

COMMITTEE ON LEGISLATIVE RESEARCH
OVERSIGHT DIVISION

FISCAL NOTE

L.R. No.: 6881-02
Bill No.: SB 1
Subject: Elementary and Secondary Education; Higher Education; Department of
 Elementary and Secondary Education; Department of Higher Education; Science
 and Technology; Teachers
Type: Original
Date: September 12, 2018

Bill Summary: This proposal modifies provisions relating to computer science education.

FISCAL SUMMARY

ESTIMATED NET EFFECT ON GENERAL REVENUE FUND			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
General Revenue	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)
Total Estimated Net Effect on General Revenue	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)

ESTIMATED NET EFFECT ON OTHER STATE FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Computer Science Education Fund*	\$0	\$0	\$0
STEM Career Awareness Fund*	\$0	\$0	\$0
Total Estimated Net Effect on Other State Funds	\$0	\$0	\$0

*Funds net to zero.

Numbers within parentheses: () indicate costs or losses.

This fiscal note contains 9 pages.

ESTIMATED NET EFFECT ON FEDERAL FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on <u>All</u> Federal Funds	\$0	\$0	\$0

ESTIMATED NET EFFECT ON FULL TIME EQUIVALENT (FTE)			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on FTE	0	0	0

Estimated Net Effect (expenditures or reduced revenues) expected to exceed \$100,000 in any of the three fiscal years after implementation of the act.

ESTIMATED NET EFFECT ON LOCAL FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Local Government	Could exceed \$100,000	Could exceed \$100,000 to (Unknown)	Could exceed \$100,000 to (Unknown)

FISCAL ANALYSIS

ASSUMPTION

§161.261 STEM Career Awareness Program

Officials from the **Department of Elementary and Secondary Education (DESE)** assume the request for proposal (RFP) would be issued for the amount available in the STEM Career Awareness Program Fund. Any cost to the state would be assumed by this fund. It is a supplementary online exploratory program for middle school students. DESE doesn't have anything comparable on which to base an estimate. Therefore, the cost is unknown; however, it has the potential to exceed \$100,000.

Oversight assumes this section requires DESE to implement an online statewide program which meets certain requirements for grades six through eight beginning in the 2019-2020 school year. Oversight notes this section requires DESE, on or before January 1, 2019 (FY 2019), to solicit proposals and select an online provider for the online course.

Oversight assumes this section creates the STEM Career Awareness Program Fund which consists of appropriations, gifts, bequest and donations to be used for establishing and supporting the STEM Career Awareness Program.

Oversight notes, per section 2.028 in appropriation bill TAFP CCS for SCS for HCS for HB 2002, there is an appropriation of \$250,000 for "STEM Career Awareness Program pursuant to House Bill 1623 (2018) and Senate Bill 894 (2018)." Oversight is unsure if the spending authority will be allowed since House Bill 1623 (2018) did not pass and Senate Bill 894 (2018) was vetoed. Oversight is unsure if the existing appropriation authority will be valid for Senate Bill 1. Also, Section 161.261 of the bill states that the program is subject to appropriation, with specific dates for DESE to solicit proposals (by January 1, 2019) and for DESE to select a provider (by March 1, 2019). Therefore, since Oversight is unsure if the existing appropriation in 2.027 & 2.028 will apply to this bill, Oversight will reflect a potential impact of \$0 (program will not be established if appropriation authority is not valid) or a cost of \$250,000 from general revenue to the STEM Career Awareness Program for FY 2019 and each year thereafter. Oversight assumes that all money will be used by the Fund in the year in which it is received.

§170.018 Computer Science

Officials from **DESE** assume this provision will result in a fiscal impact; however, DESE does not expect it to exceed \$100,000 in administrative costs. DESE defers to local school districts.

