

119TH CONGRESS
1ST SESSION

H. R. 5351

To support National Science Foundation education and professional development relating to artificial intelligence, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 15, 2025

Mr. FONG (for himself, Ms. SALINAS, and Ms. PETTERSEN) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To support National Science Foundation education and professional development relating to artificial intelligence, 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,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “NSF AI Education
5 Act of 2025”.

6 **SEC. 2. SCHOLARSHIPS AND FELLOWSHIPS IN ARTIFICIAL**
7 **INTELLIGENCE.**

8 Paragraph (2) of section 5401(e) of the National Arti-
9 ficial Intelligence Initiative Act of 2020 (15 U.S.C.

1 9451(e); enacted as part of title LIV of division E of the
2 William M. (Mac) Thornberry National Defense Author-
3 ization Act for Fiscal Year 2021 (Public Law 116–283))
4 is amended—

5 (1) in the heading, by striking “FACULTY”; and
6 (2) by adding at the end the following new sub-
7 paragraphs:

8 “(D) STUDENT SCHOLARSHIPS AND FEL-
9 LOWSHIPS IN ARTIFICIAL INTELLIGENCE.—

10 “(i) IN GENERAL.—The Director of
11 the National Science Foundation may sup-
12 port scholarships and fellowships for un-
13 dergraduate and graduate students by
14 making awards through institutions of
15 higher education, including community col-
16 leges, to students who are enrolled in pro-
17 grams of study leading to degrees or con-
18 centrations in or related to the design, re-
19 search, assessment, development, deploy-
20 ment, integration, or application of artifi-
21 cial intelligence.

22 “(ii) CONSIDERATIONS.—In carrying
23 out clause (i), the Director of the National
24 Science Foundation may prioritize making
25 awards to students who are enrolled in

1 programs of study leading to degrees or
2 concentrations in or related to any of the
3 following:

4 “(I) The teaching of artificial in-
5 telligence at elementary schools, sec-
6 ondary schools, career and technical
7 education schools, institutions of high-
8 er education, or through other higher
9 education and professional education
10 programs.

11 “(II) Artificial intelligence and
12 advanced manufacturing, including
13 the integration of artificial intelligence
14 into advanced manufacturing oper-
15 ations.

16 “(III) Artificial intelligence and
17 agriculture, including the integration
18 of artificial intelligence into agricul-
19 tural operations, prediction, and deci-
20 sion making.

21 “(iii) AWARDS.—Scholarships and fel-
22 lowships awarded under this subparagraph
23 may be in the form of awards that may
24 cover the cost of tuition, education-related
25 fees, a stipend, and professional develop-

1 ment funds for a period of up to five years.
2 Such scholarships and fellowships shall be
3 paid directly to the institution of higher
4 education in which the student is enrolled.

5 “(iv) OUTREACH.—The Director of
6 the National Science Foundation shall con-
7 duct outreach and encourage applications
8 from rural-located institutions of higher
9 education, rural-serving institutions of
10 higher education, emerging research insti-
11 tutions, Tribal Colleges or Universities,
12 and institutions located in an Established
13 Program to Stimulate Competitive Re-
14 search (EPSCoR) jurisdiction.

15 “(v) METHOD.—The Director of the
16 National Science Foundation may carry
17 out this subparagraph by making awards
18 through new or existing programs.

19 “(E) ARTIFICIAL INTELLIGENCE PROFES-
20 SIONAL DEVELOPMENT FELLOWSHIPS.—

21 “(i) IN GENERAL.—The Director of
22 the National Science Foundation may sup-
23 port activities to promote the exchange of
24 ideas and encourage collaborations between
25 institutions of higher education and indus-

try partners in the field of artificial intelligence, including through fellowships for students, teachers, faculty, and industry professionals.

“(ii) SUPPLEMENTALS FOR STUDENTS AND FACULTY.—The Director of the National Science Foundation may award fellowships for students and faculty to pursue professional development programs in STEM fields that are administered by or affiliated with institutions of higher education, including community colleges, in order to enable recipients to attain skills, training, or education in partnership with industry members on the design, research, assessment, development, deployment, integration, or application of artificial intelligence.

