

117TH CONGRESS
2D SESSION

H. R. 8231

To authorize a grant program to support equitable access to postsecondary
STEM pathways.

IN THE HOUSE OF REPRESENTATIVES

JUNE 24, 2022

Mr. NEGUSE introduced the following bill; which was referred to the
Committee on Education and Labor

A BILL

To authorize a grant program to support equitable access
to postsecondary STEM pathways.

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 “STEM Pathways
5 Through College Act”.

6 **SEC. 2. POSTSECONDARY STEM PATHWAYS GRANTS.**

7 (a) PURPOSE.—The purpose of this section is to sup-
8 port equitable access to postsecondary STEM pathways
9 to increase the number of students exposed to high-quality
10 STEM advanced coursework, support students in reducing

1 college costs, improve postsecondary credit transfers, and
 2 increase postsecondary completion.

3 (b) DEFINITIONS.—In this section:

4 (1) ADVANCED COURSEWORK.—The term “ad-
 5 vanced coursework” means coursework designed for
 6 students to earn postsecondary credit upon its suc-
 7 cessful completion while still in high school, includ-
 8 ing coursework or assessments associated with Ad-
 9 vanced Placement, International Baccalaureate, a
 10 dual or concurrent enrollment program, or an early
 11 college high school program.

12 (2) ELIGIBLE ENTITY.—The term “eligible enti-
 13 ty” means a partnership that—

14 (A) shall include—

15 (i) the State educational agency;

16 (ii) one or more local educational
 17 agencies located in the State, which may
 18 include an educational service agency; and

19 (iii) either—

20 (I) the State public higher edu-
 21 cation system inclusive of all 2-year
 22 and 4-year public institutions of high-
 23 er education in the State; or

24 (II) a consortium of the State’s
 25 public higher education institutions or

1 systems that, together, is inclusive of
2 all 2-year and 4-year public institu-
3 tions of higher education in the State;
4 and

5 (B) may include 1 or more businesses, as-
6 sociations, or nonprofit organizations rep-
7 resenting businesses, private nonprofit institu-
8 tions of higher education, nonprofit organiza-
9 tions, a State workforce agency, or a State
10 workforce development board established under
11 section 101 of the Workforce Innovation and
12 Opportunity Act (29 U.S.C. 3111).

13 (3) ESEA DEFINITIONS.—The terms “dual or
14 concurrent enrollment program”, “early college high
15 school”, “educational service agency” “elementary
16 school”, “English learner”, “evidence-based”, “high
17 school”, “institution of higher education”, “local
18 educational agency”, “middle grades”, “other staff”,
19 “professional development”, “regular high school di-
20 ploma”, “Secretary”, “State”, “State educational
21 agency”, and “technology” shall have the meaning
22 given the terms in section 8101 of the Elementary
23 and Secondary Education Act of 1965 (20 U.S.C.
24 7801).

1 (4) GOVERNOR.—The term “Governor” means
2 the chief executive officer of a State.

3 (5) PERKINS DEFINITIONS.—The terms “career
4 and technical education” and “work-based learning”
5 have the meaning given the terms in section 3 of the
6 Carl D. Perkins Career and Technical Education
7 Act of 2006 (20 U.S.C. 2302).

8 (6) POSTSECONDARY STEM PATHWAY.—The
9 term “postsecondary STEM pathway” means a se-
10 quence of courses focused on STEM education, in-
11 cluding advanced coursework approved by the eligi-
12 ble entity taken at any point during high school
13 that—

14 (A) when taken together, provide at least
15 12 credit hours or the equivalent coursework to-
16 ward an associate degree or baccalaureate de-
17 gree, or, in the case of postsecondary credit in
18 career and technical education earned through
19 such sequence of courses, credit toward a recog-
20 nized postsecondary credential for a high-skill,
21 high-wage, or in-demand industry sector or oc-
22 cupation; and

23 (B) if completed successfully, results in
24 credit that—

- 1 (i) satisfies requirements for the
2 State’s regular high school diploma; and
3 (ii) is a part of the statewide articula-
4 tion agreement described in subsection
5 (d)(2)(B); and
6 (C) may include work-based learning in a
7 STEM field aligned with the academic
8 coursework offered in a postsecondary STEM
9 pathway.

