

House \_\_\_\_\_ Amendment NO. \_\_\_\_\_

Offered By

1 AMEND Senate Substitute for Senate Committee Substitute for Senate Bill No. 549, Page 1,  
2 Section A, Line 3, by inserting after all of said line the following:

3  
4 "173.670. 1. There is hereby established within the department of higher education the  
5 "Missouri Science, Technology, Engineering and Mathematics Initiative". The department of higher  
6 education may award matching funds through this initiative to public institutions of higher  
7 education as part of the annual appropriations process.

8 2. The purpose of the initiative shall be to provide support to increase interest among  
9 elementary, secondary, and university students in fields of study related to science, technology,  
10 engineering, and mathematics and to increase the number of Missouri graduates in these fields at  
11 Missouri's public two- and four-year institutions of higher education.

12 3. As used in this section, the following terms mean:

13 (1) "Educational benefits", the funds provided by an employer to a qualified individual or to  
14 an accredited educational institution for a period of up to five years to pay any portion of the tuition  
15 or fees for a qualified individual pursuing an advanced certificate, associate's degree, bachelor's  
16 degree, master's degree, or doctorate degree in a field of study related to health care, engineering, or  
17 information technology related programs;

18 (2) "Full-time position", an occupation lasting at least one year that consists of at least thirty  
19 hours of work per week;

20 (3) "Internship", a program lasting at least eight weeks that consists of at least fifteen hours  
21 of work per week;

22 (4) "State tax liability", any liability incurred by a taxpayer under the provisions of chapter  
23 143, excluding withholding tax imposed by sections 143.191 to 143.265, or the tax imposed in  
24 chapter 147, 148, or 153;

25 (5) "STEM field", a field involving science, technology, engineering, or mathematics.

26 4. There is hereby created a "Science, Technology, Engineering and Mathematics Fund",  
27 which shall consist of money collected under this section. The state treasurer shall be custodian of  
28 the fund and may approve disbursements from the fund in accordance with sections 30.170 and  
29 30.180. Upon appropriation, money in the fund shall be used solely for the administration of this  
30 section. Any moneys remaining in the fund at the end of the biennium shall not revert to the credit  
31 of the general revenue fund. The state treasurer shall invest moneys in the fund in the same manner  
32 as other funds are invested. Any interest and moneys earned on such investments shall be credited  
33 to the fund.

34 [4.] 5. As part of the initiative, the department of higher education shall develop a process  
35 to award grants to Missouri public two- and four-year institutions of higher education and school  
36 districts that have entered into articulation agreements to offer information technology certification

Action Taken \_\_\_\_\_ Date \_\_\_\_\_

1 through technical course work leading to postsecondary academic credit through the program  
2 established in section 173.675.

3 ~~5.]~~ 6. The general assembly may appropriate funds to the science, technology,  
4 engineering~~],~~ and mathematics fund to match institution funds to support the following programs,  
5 as recommended by the department of higher education:

6 (1) ~~[Endowed teaching professor programs, which provide funds to support faculty who~~  
7 ~~teach undergraduate courses in science, technology, engineering, or mathematics fields at public~~  
8 ~~institutions of higher education;~~

9 ~~———(2)]~~ Scholarship programs, which provide financial aid or loan forgiveness awards to  
10 Missouri students who study in the science, technology, engineering, or mathematics fields or who  
11 plan to enter the teaching field in Missouri with an emphasis on science, technology, engineering,  
12 and mathematics areas; and

13 ~~[(3)]~~ (2) Experiential youth programs ~~[at public colleges or universities,]~~ designed to  
14 provide Missouri middle school, junior high, and high school students with the opportunity to  
15 experience science, technology, engineering, and mathematics fields through camps or other  
16 educational offerings~~;~~

17 ~~———(4)~~ Career enhancement programs for current elementary and secondary teachers and  
18 professors at Missouri public and private colleges and universities in the science, technology,  
19 engineering, or mathematics fields to improve the quality of teaching].

20 7. Any taxpayer in the state of Missouri who provides educational benefits or selects a  
21 student majoring in a STEM field who is attending a two-year or four-year public or private  
22 Missouri college or university for an internship located in the state of Missouri, or who selects a  
23 student who recently graduated with a degree in a STEM field from any two-year or four-year  
24 public or private Missouri college or university for a full-time position in a STEM field located in  
25 the state of Missouri, may apply to have ten thousand dollars of the taxpayer's state tax liability  
26 transferred from the general revenue fund and placed in the science, technology, engineering and  
27 mathematics fund established in subsection 4 of this section, upon approval by the department of  
28 higher education and appropriation by the general assembly. The department of higher education  
29 shall establish a procedure for approving applications under this section. For purposes of this  
30 subsection, the taxpayer's state tax liability shall be paid before a transfer under this subsection  
31 occurs. The cumulative amount of taxes transferred to the science, technology, engineering and  
32 mathematics fund under this subsection shall not exceed an annual total of two-hundred thousand  
33 dollars from all participating taxpayers in tax year 2019, with such amount adjusted annually for  
34 inflation as determined by the Consumer Price Index for all Urban Consumers for the United States  
35 as reported by the Bureau of Labor Statistics, or its successor index. In the event a donation is made  
36 to the fund from a third party, that donation shall not count towards such annual limit.

