

equal ability, and there are not sufficient scholarships available to award one to each of such applicants, the available scholarship or scholarships shall be awarded to the applicants in a manner that will tend to result in a geographically wide distribution throughout the United States recipients' places of permanent residence.

(3) Omitted

(4) Authorization

Of amounts authorized for the Directorate for Technology, Innovation, and Partnerships, \$100,000,000 shall be authorized to carry out this subsection.

(g) Existing programs

The Director may use or augment existing STEM education programs of the Foundation and leverage education or entrepreneurial partners to carry out this section.

(Pub. L. 117-167, div. B, title III, §10393, Aug. 9, 2022, 136 Stat. 1589.)

Editorial Notes

REFERENCES IN TEXT

Section 1101(a) of title 8 and section 1157 of title 8, referred to in subsec. (f)(2)(A)(i), were so in the original, but probably should have been references to sections 101(a) and 207 of the Immigration and Nationality Act, act June 27, 1952, ch. 477, which are classified to sections 1101(a) and 1157 of Title 8, Aliens and Nationality.

Section 1001(a) of title 20, referred to in subsec. (f)(2)(A)(iii), was so in the original, but probably should have been a reference to section 101(a) of the Higher Education Act of 1965, Pub. L. 89-329, which is classified to section 1001(a) of Title 20, Education.

CODIFICATION

Section is comprised of section 10393 of Pub. L. 117-167. Subsec. (f)(3) of section 10393 of Pub. L. 117-167 amended section 1869c of this title.

§ 19114. Research and development awards

(a) In general

From amounts made available for the Directorate, the Director shall make awards, on a competitive basis, for research and technology development within the key technology focus areas, including investments that advance solutions to the challenges under section 19107 of this title.

(b) Purpose

The purpose of the awards under this section shall be to accelerate technological advances and technology adoption in the key technology focus areas.

(c) Recipients

Recipients of funds under this section may include institutions of higher education, research institutions, non-profit organizations, private sector entities, consortia, or other entities as defined by the Director.

(d) Metrics

The Director may set metrics, including goals and deadlines, for the development and demonstration of technology as determined in the terms of the award, and may use such metrics to

determine whether an award recipient shall be eligible for continued or follow-on funding.

(e) Short term technology deployment

The Director shall also make awards, including through the SBIR and STTR programs (as defined in section 638(e) of title 15), to expedite short-term technology deployment within a period of no longer than 24 months.

(f) Selection criteria

In selecting recipients for an award under this section, the Director shall consider, at a minimum—

(1) the relevance of the project to the challenges and the key technology focus areas under section 19107 of this title, and the potential of the project to result in transformational advances for such challenges and the key technology focus areas;

(2) the current status of similar technology, the limits of current practice, and the novelty and risks of the proposed project;

(3) the ethical, societal, safety, and security implications relevant to the application of the technology;

(4) the appropriateness of quantitative goals and metrics for evaluating the project and a plan for evaluating those metrics; and

(5) the path for developing and, as appropriate, commercializing the technology into products and processes in the United States.

(g) Authorization of appropriations

From within funds authorized for the Directorate for Technology, Innovation, and Partnerships, there are authorized to carry out the activities under this section \$1,000,000,000 for fiscal years 2023 through 2027.

(Pub. L. 117-167, div. B, title III, §10394, Aug. 9, 2022, 136 Stat. 1591.)

§ 19115. Scaling innovations in PreK-12 STEM education

(a) In general

Taking into consideration the recommendations under section 18991(a)(4) of this title, the Director shall make awards, on a competitive, merit-reviewed basis, to establish multidisciplinary Centers for Transformative Education Research and Translation (in this section referred to as “Centers”) to support research and development on widespread and sustained implementation of STEM education innovations.

(b) Eligibility

The entity seeking an award for a Center under this section must be an institution of higher education, a nonprofit organization, or a consortium of such institutions or organizations, which may include a STEM ecosystem.