“(iii) FELLOWSHIPS FOR INDUSTRY PROFESSIONALS.—The Director of the National Science Foundation may award fellowships to industry professionals to enable recipients to seek short-term appointments to instruct and educate students on the design, research, assessment, development,

1 deployment, integration, or application of
2 artificial intelligence.

3 “(iv) FELLOWSHIPS FOR SCHOOL
4 PROFESSIONALS.—The Director of the Na-
5 tional Science Foundation may award fel-
6 lowships to teachers, school counselors,
7 and other school professionals for profes-
8 sional development programs in order to
9 enable recipients to attain skills, training,
10 or education in partnership with industry
11 members on the teaching, use of, or appli-
12 cation of artificial intelligence in K–12 set-
13 tings.

14 “(v) AWARDS.—Awards made under
15 this subparagraph may be in the form of
16 an award that covers the cost of tuition,
17 education-related fees, a stipend, and pro-
18 fessional development funds for up to one
19 year. Such awards shall be paid directly to
20 the institution of higher education that ad-
21 ministers, or is affiliated with, the program
22 in which the fellowship recipient is partici-
23 pating.

24 “(F) NATIONAL SCIENCE FOUNDATION
25 OUTREACH CAMPAIGN.—The Director of the

1 National Science Foundation may carry out a
2 nationwide outreach campaign to industry as
3 well as students at elementary schools, sec-
4 ondary schools, career and technical education
5 schools, and institutions of higher education, or
6 through other higher education and professional
7 education programs, to increase awareness re-
8 garding National Science Foundation-funded
9 artificial intelligence education opportunities.

10 “(G) ELIGIBILITY.—To be eligible to re-
11 ceive a scholarship or fellowship under this
12 paragraph, an individual shall satisfy all of the
13 following:

14 “(i) Be a citizen, national, or lawful
15 permanent resident of the United States.

16 “(ii) Demonstrate a commitment to a
17 career in advancing the field of artificial
18 intelligence.

19 “(iii) Accept the terms of a fellowship
20 under this subparagraph.

21 “(H) REPORTS.—

22 “(i) IN GENERAL.—Not later than
23 seven years after the date of the enactment
24 of this subparagraph, the Director of the
25 National Science Foundation shall submit

1 to Congress, and make widely available to
2 the public, a report including any rec-
3 ommendations for legislative action that
4 could optimize the effectiveness of the
5 scholarships and fellowships under this
6 paragraph.

7 “(ii) REQUIREMENTS.—In preparing
8 the reports under clause (i), the Director
9 of the National Science Foundation may,
10 as practicable—

11 “(I) include an assessment of the
12 effectiveness of such scholarships and
13 fellowships in expanding apprentice-
14 ships, internships, and other applied
15 or experiential learning opportunities
16 offered by employers in conjunction
17 with community colleges or other in-
18 stitutions of higher education;

19 “(II) assess the number of stu-
20 dents who received such scholarships
21 and fellowship;

22 “(III) assess the percentage of
23 such students who successfully com-
24 plete their education programs and
25 who intend to enter the workforce;

1 “(IV) assess the percentage of
 2 undergraduate, graduate, and
 3 postdoctoral students who enter the
 4 workforce in a field relating to such
 5 scholarship or fellowship;

6 “(V) assess the impact on the
 7 number of K–12 teachers, school
 8 counselors, and other school profes-
 9 sionals who received such scholarships
 10 or fellowships; and

11 “(VI) include an assessment of
 12 the effects such scholarships and fel-
 13 lowships have on related fields.”.