10 (7) STEM EDUCATION.—The term “STEM
11 education” means courses, activities, high-quality in-
12 struction, and learning in the subjects of science,
13 technology, engineering, or mathematics, including
14 computer science.

15 (8) SUBGROUP OF STUDENTS.—The term “sub-
16 group of students” means—

- 17 (A) students from a family with a low in-
18 come;
19 (B) students of color;
20 (C) children with disabilities, as defined in
21 section 602(3) of the Individuals with Disabil-
22 ities Education Act (20 U.S.C. 1401(3));
23 (D) English learners;

1 (E) migratory children, as described in sec-
 2 tion 1309(3) of the Elementary and Secondary
 3 Education Act of 1965 (20 U.S.C. 6399(3));

4 (F) homeless children and youths, as de-
 5 fined in section 725 of the McKinney-Vento
 6 Homeless Assistance Act (42 U.S.C. 11434a);

7 (G) students who are in foster care or are
 8 aging out of the foster care system; and

9 (H) first-generation college students.

10 (9) WIOA DEFINITIONS.—The terms “in-de-
 11 mand industry sector or occupation” and “recog-
 12 nized postsecondary credential” have the meanings
 13 given the terms in section 3 of the Workforce Inno-
 14 vation and Opportunity Act (29 U.S.C. 3102).

15 (10) STUDENTS FROM A FAMILY WITH A LOW
 16 INCOME.—The term “students from a family with a
 17 low income” includes any student who is identified
 18 by any of the measures described in section
 19 1113(a)(5) of the Elementary and Secondary Edu-
 20 cation Act (20 U.S.C. 6313(a)(5)).

21 (11) FIRST-GENERATION COLLEGE STUDENT.—
 22 The term “first-generation college student” has the
 23 meaning given the term in section 402A(h) of the
 24 Higher Education Act of 1965 (20 U.S.C. 1070a–
 25 11(h)).

1 (c) AUTHORIZATION OF GRANTS.—

2 (1) IN GENERAL.—From the amounts appro-
3 priated under subsection (i) and not reserved under
4 paragraph (2), the Secretary shall award grants, on
5 a competitive basis, to eligible entities to enable
6 those eligible entities to implement activities de-
7 scribed under subsection (e).

8 (2) RESERVATIONS.—From the total amount
9 appropriated under subsection (i) for a fiscal year,
10 the Secretary shall reserve—

11 (A) 1 percent for the Bureau of Indian
12 Education to improve access to postsecondary
13 STEM pathways;

14 (B) 2 percent to conduct the evaluation de-
15 scribed under subsection (g); and

16 (C) 2 percent for technical assistance and
17 dissemination, which may include—

18 (i) providing, directly or through
19 grants, contracts, or cooperative agree-
20 ments, technical assistance on using evi-
21 dence-based practices to improve the out-
22 comes of activities funded under this sec-
23 tion; and

24 (ii) disseminating information on evi-
25 dence-based practices that are successful in

1 improving the quality of activities funded
2 under this section.

3 (3) DURATION.—A grant awarded under this
4 section shall be for a period of not more than 5
5 years.

6 (4) RENEWAL.—The Secretary may renew a
7 grant awarded under this section for 1 additional 2-
8 year period for programs that meet the goals speci-
9 fied in subsection (d)(4)(B) of the initial grant.

10 (5) DIVERSITY OF PROJECTS.—In awarding
11 grants under this section, the Secretary shall ensure
12 that, to the extent practicable, grants are distributed
13 among eligible entities that will serve geographically
14 diverse areas, including urban, suburban, and rural
15 areas.

16 (6) SUFFICIENT SIZE AND SCOPE.—Each grant
17 awarded under this section shall be of sufficient size
18 and scope to allow the eligible entity to carry out the
19 purposes of this section.

20 (7) PRIORITIES.—In awarding grants under
21 this section, the Secretary shall give priority to ap-
22 plications that—

23 (A) provide postsecondary STEM path-
24 ways to a high proportion of the State's stu-

dents enrolled in high schools operated by local educational agencies;

(B) prioritize evidence-based strategies to ensure subgroups of students have equitable access to postsecondary STEM pathways; and

(C) are submitted by eligible entities that include local educational agencies who are in the highest quartile of local educational agencies, in a ranking of all qualified local educational agencies in the State, ranked in descending order by the number or percentage of children in each agency counted under section 1124(c) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6333(c)).

