

COMMITTEE ON LEGISLATIVE RESEARCH
OVERSIGHT DIVISION

FISCAL NOTE

L.R. No.: 5880-09
Bill No.: Truly Agreed To and Finally Passed HCS for SS for SCS for SB Nos. 894 & 921
Subject: Elementary and Secondary Education; Science and Technology
Type: Original
Date: June 21, 2018

Bill Summary: This proposal establishes a statewide STEM career awareness program and enacts new provisions of law related to computer science.

FISCAL SUMMARY

ESTIMATED NET EFFECT ON GENERAL REVENUE FUND			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
General Revenue	(Could exceed \$550,000)	(Could exceed \$554,000)	(Could exceed \$558,000)
Total Estimated Net Effect on General Revenue	(Could exceed \$550,000)	(Could exceed \$554,000)	(Could exceed \$558,000)

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
STEM Fund	Up to \$200,000	Up to \$204,000	Up to \$208,000
Total Estimated Net Effect on <u>Other</u> State Funds	Up to \$200,000	Up to \$204,000	Up to \$208,000

*Funds net to zero.

Numbers within parentheses: () indicate costs or losses.

This fiscal note contains 12 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.

Officials from the **Office of Administration - Budget and Planning (BAP)** assume section 161.261 requires the Department of Elementary and Secondary Education (DESE) to establish a statewide STEM Career Awareness Program subject to appropriation. Additionally, the STEM Career Awareness Program Fund is created.

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 2.027 in appropriation bill TAFP CCS for SCS for HCS for HB 2002, an appropriation of \$250,000. Therefore, Oversight will reflect an appropriation of \$250,000 from general revenue to the STEM Career Awareness Program. Oversight assumes that all money will be used by the Fund in the year in which it is received.

§167.910 Career Readiness Task Force

Officials from **BAP** assume Section 167.910 creates the "Career Readiness Course Task Force" to explore the potential of providing a career readiness course in public schools to students in the eighth or ninth grade. DESE is required to provide legal, research, clerical, and technical services as the task force requires.

§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)

Officials from **BAP** assume section 170.018 requires DESE to develop a high school graduation policy, which allows students to fulfill one academic credit of mathematics, science, or practical arts by taking a district-approved computer science course. Section 170.018.2 requires DESE to convene a work group to develop academic performance standards for computer science.

§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.

§173.670 STEM Fund

Officials from the **Department of Higher Education (DHE)** stated DHE would be in charge of reviewing institutional matching fund requests for the Science, Technology, Engineering, and Mathematics Fund (Sections 173.670.6). This would require the promulgation of rules to

ASSUMPTION (continued)

determine how applicants would be selected, which could be handled with existing staff, and the addition of ½ Research Associate FTE to handle the continuous influx of applications for the two new programs .

Costs are estimated at \$23,925 for FY 2019, \$28,126 for FY 2020, and \$28,366 for FY 2021. Costs for the ½ FTE are based upon OA budget guidelines for FY19 standards for ongoing supplies, IT cost per FTE, etc.

Oversight assumes DHE could handle the program with existing staff. Should a sufficient number of new matching fund requests be submitted to justify additional FTE, DHE could request the FTE through the appropriation process.

Officials from **Department of Revenue** assume this proposed section would allow any taxpayer hiring a person who is currently enrolled in a field of study related to science, technology, engineering, or mathematics to apply up to \$10,000 of their state tax liability to be transferred from general revenue and placed in a STEM Fund. These transfers may not exceed \$200,000. The proposed legislation may reduce GR by \$200,000, but will have no effect on total state revenues.

Officials from **BAP** assume section 173.670 of this proposal establishes a process whereby a qualifying taxpayer that selects a qualifying intern or full-time employee may apply to have, upon appropriation, up to \$10,000 of their tax liability transferred from the General Revenue Fund to the Science, Technology, Engineering and Mathematics (STEM) Fund, which may subsequently be appropriated to public higher education institutions. The taxpayer shall remit their tax liability before such funds are transferred. The annual limit on funds that may be moved from GR under this proposal is \$200,000 beginning tax year 2019; such limit shall be annually adjusted by inflation, which is assumed to be 2% per year. This proposal will have no direct impact on TSR or general revenue collections.

Bill as a whole

Officials from **BAP** assume sections 161.261, 167.910, and 170.018 will not affect Total State Revenue; however, DESE may have specific costs related to the implementation of these provisions.

Section 161.106 specifies that DESE will be responsible for handling career and technical student organization funds. Section 162.1115 allows DESE to rely on technical coursework and skills assessments industry-recognized credentials in developing career pathways for students. Section 170.028 requires the Career and Technical Education Advisory Council to annually

ASSUMPTION (continued)

review and update a list of industry certifications, state-issued professional licenses, and occupational competency assessments. Section 178.550 adds the Director of the Department of Economic Development or their designee to the Career and Technical Education Advisory Council. No impact is expected from these provisions.

Officials from the **Office of the State Treasurer, Department of Economic Development, Department of Insurance, Financial Institutions and Professional Registration, Missouri State University** and **State Technical College of Missouri** assume the proposal will have no fiscal impact on their organizations.