14 **SEC. 3. COMMUNITY COLLEGE AND AREA CAREER AND**
 15 **TECHNICAL EDUCATIONAL SCHOOL CENTERS**
 16 **OF ARTIFICIAL INTELLIGENCE EXCELLENCE.**

17 (a) IN GENERAL.—Subparagraph (B) of section
 18 5401 of the National Artificial Intelligence Initiative Act
 19 of 2020 (15 U.S.C. 9451(e)(3); enacted as part of title
 20 LIV of division E of the William M. (Mac) Thornberry
 21 National Defense Authorization Act for Fiscal Year 2021
 22 (Public Law 116–283)) is amended to read as follows:

23 “(B) CENTERS OF AI EXCELLENCE.—

24 “(i) DEFINITIONS.—In this subpara-
 25 graph:

1 “(I) AREA CAREER AND TECH-
2 NICAL EDUCATION SCHOOL.—The
3 term ‘area career and technical edu-
4 cation school’ has the meaning given
5 such term in section 3 of the Carl D.
6 Perkins Career and Technical Edu-
7 cation Act of 2006 (20 U.S.C. 2302).

8 “(II) ELIGIBLE APPLICANT.—
9 The term ‘eligible applicant’ means a
10 community college, or area career and
11 technical education school, in partner-
12 ship with one or more of the fol-
13 lowing:

14 “(aa) A Federal, State,
15 local, Tribal, or territorial gov-
16 ernment entity.

17 “(bb) An institution of high-
18 er education.

19 “(cc) An entity in private in-
20 dustry.

21 “(dd) An economic develop-
22 ment organization or venture de-
23 velopment organization.

24 “(ee) A nonprofit organiza-
25 tion.

1 “(III) VENTURE DEVELOPMENT
2 ORGANIZATION.—The term ‘venture
3 development organization’ has the
4 meaning given such term in section
5 27(a) of the Stevenson-Wydler Tech-
6 nology Innovation Act of (15 U.S.C.
7 3722(a)).

8 “(ii) ESTABLISHMENT OF CENTERS
9 OF AI EXCELLENCE.—The Director of the
10 National Science Foundation, in coordina-
11 tion with the Regional Technology Hubs
12 program of the Department of Commerce,
13 subject to the availability of appropria-
14 tions, shall establish up to eight regionally
15 and geographically diverse eligible appli-
16 cants to be designated as Community Col-
17 lege and Area Career and Technical Edu-
18 cation Centers of AI Excellence (referred
19 to in this subparagraph as ‘Centers of AI
20 Excellence’). Such Centers of AI Excel-
21 lence shall enhance educational outcomes
22 and drive workforce development by inte-
23 grating artificial intelligence into teaching,
24 learning, and community engagement.

1 “(iii) APPLICATION.—An eligible ap-
2 plicant seeking to be designated as a Cen-
3 ter of AI Excellence under this subpara-
4 graph shall submit to the Director of the
5 National Science Foundation an applica-
6 tion at such time, in such manner, and
7 containing such information as the Direc-
8 tor may require. Such application shall in-
9 clude the following:

10 “(I) A description of the focus
11 area or areas for such proposed Cen-
12 ter of AI Excellence and how such
13 area or areas are aligned with re-
14 gional investments made by industry
15 and the Federal Government.

16 “(II) A description of the capac-
17 ity of the applicant to carry out the
18 purpose of such proposed Center of
19 AI Excellence.

20 “(III) A description of dem-
21 onstrate current and anticipated fu-
22 ture workforce demands in occupa-
23 tions directly related to such proposed
24 Center of AI Excellence.

1 “(IV) A description of how the
2 eligible applicant will support the col-
3 lection of information and data for
4 purposes of evaluation of such pro-
5 posed Center of AI Excellence.

6 “(V) An evaluation plan that in-
7 cludes the use of outcome-oriented
8 measures to assess the impact and ef-
9 ficacy of such proposed Center for AI
10 Excellence.

11 “(iv) ACTIVITIES.—A designated Cen-
12 ter of AI Excellence shall develop and dis-
13 seminate information regarding best prac-
14 tices for matters such as the following:

15 “(I) Artificial intelligence re-
16 search and education, and research on
17 the effects of artificial intelligence in
18 education, at community colleges and
19 area career and technical education
20 schools.

21 “(II) Methods to scale up suc-
22 cessful programs that perform re-
23 search or provide education on artifi-
24 cial intelligence at community colleges

1 and area career and technical edu-
2 cation schools.

3 “(III) Providing educators and
4 teachers with actionable strategies
5 and resources to effectively integrate
6 artificial intelligence into curriculums
7 in the classroom.