(d) ELIGIBLE ENTITY APPLICATION.—In order to receive a grant under subsection (c)(1), the eligible entity shall submit an application to the Secretary, at such time, in such manner, and containing such information as the Secretary may reasonably require. Such application shall include, at a minimum—

(1) signatures from the Governor, chief State school officer, and State higher education executive officer verifying the eligible entity shall meet the requirements described in paragraph (2) within the specified timeframe;

1 (2) a description of how the eligible entity will,
2 not later than 2 years after the date of the initial
3 receipt of funds under this section—

4 (A) ensure STEM postsecondary pathways
5 are aligned with entrance requirements for
6 credit-bearing coursework at the State’s public
7 institutions of higher education; and

8 (B) develop a formal, universal statewide
9 articulation agreement among all public institu-
10 tions of higher education or systems in the
11 State—

12 (i) to guarantee that—

13 (I) all advanced coursework suc-
14 cessfully completed as part of a post-
15 secondary STEM pathway results in
16 credit that—

17 (aa) counts as credit for a
18 regular high school diploma;

19 (bb) fully transfers to, and
20 is credited by, all public institu-
21 tions of higher education in the
22 State, and that such credits will
23 count toward meeting related de-
24 gree or certificate requirements;
25 and

1 (cc) is transferable to any
2 private nonprofit institution of
3 higher education or public insti-
4 tution of higher education located
5 in another State that chooses to
6 participate in the articulation
7 agreement; and

8 (II) if a student earns an asso-
9 ciate degree (including an associate
10 degree in applied science) as part of a
11 postsecondary STEM pathway, such
12 associate degree, awarded by a par-
13 ticipating institution of higher edu-
14 cation in the State, shall be fully ac-
15 ceptable in transfer and credited as
16 the first 2 years of a related bacca-
17 laureate program at a public institu-
18 tion of higher education in such State;
19 and

20 (ii) to facilitate the seamless transfer
21 of credit earned in the postsecondary
22 STEM pathway among such institutions of
23 higher education, including between 2-year
24 and 4-year public institutions of higher
25 education and private nonprofit institu-

tions of higher education (if such private nonprofit institutions of higher education choose to participate in the articulation agreement), by using methods such as—

(I) common course numbering;

(II) a general education core curriculum; and

(III) management systems regarding course equivalency, transfer of credit, and articulation;

(3) a description of how the eligible entity will disseminate information to subgroups of students in the middle grades and high school served by the eligible entity, including their families, about the opportunity to participate in a postsecondary STEM pathway and the benefits of participation;

(4) a description of how the eligible entity will implement postsecondary STEM pathways in all local educational agencies participating in the eligible entity, including—

(A) the timeline and plan to provide, by the end of the grant period, a substantial number of students in the State the opportunity to participate in a postsecondary STEM pathway; and

1 (B) annual goals for participation in ad-
2 vanced coursework and postsecondary STEM
3 pathways among subgroups of students such
4 that, if the goals are met—

5 (i) significant progress will be made
6 toward improving equity in access to ad-
7 vanced coursework and postsecondary
8 STEM pathways across the local edu-
9 cational agencies within the eligible entity
10 in the State; and

11 (ii) the demographics of students par-
12 ticipating in advanced coursework and
13 postsecondary STEM pathways will be
14 similar to the demographics of total stu-
15 dent enrollment in the State the eligible
16 entity is located in by the end of the grant
17 period;

18 (5) a description of how the eligible entity has,
19 or will, ensure that postsecondary STEM pathways
20 are aligned with in-demand industries or occupations
21 and provide students with opportunities for work-
22 based learning;

23 (6) a description of how the eligible entity con-
24 sulted with stakeholders in development of its appli-
25 cation and how the eligible entity will continue to en-

1 gage, collaborate, and solicit feedback with stake-
2 holders to improve implementation of the application
3 requirements described in this subsection and uses
4 of funds described in subsection (e), including—

5 (A) the State board of education (if the
6 State has a State board of education);

7 (B) the State higher education governing
8 or coordinating entity (if the State has such an
9 entity);

10 (C) a State board or local board, as de-
11 fined in section 3 of the Workforce Innovation
12 and Opportunity Act (29 U.S.C. 3102)