Officials from the **University of Central Missouri** assume there would be a positive impact for the university.

Officials from the **Wellsville-Middletown R-1 School District** state since so much of this proposal is dependent on the formation of committees, task forces and the promulgation of rules and regulations by DESE, it is impossible to determine just how much this will cost the school district.

Officials from the **Sherwood Cass R-VIII School District** state if it gets to the point where schools must offer a computer coding class the district would have costs for hardware, training for a teacher, and costs for a curriculum. Depending on the sources it could run about \$15,000 for hardware and \$8,000 - \$20,000 for curriculum and training. This would be a significant issue in smaller schools who are already deficit spending or trying to just add more technology to the classroom let alone having an advanced computer course such as this. If this remains as a student has the option I don't see any other financial implications if we don't already have the course. If anything, those who offer a course may have to hire additional teachers so more sections of the course could be created into the master schedule.

In response to a previous version, SS for SCS for SB Nos. 894 & 921 (LR 5880-08), officials from the **Kirksville R-III School District** assumed this proposal would have a limited negative fiscal impact on the district.

In response to a previous version, SS for SCS for SB Nos. 894 & 921 (LR 5880-08), officials from the **Summersville R2 School District** assumed there is a negative fiscal impact.

In response to a previous version, SS for SCS for SB Nos. 894 & 921 (LR 5880-08), officials from the **Missouri Western State University** assumed the proposal will have minimal fiscal impact on their organization.

ASSUMPTION (continued)

In response to a similar proposal, HB 921 (LR 5885-01), officials from the **Northwest Missouri State University** assumed the proposal will have no fiscal impact on their organizations.

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

Officials from the **Office of the Secretary of State (SOS)** stated many bills considered by the General Assembly include provisions allowing or requiring agencies to submit rules and regulations to implement the act. The SOS is provided with core funding to handle a certain amount of normal activity resulting from each year's legislative session. The fiscal impact for this fiscal note to the SOS for Administrative Rules is less than \$2,500. The SOS recognizes that this is a small amount and does not expect that additional funding would be required to meet these costs. However, the SOS also recognizes that many such bills may be passed by the General Assembly in a given year and that collectively the costs may be in excess of what the office can sustain with the core budget. Therefore, the SOS reserves the right to request funding for the cost of supporting administrative rules requirements should the need arise based on a review of the finally approved bills signed by the governor.

Oversight assumes the SOS could absorb the costs of printing and distributing regulations related to this proposal. If multiple bills pass which require the printing and distribution of regulations at substantial costs, the SOS could request funding through the appropriation process.

Oversight assumes there could be costs associated with developing a computer science course for school districts that currently do not offer one. Oversight will show the cost to school districts as unknown.

Officials at the following school districts: Arcadia Valley R-2, Avilla R-13, Bakersfield, Belton, Benton County R-2, Bismark R-5, Bloomfield R-14, Blue Springs, Bolivar R-1, Bowling Green R-1, Branson, Brentwood, Bronaugh R-7, Campbell R-2, Carrollton R-7, Caruthersville, Central R-III, Chilhowee R-4, Chillicothe R-II, Clarkton C-4, Cole R-I, Columbia, Concordia R-2, Crawford County R-1, Crocker R-II, Delta C-7, East Carter R-2, Eldon R-I, Everton R-III, Fair Play, Fayette R-3, Forsyth R-3, Fox C-6, Fredericktown R-I, Fulton, Grain Valley, Hancock Place, Hannibal, Harrisonburg R-8, Harrisonville, Hillsboro R-3, Hollister R-5, Humansville R-4, Hurley R-1, Independence, Jefferson City, Kansas City Public Schools, Kearney R-1, Kennett #39, King City R-1, Kingston 42, Kirbyville R-VI, Lee Summit, Leeton R-10, Lewis County C-1, Lincoln R-II, Lindbergh, Lonedell R-14, Macon County R-1, Malta Bend, Mehville, Meramec Valley R-3, Mexico, Middle Grove C-1, Midway R-1, Milan C-2, Moberly, Monroe City R-I, Morgan County R-2, New Haven, Nixa, North Kansas City, North St. Francois Co. R-1,

ASSUMPTION (continued)

Northeast Nodaway R-5, Odessa R-VII, Oregon-Howell R-III, Orrick R-11, Osborn R-0, Parkway, Pattonville, Pettis County R-12, Pierce City, Plato R-5, Princeton R-5, Raymore-Peculiar R-III, Raytown, Reeds Springs R-IV, Renick R-5, Republic R-III, Richards R-V, Richland R-1, Richmond R-XVI, Riverview Gardens, Salisbury R-4, Sarcoxie R-2, Scotland County R-I, Sedalia, Seymour R-2, Shell Knob #78, Sikeston, Silex, Smithville R-2, Special School District of St. Louis County, Spickard R-II, Springfield, St Joseph, St Louis, St. Charles, St. Elizabeth R-4, Sullivan, Valley R-6, Verona R-7, Warren County R-3, Warrensburg R-6, Waynesville, Webster Groves, Wentzville, West Plains, Westview C-6 and the Wright City R-2 school districts did not respond to **Oversight's** request for fiscal impact.