8 “(IV) Providing experiential
9 learning opportunities, including re-
10 search and industry experiences on ar-
11 tificial intelligence and learning oppor-
12 tunities for students that are enabled
13 through artificial intelligence.

14 “(V) Identifying pathways for
15 students to jobs that are enabled by
16 artificial intelligence, such as pre-
17 viously nonexistent jobs with respect
18 to which artificial intelligence use is
19 an integral part, jobs working directly
20 on artificial intelligence, and pre-
21 viously existing jobs with respect to
22 which needed skills have been signifi-
23 cantly changed due to working with
24 artificial intelligence.

1 “(VI) Facilitating partnerships
2 with employers, employer consortia, or
3 other private sector organizations that
4 offer apprenticeships, internships, co-
5 operative education, or applied learn-
6 ing experiences in the field of artificial
7 intelligence.

8 “(v) PARTNERSHIPS.—The Director
9 of the National Science Foundation shall
10 encourage applicants to consider including
11 or partnering with a nonprofit organiza-
12 tion, civil society organizations, industry,
13 or an institution of higher education (or a
14 consortium thereof) that has extensive ex-
15 perience and expertise in artificial intel-
16 ligence.

17 “(vi) EVALUATIONS.—All applications
18 for designation under clause (ii) shall in-
19 clude an evaluation plan that includes the
20 use of outcome-oriented measures to assess
21 the impact and efficacy of the proposed
22 Center for AI Excellence.

23 “(vii) ACCOUNTABILITY AND DISSEMI-
24 NATION.—

1 “(I) EVALUATION REQUIRED.—

2 The Director of the National Science
3 Foundation shall evaluate the activi-
4 ties under clause (iv). Such evalua-
5 tion, to the extent practicable, shall
6 integrate the findings of research re-
7 sulting from such activity or activities
8 as a result of a designation under
9 clause (ii) with the findings of other
10 research on artificial intelligence edu-
11 cation.

12 “(II) REPORT ON EVALUA-
13 TIONS.—Not later than 180 days
14 after the completion of the evaluation
15 under subclause (I), the Director of
16 the National Science Foundation shall
17 submit to Congress and make widely
18 available to the public a report that
19 includes the following:

20 “(aa) The results of such
21 evaluation.

22 “(bb) Any recommendations
23 for administrative and legislative
24 action that could optimize the ef-

1 fectiveness of the designations
2 made under clause (ii).”.

3 **SEC. 4. AWARDS FOR RESEARCH ON ARTIFICIAL INTEL-**
4 **LIGENCE IN EDUCATION.**

5 (a) IN GENERAL.—Section 5401 of the National Ar-
6 tificial Intelligence Initiative Act of 2020 (15 U.S.C. 9451;
7 enacted as part of title LIV of division E of the William
8 M. (Mac) Thornberry National Defense Authorization Act
9 for Fiscal Year 2021 (Public Law 116–283)) is amend-
10 ed—

11 (1) by redesignating subsection (g) as sub-
12 section (i); and

13 (2) by inserting after subsection (f) the fol-
14 lowing new subsections:

15 “(g) AWARDS FOR RESEARCH ON ARTIFICIAL INTEL-
16 LIGENCE IN EDUCATION.—

17 “(1) ELIGIBLE ENTITY DEFINED.—In this sub-
18 section, the term ‘eligible entity’ means any of the
19 following:

20 “(A) An institution of higher education.

21 “(B) A nonprofit organization.

22 “(C) A consortium of one or more institu-
23 tions of higher education or nonprofit organiza-
24 tions and one or more private sector entities.

25 “(2) AWARDS.—

1 “(A) IN GENERAL.—The Director of the
2 National Science Foundation may make
3 awards, on a competitive, merit-reviewed basis,
4 to eligible entities, to enable such eligible enti-
5 ties to promote research regarding teaching
6 models, tools, and materials for artificial intel-
7 ligence, its integration into the classroom,
8 teaching, and learning for pre-kindergarten
9 through grade 12 students, and its impacts on
10 educational and learning outcomes.