ASSUMPTION (continued)

§170.018.1 (2) Computer Science Graduation Policy

Oversight notes this provision requires DESE to create a policy to allow one unit of academic credit with a district-approved computer science course to fulfill one unit of academic credit for any math, science or practical arts unit required for graduation. Currently, computer science courses are allowed to count as a practical art (of which a student needs 1 unit) or as an elective (of which a student needs 7 units).

§170.018.2 Computer Science Work Group

Oversight assumes this provision requires the state board of education to convene a work group to develop academic standards relating to computer science. Oversight notes this provision requires the state board of education to adopt and implement academic performance standards relating to computer science.

§170.018.3 Teacher Endorsement

Oversight assumes this provision requires the state board of education to develop a procedure for a teacher who holds a certificate of license to teach and demonstrate sufficient content knowledge of computer science to receive a special endorsement on his or her license.

§170.018.4 Computer Science Education Fund

Oversight assumes this provision creates the Computer Science Education Fund which shall consist of appropriations and other moneys for the purpose of providing teacher professional development programs relating to computer science. Oversight assumes that all money will be used by the Fund in the year in which it is received.

Oversight notes in other fiscal notes for similar proposals, this fund was estimated to have an impact of less than \$100,000. However, upon further inquiry, DESE has noted there is no way to estimate the moneys that may be appropriated to this fund. Oversight will show an impact as could exceed \$100,000 in appropriations for the grant funding program.

Bill as a Whole

Officials from the **Office of the State Treasurer** assume the proposal will have no fiscal impact on their organization. This proposal would create the following funds:

- The "STEM Career Awareness Program Fund" which would not be subject to the biennial transfer and would have interest credited back to it
- The "Computer Science Education Fund" which would not be subject to the biennial transfer and would have interest credited back to it.

ASSUMPTION (continued)

Officials from the **Wellsville-Middletown R-1 School District** state their small rural school district has limited band width and limited funds for computers and other technology hardware. The district is also lacking the population size to make it feasible to hire a qualified technology instructor.

Officials from **Lincoln University** indicated this proposal would have a positive fiscal impact on the university.

Officials from the **Joint Committee on Administrative Rules** assume this proposal is not anticipated to cause a fiscal impact beyond its current appropriation.

In response to a similar proposal, officials from **Northwest Missouri State University** estimated the cost to implement new standards at \$85,621.

In response to a similar proposal, officials from the **University of Central Missouri** stated the proposal would have a financial impact on the university. Anticipated one-time, periodic costs include:

- The course work will need to be developed and integrated into the curriculum for middle school teachers.
- Professional development for existing faculty in the middle school program.

Anticipated on-going costs include:

- There may be a need for added faculty if the required material cannot be integrated into existing faculty load.

In response to a similar proposal, officials from the **University of Missouri System** assumed the proposal would have no to minimal fiscal impact on the University of Missouri.

In response to a similar proposal, officials from the **Department of Higher Education** and **Missouri Western State University** assumed the proposal would have no fiscal impact on their organizations.

<u>FISCAL IMPACT - State Government</u>	FY 2019 (9 Mo.)	FY 2020	FY 2021
GENERAL REVENUE			
<u>Transfer Out</u> - STEM Career Awareness Fund (§161.261) - depending upon the validity of the existing appropriation authority in 2.027 & 2.028	\$0 or (\$250,000)	\$0 or (\$250,000)	\$0 or (\$250,000)
<u>Cost</u> - DESE computer science work group, policy and standards (§170.018)	(Less than \$100,000)	(Less than \$100,000)	(Less than \$100,000)
<u>Transfer Out</u> - Computer Science Education Fund for grants (§170.018.4)	(Could exceed \$100,000)	(Could exceed \$100,000)	(Could exceed \$100,000)
ESTIMATED NET EFFECT ON GENERAL REVENUE	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)	(Could exceed \$100,000) to (Could exceed \$350,000)
 COMPUTER SCIENCE EDUCATION FUND			
<u>Transfer In</u> - from General Revenue	Could exceed \$100,000	Could exceed \$100,000	Could exceed \$100,000
<u>Transfer In</u> - from gifts, bequests or donations	Could exceed \$100,000	Could exceed \$100,000	Could exceed \$100,000
<u>Cost</u> - grants for professional development in computer science (§170.018)	(Could exceed \$200,000)	(Could exceed \$200,000)	(Could exceed \$200,000)
ESTIMATED NET EFFECT ON THE COMPUTER SCIENCE EDUCATION FUND	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