<u>FISCAL IMPACT - State Government</u>	FY 2019 (10 Mo.)	FY 2020	FY 2021
GENERAL REVENUE			
<u>Cost</u> - DESE computer science work group, policy and standards (§170.018.2)	(Less than \$100,000)	(Less than \$100,000)	(Less than \$100,000)
<u>Transfer Out</u> - Computer Science Education Fund (§170.018.4)	(Could exceed \$100,000)	(Could exceed \$100,000)	(Could exceed \$100,000)
<u>Transfer Out</u> - STEM Career Awareness Fund (§161.261)	(\$250,000)	(\$250,000)	(\$250,000)
<u>Transfer Out</u> - to STEM Fund - taxpayer tax liability transferred for hiring an intern or full-time position (§173.670.7)	(Up to \$200,000)	(Up to \$204,000)	(Up to \$208,000)
ESTIMATED NET EFFECT ON GENERAL REVENUE	(Could exceed <u>\$550,000</u>)	(Could exceed <u>\$554,000</u>)	(Could exceed <u>\$558,000</u>)

<u>FISCAL IMPACT - State Government</u>	FY 2019	FY 2020	FY 2021
Continued	(10 Mo.)		
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 <u>\$200,000</u>)	(Could exceed <u>\$200,000</u>)	(Could exceed <u>\$200,000</u>)
ESTIMATED NET EFFECT ON THE COMPUTER SCIENCE EDUCATION FUND	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

STEM CAREER AWARENESS FUND

<u>Transfer In</u> - from General Revenue	\$250,000	\$250,000	\$250,000
<u>Transfer In</u> - from gifts, bequests or donations	Could exceed \$100,000	Could exceed \$100,000	Could exceed \$100,000
<u>Cost</u> - online STEM Career Awareness program (§161.261)	Could exceed <u>(\$350,000)</u>	Could exceed <u>(\$350,000)</u>	Could exceed <u>(\$350,000)</u>
ESTIMATED NET EFFECT ON THE STEM CAREER AWARENESS FUND	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

<u>FISCAL IMPACT - State Government</u>	FY 2019	FY 2020	FY 2021
Continued	(10 Mo.)		

**SCIENCE, TECHNOLOGY,
 ENGINEERING AND
 MATHEMATICS FUND**

<u>Transfer In - from General Revenue</u>	Up to <u>\$200,000</u>	Up to <u>\$204,000</u>	Up to <u>\$208,000</u>
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**ESTIMATED NET EFFECT ON THE
 SCIENCE, TECHNOLOGY,
 ENGINEERING AND
 MATHEMATICS FUND**

	<u>Up to \$200,000</u>	<u>Up to \$204,000</u>	<u>Up to \$208,000</u>
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<u>FISCAL IMPACT - Local Government</u>	FY 2019	FY 2020	FY 2021
	(10 Mo.)		

LOCAL SCHOOL DISTRICT FUNDS

<u>Revenue - from the state's Computer Science Fund - grants for professional development in computer science</u>	Could exceed \$100,000	Could exceed \$100,000	Could exceed \$100,000
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<u>Cost - computer science course</u>	<u>\$0</u>	<u>(Unknown)</u>	<u>(Unknown)</u>
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ESTIMATED NET EFFECT ON LOCAL SCHOOL DISTRICTS	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.

FISCAL DESCRIPTION (continued)

Additionally, before July 1, 2019, 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 select a provider for the online program using specified criteria or choose a third-party nonprofit entity to implement the program, solicit proposals, and select a provider. The program shall be supported by the "STEM Career Awareness Program Fund" and shall be implemented beginning with the 2019-2020 school year.

This bill changes the law regarding the Missouri Science, Technology, Engineering and Mathematics (STEM) Fund. Missouri taxpayers who provide educational benefits or hire a STEM student attending a Missouri college for an internship in Missouri, or a STEM graduate from a Missouri college for a full-time STEM position in Missouri, may apply to have \$10,000 of state tax liability placed in the fund, subject to appropriation by the General Assembly and approval by the Department of Higher Education. The cumulative amount of taxes transferred to the fund is capped at an annual total of \$200,000, with annual cost-of-living adjustments.

The bill removes endowed teaching professor programs and career enhancement programs from the list of programs eligible for moneys from the fund. Students demonstrating financial need shall benefit from 60% of any moneys granted to funded programs.

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

L.R. No. 5880-09

Bill No. Truly Agreed To and Finally Passed HCS for SS for SCS for SB Nos. 894 & 921

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SOURCES OF INFORMATION

Department of Elementary and Secondary Education

Department of Higher Education

Office of the State Treasurer

Department of Revenue

Office of Administration - Budget and Planning

Department of Insurance, Financial Institutions and Professional Registration

Joint Committee on Administrative Rules

Office of the Secretary of State

University of Central Missouri

Missouri State University

State Technical College of Missouri

Northwest Missouri State University

Missouri Western State University

Summersville R2 School District

Kirksville R-III School District

Sherwood Cass R-VIII School District

Ross Strope



Acting Director

June 21, 2018