11 “(B) METHOD.—The Director of the Na-
12 tional Science Foundation may carry out sub-
13 paragraph (A) by making awards through new
14 or existing programs.

15 “(3) APPLICATION.—

16 “(A) IN GENERAL.—An eligible entity that
17 desires to receive an award under this sub-
18 section shall submit to the Director of the Na-
19 tional Science Foundation an application at
20 such time, in such manner, and containing such
21 information as the Director may require.

22 “(B) CONTENTS.—An application under
23 subparagraph (A) may include the following:

1 “(i) A description of any regional
2 partnerships the eligible entity plans to
3 utilize to carry out the award.

4 “(ii) With respect to an application
5 that concerns the use or integration of ar-
6 tificial intelligence, a description of poten-
7 tial ethical concerns and implications of
8 teacher, faculty, and student interactions
9 with artificial intelligence.

10 “(iii) A description of how proposed
11 research on teaching models, tools, and
12 materials were developed in consultation
13 with other educators, academia, industry,
14 government entities, or civil society organi-
15 zations.

16 “(iv) Such other information as the
17 Director may require.

18 “(4) USE OF AWARD FUNDS.—Awards de-
19 scribed in paragraph (2)(A) shall be used by the re-
20 cipient to carry out the following:

21 “(A) Emphasize preparing incoming K–12
22 teachers to integrate artificial intelligence into
23 their classrooms in beneficial and innovative
24 ways.

1 “(B) Support research to develop, pilot,
2 fully implement, or test topics, such as the fol-
3 lowing:

4 “(i) Instructional materials and high-
5 quality learning opportunities for teaching
6 artificial intelligence.

7 “(ii) Models for the preparation of
8 new teachers who will teach artificial intel-
9 ligence.

10 “(iii) Scalable models of professional
11 development and ongoing support for
12 teachers.

13 “(iv) Tools and models for teaching
14 and learning aimed at supporting student
15 success.

16 “(v) Evaluations of the effect of dif-
17 ferent approaches to teaching artificial in-
18 telligence on students’ educational and
19 learning outcomes.

20 “(5) PARTNERSHIPS.—In making awards under
21 this subsection, the Director of the National Science
22 Foundation shall carry out the following:

23 “(A) Encourage applicants which, for the
24 purpose of the proposed activity or activities
25 funded through such award, include or partner

1 with a nonprofit organization or an institution
2 of higher education (or a consortium thereof)
3 that has extensive experience and expertise in
4 integrating artificial intelligence into K–12
5 classrooms.

6 “(B) Encourage applicants which, for the
7 purpose of such proposed activity or activities
8 funded through such award, include or partner
9 with a consortium of schools, institutions of
10 higher education, school districts, non-profit or-
11 ganizations, or other State and local govern-
12 ment entities.

13 “(C) Encourage applicants which, for the
14 purpose of such proposed activity or activities
15 funded through such award, include commit-
16 ments from school principals, other school lead-
17 ers, or administrators to make a priority re-
18 forms and activities proposed by the applicant.

19 “(h) ARTIFICIAL INTELLIGENCE COLLABORATIVE.—

20 “(1) IN GENERAL.—The Director of the Na-
21 tional Science Foundation may establish a pilot pro-
22 gram of regional cohorts that will provide peer sup-
23 port, mentoring, and hands-on research experiences
24 for educators, principals, and other school leaders of
25 students in kindergarten through grade 12, in order

1 to build a network allowing educators, principals,
2 other school leaders to carry out the following:

3 “(A) Engage with one another on edu-
4 cational efforts related to teaching and using
5 artificial intelligence and evaluating its effects
6 on students’ educational and learning outcomes.

7 “(B) Interact with researchers, academia,
8 and local industry involved in artificial intel-
9 ligence.

10 “(2) METHOD.—The Director of the National
11 Science Foundation may carry out this subsection by
12 making awards through new or existing programs,
13 including the pilot program authorized under section
14 10511(a)(2)(B) of the Research and Development,
15 Competition, and Innovation Act (42 U.S.C. 19172;
16 enacted as part of title V of division B of Public
17 Law 117–167).”.

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