13 (D) the State agency responsible for the
14 administration of career and technical edu-
15 cation in the State or for the supervision of the
16 administration of career and technical edu-
17 cation in the State (if the State has such an en-
18 tity);

19 (E) institutions of higher education in the
20 State;

21 (F) local educational agencies, including
22 those located in rural areas and with the high-
23 est enrollments of students from low income
24 families, as described in subsection (e)(7)(C);

1 (G) representatives of Indian Tribes lo-
2 cated in the State;

3 (H) charter school leaders (if the State has
4 charter schools);

5 (I) civil rights organizations in the State;

6 (J) business leaders or their representa-
7 tives in the State;

8 (K) teachers, principals, and other school
9 leaders; and

10 (L) parents and students;

11 (7) an assurance that the eligible entity will
12 provide postsecondary STEM pathways at no cost to
13 students and families, including that students and
14 their parents shall not be required to pay the cost
15 of tuition, fees (including examination fees associ-
16 ated with Advanced Placement, International Bacca-
17 laureate, and similar examinations), books, and sup-
18 plies necessary to successfully complete postsec-
19 ondary STEM pathways;

20 (8) an assurance that not less than half of
21 grant funds received by the eligible entity will be
22 used to support subgroups of students in accessing
23 and completing postsecondary STEM pathways; and

1 (9) an assurance that the State will comply
2 with the supplement, not supplant requirement de-
3 scribed under subsection (h).

4 (e) USES OF FUNDS.—

5 (1) REQUIRED USES.—An eligible entity receiv-
6 ing a grant under this section shall use grant funds
7 to carry out the following:

8 (A) Activities to implement the alignment
9 requirements pursuant to subsection (d)(2) for
10 a period of time not to exceed the first 2 fiscal
11 years for which the grant is provided.

12 (B) Supporting the development and im-
13 plementation of postsecondary STEM pathways
14 consistent with the timeline, plan, and goals
15 specified in subsection (d)(4) in order to in-
16 crease the number of students accessing and
17 completing postsecondary STEM pathways in
18 the State, including—

19 (i) expanding advanced coursework of-
20 fered to students served by the eligible en-
21 tity to increase the availability of postsec-
22 ondary STEM pathways;

23 (ii) covering tuition, fees (including
24 examination fees associated with Advanced
25 Placement, International Baccalaureate,

and similar examinations), books, and supplies for students participating in postsecondary STEM pathways, in accordance with subsection (d)(7); and

(iii) covering transportation costs necessary for full participation in postsecondary STEM pathways for students from a family with a low income.

(C) Implementing programs and activities to improve student preparation for, and participation in postsecondary STEM pathways, with a priority for students enrolled in local educational agencies described in subsection (c)(7)(C) and subgroups of students, which may include—

(i) using data from evidence-based early warning indicator systems;

(ii) providing supplemental advising or counseling activities that are voluntary to students, including information on choosing postsecondary options, applying for financial aid, completing applications to institutions of higher education, and career counseling and advising, beginning as early as the middle grades; and

1 (iii) other evidence-based activities to
2 support the successful implementation of
3 postsecondary STEM pathways and stu-
4 dents' transition from high school to post-
5 secondary education.

6 (D) Conducting outreach and commu-
7 nicating with subgroups of students, including
8 their families, to build awareness about the op-
9 portunity to participate in a postsecondary
10 STEM pathway and the benefits of participa-
11 tion.

12 (2) PERMITTED USES.—An eligible entity re-
13 ceiving a grant under this section may also use
14 grant funds to—

15 (A) provide training, professional develop-
16 ment, or recruitment for educators employed by
17 the local educational agencies within the eligible
18 entity and for faculty who teach courses that
19 are included in a postsecondary STEM path-
20 way, including increasing the number of edu-
21 cators qualified to teach dual or concurrent en-
22 rollment programs in STEM courses, to im-
23 prove access and completion of such pathways,
24 particularly for subgroups of students; and

1 (B) carry out capacity-building efforts to
2 improve the coordination between the elemen-
3 tary and secondary education system and the
4 higher education system, including through
5 stakeholder engagement and monitoring.

6 (3) TRANSPORTATION CAP.—An eligible entity
7 shall not use more than 25 percent of grant funds
8 to cover transportation costs authorized under para-
9 graph (1)(B)(iii).