(c) Application

An eligible entity under subsection (b) seeking an award under this section shall submit an application to the Director at such time, in such manner, and containing such information as the Director may require. The application shall include, at a minimum, a description of how the proposed Center will be used to—

(1) establish partnerships among academic institutions, local or State educational agen-

cies, and other relevant stakeholders in supporting programs and activities to facilitate the widespread and sustained implementation of promising, evidence-based STEM education practices, models, programs, curriculum, and technologies;

(2) support enhanced STEM education infrastructure, including cyberlearning technologies, to facilitate the widespread adoption of promising, evidence-based practices;

(3) support research and development on scaling practices, partnerships, and alternative models to current approaches, including approaches sensitive to the unique combinations of capabilities, resources, and needs of varying localities, educators, and learners;

(4) include a focus on the learning needs of under-resourced schools and learners in low-resource or underachieving local educational agencies in urban and rural communities and the development of high-quality curriculum that engages these learners in the knowledge and practices of STEM fields;

(5) include a focus on the learning needs and unique challenges facing students with disabilities;

(6) support research, development, or education on one or more of the key technology focus areas;

(7) support research and development on scaling practices and models to support and sustain highly-qualified STEM educators in urban and rural communities; and

(8) at the discretion of the Director, any other requirements recommended in the study commissioned under section 18991(a) of this title.

(d) Additional considerations

In making an award under this section, the Director may also consider the extent to which the proposed Center will—

(1) leverage existing collaborations, tools, and strategies supported by the Foundation, including NSF INCLUDES and the Convergence Accelerators;

(2) support research on and the development and scaling of innovative approaches to distance learning and education for various student populations;

(3) support education innovations that leverage new technologies or deepen understanding of the impact of technology on educational systems; and

(4) include a commitment from local or State education administrators to making the proposed reforms and activities a priority.

(e) Partnership

In carrying out the program under this section, the Director shall explore opportunities to partner with the Department of Education, including through jointly funding activities under this section.

(f) Duration

Each award made under this section shall be for a duration of no more than 5 years.

(g) Annual meeting

The Director shall encourage and facilitate an annual meeting of the Centers, as appropriate,

to foster collaboration among the Centers and to further disseminate the results of the Centers' supported activities.

(h) Existing programs

The Director may use existing NSF programs to establish and execute this section.

(i) Report

Not later than 5 years after August 9, 2022, the Director shall submit to Congress and make widely available to the public a report that includes—

(1) a description of the focus and proposed goals of each Center;

(2) an assessment, based on a common set of benchmarks and tools, of the Centers' success in helping to promote scalable solutions in PreK–12 STEM education; and

(3) any recommendations for administrative and legislative action that could optimize the effectiveness of the Centers established under this section.

(Pub. L. 117–167, div. B, title III, §10395, Aug. 9, 2022, 136 Stat. 1591.)

§ 19116. Authorities

In addition to existing authorities available to the Foundation, the Director may exercise the following authorities in carrying out the activities under this part:

(1) Awards

In carrying out this part, the Director may provide awards in the form of grants, contracts, cooperative agreements, cash prizes, and other transactions.

(2) Program directors

(A) Designation

The Director may designate individuals to serve as program directors for the programs established within the Directorate pursuant to the responsibilities established under subparagraph (B). The Director shall ensure that program directors—

(i) have expertise in one or more of the challenges and key technology focus areas under section 19107 of this title; and

(ii) come from a variety of backgrounds, including industry, and from a variety of institutions of higher education.

(B) Responsibilities

A program director of a program of the Directorate, in consultation with the Assistant Director, shall be responsible for—

(i) establishing research and development goals for the program, including through the convening of workshops, conferring with a broad range of stakeholders and outside experts, taking into account relevant expert reports, and publicizing the goals of the program to the public and private sectors;

(ii) surveying a wide range of institutions of higher education, nonprofit organizations, and private entities to identify emerging trends in the challenges and key technology focus areas under section 19107 of this title, and, as appropriate, soliciting proposals from such entities to conduct re-