<u>FISCAL IMPACT - State Government</u> continued	FY 2019 (9 Mo.)	FY 2020	FY 2021
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STEM CAREER AWARENESS FUND

<u>Transfer In</u> - from General Revenue	\$0 or \$250,000	\$0 or \$250,000	\$0 or \$250,000
	\$0 or Could exceed \$100,000	\$0 or Could exceed \$100,000	\$0 or Could exceed \$100,000
<u>Transfer In</u> - from gifts, bequests			
<u>Cost</u> - online STEM Career Awareness program (§161.261)	\$0 or (Could exceed \$350,000)	\$0 or (Could exceed \$350,000)	\$0 or (Could exceed \$350,000)

ESTIMATED NET EFFECT ON THE STEM CAREER AWARENESS FUND

	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
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<u>FISCAL IMPACT - Local Government</u>	FY 2019 (10 Mo.)	FY 2020	FY 2021
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LOCAL SCHOOL DISTRICT FUNDS

<u>Revenue</u> - from the state's Computer Science Education Fund - grants for professional development in computer science	Could exceed \$100,000	Could exceed \$100,000	Could exceed \$100,000
<u>Cost</u> - computer science course depending upon standards established in §170.018.1(4)	\$0	\$0 or (Unknown)	\$0 or (Unknown)

ESTIMATED NET EFFECT ON LOCAL SCHOOL DISTRICT FUNDS	Could exceed <u>\$100,000</u>	Could exceed \$100,000 to <u>(Unknown)</u>	Could exceed \$100,000 to <u>(Unknown)</u>
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FISCAL IMPACT - Small Business

No direct fiscal impact to small businesses would be expected as a result of this proposal.

FISCAL DESCRIPTION

This act requires that before July 1, 2019, the Department of Elementary and Secondary Education (DESE) develop a high school graduation policy that allows a student to fulfill one unit of academic credit with a district-approved computer science course for any math, science, or practical arts unit required for high school graduation.

Additionally, the State Board of Education shall convene a work group to develop and recommend academic performance standards relating to computer science. These standards shall be adopted and implemented beginning in the 2019-2020 school year. The Board shall also develop a procedure by which any licensed teacher who demonstrates sufficient content knowledge of computer science shall receive a special endorsement on his or her license signifying this specialized knowledge.

This act creates the "Computer Science Education Fund" for the purpose of providing teacher professional development programs relating to computer science. The Board shall award grants from the fund to eligible entities, as defined in the act, who have submitted an application to DESE, as specified in the act.

Subject to appropriation, DESE shall create the "STEM Career Awareness Program Fund" to increase STEM career awareness among students in grades six through eight. The statewide program shall introduce students to a wide variety of STEM careers and technology through an online-based STEM curriculum. Before January 1, 2019, DESE shall solicit proposals and by March 1, 2019 shall select provider for the online program. The program shall be supported by the "STEM Career Awareness Program Fund" and shall be implemented beginning with the 2019-2020 school year.

This legislation is not federally mandated, would not duplicate any other program and would not require additional capital improvements or rental space.

SOURCES OF INFORMATION

Department of Elementary and Secondary Education
Department of Higher Education
Office of the State Treasurer
Wellsville-Middletown R-1 School District
University of Central Missouri
University of Missouri System
Missouri Western State University
Northwest Missouri State University
Lincoln University

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September 12, 2018

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September 12, 2018