

SECOND REGULAR SESSION

HOUSE BILL NO. 2113

100TH GENERAL ASSEMBLY

INTRODUCED BY REPRESENTATIVE BOSLEY.

3179H.011

DANA RADEMAN MILLER, Chief Clerk

AN ACT

To repeal sections 161.261 and 173.670, RSMo, and to enact in lieu thereof two new sections relating to E-STEAM education.

Be it enacted by the General Assembly of the state of Missouri, as follows:

Section A. Sections 161.261 and 173.670, RSMo, are repealed and two new sections enacted in lieu thereof, to be known as sections 161.261 and 173.670, to read as follows:

161.261. 1. Subject to appropriation, the department of elementary and secondary education shall establish a statewide program to be known as the "[STEM] E-STEAM Career Awareness Program" to increase [STEM] E-STEAM career awareness among students in grades six through eight. For purposes of this section, **the term "STEM" means science, technology, engineering, and mathematics, and the term "E-STEAM" means entrepreneurship, science, technology, engineering, arts and agriculture, and mathematics.**

2. The department of elementary and secondary education shall promote the statewide program beginning in the 2019-20 school year. The program shall introduce students to a wide variety of STEM careers and technology through an online-based STEM curriculum. **Beginning in the 2021-22 school year and continuing thereafter, the program shall introduce students to a wide variety of E-STEAM careers and technology through an online-based E-STEAM curriculum.**

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

EXPLANATION — Matter enclosed in bold-faced brackets [thus] in the above bill is not enacted and is intended to be omitted from the law. Matter in **bold-face** type in the above bill is proposed language.

17 (1) The program introduces students to a wide variety of STEM careers and
18 technologies;

19 (2) The curriculum is designed for flexible implementation in a wide variety of
20 classrooms, including science, math, English, and social studies, through lessons that emphasize
21 the application of STEM careers in such contexts;

22 (3) The curriculum demonstrates how math and language arts skills appropriate to
23 middle schools are used by STEM careers, making classroom instruction relevant to students
24 interested in STEM careers;

25 (4) The program produces analytic reports for individual students and for classes,
26 including an analysis of performance against individual math and language arts skills objectives;

27 (5) The curriculum is available in a self-paced online format; and

28 (6) The program includes web-based professional development for school staff.

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

32 **5. Beginning in the 2021-22 school year and continuing thereafter, the department**
33 **of elementary and secondary education shall require the selected provider to modify the**
34 **program to ensure that students are also introduced to careers related to entrepreneurship,**
35 **the arts, and technological advances in agriculture.**

36 6. There is hereby created in the state treasury the "[STEM] E-STEAM Career
37 Awareness Program Fund". The fund shall consist of any appropriations, gifts, bequests, or
38 public or private donations to such fund. The state treasurer shall be custodian of the fund. In
39 accordance with sections 30.170 and 30.180, the state treasurer may approve disbursements of
40 public moneys in accordance with distribution requirements and procedures developed by the
41 department of elementary and secondary education. The fund shall be a dedicated fund and,
42 upon appropriation, moneys in the fund shall be used solely for the administration of this section.
43 Notwithstanding the provisions of section 33.080 to the contrary, any moneys remaining in the
44 fund at the end of the biennium shall not revert to the credit of the general revenue fund. The
45 state treasurer shall invest moneys in the fund in the same manner as other funds are invested.
46 Any interest and moneys earned on such investments shall be credited to the fund.

47 [6.] 7. The department of elementary and secondary education may promulgate all
48 necessary rules and regulations for the administration of this section. Any rule or portion of a
49 rule, as that term is defined in section 536.010, that is created under the authority delegated in
50 this section shall become effective only if it complies with and is subject to all of the provisions
51 of chapter 536 and, if applicable, section 536.028. This section and chapter 536 are
52 nonseverable, and if any of the powers vested with the general assembly pursuant to chapter 536

53 to review, to delay the effective date, or to disapprove and annul a rule are subsequently held
54 unconstitutional, then the grant of rulemaking authority and any rule proposed or adopted after
55 December 18, 2018, shall be invalid and void.

173.670. 1. There is hereby established within the department of higher education and
2 workforce development the "Missouri **Entrepreneurship**, Science, Technology, Engineering,
3 **Arts and Agriculture**, and Mathematics (**E-STEAM**) Initiative". The department of higher
4 education and workforce development may award matching funds through this initiative to
5 public institutions of higher education as part of the annual appropriations process.

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

11 3. There is hereby created [~~a "Science, Technology, Engineering and Mathematics~~
12 ~~Fund"~~] **the "E-STEAM Fund"**, which shall consist of money collected under this section. The
13 state treasurer shall be custodian of the fund and may approve disbursements from the fund in
14 accordance with sections 30.170 and 30.180. Upon appropriation, money in the fund shall be
15 used solely for the administration of this section. Any moneys remaining in the fund at the end
16 of the biennium shall not revert to the credit of the general revenue fund. The state treasurer
17 shall invest moneys in the fund in the same manner as other funds are invested. Any interest and
18 moneys earned on such investments shall be credited to the fund.

19 4. As part of the initiative, the department of higher education and workforce
20 development shall develop a process to award grants to Missouri public two- and four-year
21 institutions of higher education and school districts that have entered into articulation agreements
22 to offer information technology certification through technical course work leading to
23 postsecondary academic credit through the program established in section 173.675.

24 5. The general assembly may appropriate funds to the [~~science, technology, engineering,~~
25 ~~and mathematics~~] **E-STEAM** fund to match institution funds to support the following programs:

26 (1) Endowed teaching professor programs, which provide funds to support faculty who
27 teach undergraduate courses in **entrepreneurship**, science, technology, engineering, **arts**,
28 **technological advances in agriculture**, or mathematics fields at public institutions of higher
29 education;

30 (2) Scholarship programs, which provide financial aid or loan forgiveness awards to
31 Missouri students who study in the **entrepreneurship**, science, technology, engineering, **arts**,
32 **technological advances in agriculture**, or mathematics fields or who plan to enter the teaching

33 field in Missouri with an emphasis on **entrepreneurship**, science, technology, engineering, **arts**,
34 **technological advances in agriculture**, and mathematics areas;

35 (3) Experiential youth programs at public colleges or universities, designed to provide
36 Missouri middle school, junior high, and high school students with the opportunity to experience
37 **entrepreneurship**, science, technology, engineering, **arts**, **technological advances in**
38 **agriculture**, and mathematics fields through camps or other educational offerings; **and**

39 (4) Career enhancement programs for current elementary and secondary teachers and
40 professors at Missouri public and private colleges and universities in the **entrepreneurship**,
41 science, technology, engineering, **arts**, **technological advances in agriculture**, or mathematics
42 fields to improve the quality of teaching.

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