37 8. The department of higher education may promulgate all necessary rules and regulations  
38 for the administration of this section. Any rule or portion of a rule, as that term is defined in section  
39 536.010, that is created under the authority delegated in this section shall become effective only if it  
40 complies with and is subject to all of the provisions of chapter 536 and, if applicable, section  
41 536.028. This section and chapter 536 are nonseverable, and if any of the powers vested with the  
42 general assembly pursuant to chapter 536 to review, to delay the effective date, or to disapprove and  
43 annul a rule are subsequently held unconstitutional, then the grant of rulemaking authority and any  
44 rule proposed or adopted after August 28, 2018, shall be invalid and void."; and

45  
46 Further amend said bill, Page 14, Section 620.2020, Line 213, by inserting after all of said line the  
47 following:  
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1           "620.2700. 1. Subject to appropriation, the department of elementary and secondary  
2 education shall establish a statewide program to be known as the "STEM Career Awareness  
3 Program" to increase STEM career awareness among students in grades six through eight. For  
4 purposes of this section, "STEM" means science, technology, engineering, and mathematics.

5           2. The department of elementary and secondary education shall promote the statewide  
6 program beginning in the 2019-20 school year. The program shall introduce students to a wide  
7 variety of STEM careers and technology through an online-based STEM curriculum.

8           3. Before January 1, 2019, the department of elementary and secondary education shall  
9 solicit proposals and select a provider for the online program. The program selected shall meet the  
10 following criteria:

11           (1) The program introduces students to a wide variety of STEM careers and technologies,  
12 including a curriculum explicitly focused on more than eighty different careers and technologies;

13           (2) The curriculum is organized around the concept of solving societal or human-centered  
14 problems, instead of focusing solely on scientific concepts. The curriculum shall have at least ten  
15 different problems that emphasize different career clusters;

16           (3) The curriculum is designed for flexible implementation in a wide variety of classrooms,  
17 including science, math, English, and social studies, through lessons that emphasize the application  
18 of STEM careers in these contexts;

19           (4) The curriculum demonstrates how math and language skills appropriate to middle  
20 schools are used by STEM careers, making classroom instruction relevant to students interested in  
21 STEM careers;

22           (5) The program uses game-based elements to encourage engagement and competition with  
23 students and teams, including automated online leaderboards;

24           (6) The program rewards students, in the game format, for accomplishment in  
25 demonstrating the application of math and language skills in the contexts of the STEM careers and  
26 technologies;

27           (7) The program automatically produces analytic reports for individual students and for  
28 classes, including analysis of performance against individual math and language skills objectives;

29           (8) The curriculum is available in a self-paced format over the internet, allowing access to  
30 students through individual student accounts anywhere that the students can access the internet;

31           (9) The curriculum includes a narrative soundtrack accompanying and matching all  
32 instructional text to assist students in developing reading skills in the context of STEM careers;

33           (10) The program has a validation from a national, third-party nonprofit organization that  
34 the program increases STEM career awareness and interest;

35           (11) The program shall be listed as a recommended STEM resource in ACT's "Condition of  
36 STEM" 2015 report; and

37           (12) The program includes web-based professional development for school staff.

38           4. Notwithstanding subsections 2 and 3 of this section, the department of elementary and  
39 secondary education may choose a third-party nonprofit entity to implement the statewide program,  
40 solicit proposals, and select a provider as described under subsection 3 of this section.

41           5. (1) There is hereby created in the state treasury the "STEM Career Awareness Program  
42 Fund". The fund shall consist of any appropriations, gifts, bequests, or public or private donations  
43 to such fund. The state treasurer shall be custodian of the fund. In accordance with sections 30.170  
44 and 30.180, the state treasurer may approve disbursements of public moneys in accordance with  
45 distribution requirements and procedures developed by the department of elementary and secondary  
46 education. The fund shall be a dedicated fund and, upon appropriation, moneys in the fund shall be  
47 used solely for the administration of this section.

48           (2) Notwithstanding the provisions of section 33.080 to the contrary, any moneys remaining

1 in the fund at the end of the biennium shall not revert to the credit of the general revenue fund.

2 (3) The state treasurer shall invest moneys in the fund in the same manner as other funds are  
3 invested. Any interest and moneys earned on such investments shall be credited to the fund.

4 6. The department of elementary and secondary education may promulgate all necessary  
5 rules and regulations for the administration of this section. Any rule or portion of a rule, as that  
6 term is defined in section 536.010, that is created under the authority delegated in this section shall  
7 become effective only if it complies with and is subject to all of the provisions of chapter 536 and, if  
8 applicable, section 536.028. This section and chapter 536 are nonseverable, and if any of the  
9 powers vested with the general assembly pursuant to chapter 536 to review, to delay the effective  
10 date, or to disapprove and annul a rule are subsequently held unconstitutional, then the grant of  
11 rulemaking authority and any rule proposed or adopted after August 28, 2018, shall be invalid and  
12 void."; and

13  
14 Further amend said bill by amending the title, enacting clause, and intersectional references  
15 accordingly.