

117TH CONGRESS  
2D SESSION

# H. R. 8231

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

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IN THE HOUSE OF REPRESENTATIVES

JUNE 24, 2022

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

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## 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-



1           dents enrolled in high schools operated by local  
2           educational agencies;

3           (B) prioritize evidence-based strategies to  
4           ensure subgroups of students have equitable ac-  
5           cess to postsecondary STEM pathways; and

6           (C) are submitted by eligible entities that  
7           include local educational agencies who are in  
8           the highest quartile of local educational agen-  
9           cies, in a ranking of all qualified local edu-  
10          cational agencies in the State, ranked in de-  
11          scending order by the number or percentage of  
12          children in each agency counted under section  
13          1124(c) of the Elementary and Secondary Edu-  
14          cation Act of 1965 (20 U.S.C. 6333(c)).

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

21               (1) signatures from the Governor, chief State  
22               school officer, and State higher education executive  
23               officer verifying the eligible entity shall meet the re-  
24               quirements described in paragraph (2) within the  
25               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-

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

5 (I) common course numbering;

6 (II) a general education core cur-  
7 rriculum; and

8 (III) management systems re-  
9 garding course equivalency, transfer  
10 of credit, and articulation;

11 (3) a description of how the eligible entity will  
12 disseminate information to subgroups of students in  
13 the middle grades and high school served by the eli-  
14 gible entity, including their families, about the op-  
15 portunity to participate in a postsecondary STEM  
16 pathway and the benefits of participation;

17 (4) a description of how the eligible entity will  
18 implement postsecondary STEM pathways in all  
19 local educational agencies participating in the eligi-  
20 ble entity, including—

21 (A) the timeline and plan to provide, by  
22 the end of the grant period, a substantial num-  
23 ber of students in the State the opportunity to  
24 participate in a postsecondary STEM pathway;  
25 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,



1 and similar examinations), books, and sup-  
2 plies for students participating in postsec-  
3 ondary STEM pathways, in accordance  
4 with subsection (d)(7); and

5 (iii) covering transportation costs nec-  
6 essary for full participation in postsec-  
7 ondary STEM pathways for students from  
8 a family with a low income.

9 (C) Implementing programs and activities  
10 to improve student preparation for, and partici-  
11 pation in postsecondary STEM pathways, with  
12 a priority for students enrolled in local edu-  
13 cational agencies described in subsection  
14 (e)(7)(C) and subgroups of students, which may  
15 include—

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

18 (ii) providing supplemental advising or  
19 counseling activities that are voluntary to  
20 students, including information on choos-  
21 ing postsecondary options, applying for fi-  
22 nancial aid, completing applications to in-  
23 stitutions of higher education, and career  
24 counseling and advising, beginning as early  
25 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.

○