10 (f) REPORTING REQUIREMENTS.—

11 (1) ELIGIBLE ENTITY REPORTING.—Not later
12 than 1 year after the enactment of this section and
13 every year thereafter, the eligible entity shall provide
14 a report to the Secretary containing such informa-
15 tion as the Secretary may require, including, at a
16 minimum—

17 (A) information on the progress of the eli-
18 gible entity in establishing the policies and com-
19 pleting the required activities as specified in
20 subsection (d)(2);

21 (B) the number and percentage of local
22 educational agencies and institutions of higher
23 education in the State offering a postsecondary
24 STEM pathway, including changes year-over-
25 year, and the extent to which the eligible entity

1 was meeting its timeline, plan, and goals speci-
2 fied in subsection (d)(4);

3 (C) the eligible entity's progress in meeting
4 the goals established by the eligible entity for
5 the participation of subgroups of students in
6 postsecondary STEM pathways as specified in
7 subsection (d)(4);

8 (D) evidence demonstrating how the eligi-
9 ble entity certified each such pathway meets all
10 the requirements of this section;

11 (E) the number and percentage of students
12 in the State, including disaggregated by each
13 subgroup of students, and by sex, who—

14 (i) participate in a postsecondary
15 STEM pathway; and

16 (ii) participate in a postsecondary
17 STEM pathway and—

18 (I) successfully complete a post-
19 secondary STEM pathway;

20 (II) enroll in an institution of
21 higher education and received credit,
22 in accordance with the alignment re-
23 quirements described in subsection
24 (d)(2);

1 (III) receive credit toward a rec-
2 ognized postsecondary credential for a
3 high-skill, high-wage, or in-demand in-
4 dustry sector or occupation; and

5 (IV) earn a postsecondary cre-
6 dential; and

7 (F) any additional information as the Sec-
8 retary may reasonably require to ensure compli-
9 ance with the requirements of this section and
10 to effectively evaluate, monitor, and improve
11 grant implementation.

12 (2) SECRETARY'S REPORT.—Not later than 6
13 months after receiving the initial report described in
14 paragraph (1) and annually thereafter, the Secretary
15 shall submit a report to the Committee on Health,
16 Education, Labor, and Pensions of the Senate and
17 the Committee on Education and Labor of the
18 House of Representatives that includes a summary
19 of reports submitted by eligible entities and identi-
20 fies best practices related to improving access to
21 STEM education and postsecondary education, par-
22 ticularly for subgroups of students, through the im-
23 plementation of postsecondary STEM pathways.

24 (g) EVALUATION.—The Secretary, acting through the
25 Director of the Institute of Education Sciences, shall con-

1 duct an independent evaluation after the initial award of
2 grants under this section, of the policies and services pro-
3 vided under this section, including at a minimum, the im-
4 pact of such policies and services on outcomes for all stu-
5 dents, particularly for subgroups of students, with regard
6 to each of the following:

7 (1) Enrollment in and completion of advanced
8 coursework during high school, including the number
9 of courses students take and the number of credits
10 students earn.

11 (2) Postsecondary enrollment, remediation,
12 first-year credit attainment, persistence, and comple-
13 tion including the number of students who enrolled
14 in a STEM field, and the number of students who
15 received a credential in a STEM field.

16 (3) The rate at which credits earned through
17 postsecondary STEM pathways are recognized for
18 credit by public institutions of higher education in-
19 stitutions.

20 (4) Postsecondary degree attainment, including
21 completion of an associate degree, baccalaureate de-
22 gree, or recognized postsecondary credential, and the
23 time it takes students to earn a degree.

1 (5) Changes in access and rigor of STEM edu-
2 cation offered to students served by local educational
3 agencies in eligible entities.

4 (6) To the extent practicable, analysis of stu-
5 dent outcomes described in paragraphs (1) through
6 (5) by STEM field.

7 (h) SUPPLEMENT, NOT SUPPLANT.—Federal funds
8 provided under this section shall be used to supplement,
9 not supplant, other Federal, State, or local funds available
10 to carry out activities described in this section.

11 (i) AUTHORIZATION OF APPROPRIATIONS.—For the
12 purpose of carrying out this section, there are authorized
13 to be appropriated such sums as may be necessary for
14 each of fiscal years 2022 through 2026.

○