LEGISLATIVE GENERAL COUNSEL
₵ Approved for Filing: A.O. Stallings ₵
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COMPUTER SCIENCE INITIATIVE FOR PUBLIC SCHOOLS

2015 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Howard A. Stephenson

House Sponsor: Bradley G. Last

LONG TITLE

General Description:

This bill provides for computer science instruction in public schools.

Highlighted Provisions:

This bill:

- defines terms;
- creates the computer science initiative for public schools;
- requires the STEM Action Center Board and the State Board of Education to collaborate to develop and implement the initiative by:
  - creating an online repository of computer science instructional resources;
  - providing for professional development on teaching computer science; and
  - selecting one or more providers, through a request for proposals process, to provide a comprehensive computer coding instructional software solution;
- specifies criteria for a school district or charter school to participate in certain elements of the initiative;
- provides for review and evaluation of the initiative; and
- requires the STEM Action Center Board and the State Board of Education to annually report on the initiative to the Education Interim Committee.

Money Appropriated in this Bill:

This bill appropriates in fiscal year 2016:

S.B. 107

▸ to the Governor's Office of Economic Development - STEM Action Center, as an ongoing appropriation:

• from the General Fund, $2,070,000.

Other Special Clauses:

This bill provides a special effective date.

Utah Code Sections Affected:

ENACTS:

63M-1-3212, Utah Code Annotated 1953

Be it enacted by the Legislature of the state of Utah:

Section 1. Section **63M-1-3212** is enacted to read:

63M-1-3212. Computer science initiative for public schools.

(1) As used in this section:

(a) "Computational thinking" means the set of problem-solving skills and techniques that software engineers use to write programs that underlie computer applications, including decomposition, pattern recognition, pattern generalization, and algorithm design.

(b) "Computer coding" means the process of writing script for a computer program or mobile device.

(2) On behalf of the board, the staff of the board and the staff of the State Board of Education shall collaborate to develop and implement a computer science initiative for public schools by:

(a) creating an online repository that:

(i) is available for school districts and charter schools to use as a resource; and

(ii) includes high-quality computer science instructional resources that are designed to teach students in all grade levels:

(A) computational thinking skills; and

(B) computer coding skills;

(b) providing for professional development on teaching computer science by:

(i) including resources for teachers and administrators related to teaching computational thinking and computer coding in the STEM education high quality professional development application described in Section 63M-1-3209;

(ii) providing statewide or regional professional development institutes; and

(iii) distributing grants to school districts and charter schools, in accordance with this section, that may be used to provide incentives for teachers to earn a secondary computer science endorsement;

(c) selecting one or more providers, through a request for proposals process in accordance with this section, to provide a comprehensive computer coding instructional software solution described in Subsection (3); and

(d) encouraging schools to partner with technology companies for student and teacher mentoring opportunities.

(3) On behalf of the board, the staff of the board and the staff of the State Board of Education shall collaborate and select one or more providers, through a request for proposals process, to provide a comprehensive computer coding instructional software solution that includes:

(a) licenses for computer coding instructional software that may be on-premises or cloud-based;

(b) professional development for teachers and administrators related to the use of the software;

(c) real-time technical and instructional support for teachers; and

(d) real-time coding support for students.

(4) In evaluating provider proposals, the staff of the board and the staff of the State Board of Education shall ensure that the evaluation criteria weighs the extent to which the:

(a) software:

(i) includes activities that are designed to teach professional computer science and engineering skills through computer coding;

(ii) engages students in the design and coding of an original digital project from conception through publication;

(iii) offers sequential learning opportunities for a coding pathway across multiple grades;

(iv) is designed as an engaging product for the school context;

(v) provides collaborative learning capabilities;

(vi) provides opportunities for frequent and informal assessments and includes an

embedded progress monitoring tool and mechanisms for regular feedback to students and teachers; and

(vii) can be integrated into the core curriculum; and

(b) proposed provider has demonstrated efficacy:

(i) in a variety of educational contexts, including rural, urban, and suburban; and

(ii) with a variety of students, including low-income students, high achieving students, and struggling students.

(5) (a) To apply for a grant described in Subsection (2)(b)(iii), a school district or charter school shall submit a plan to the board for the use of the grant, including:

(i) a statement of purpose that describes the learning objectives, goals, and measurable outcomes the school district or charter school will accomplish by providing professional development on teaching computer science; and

(ii) a description of how the school district or charter school will provide high-quality professional development for teachers and administrators.

(b) To apply for the comprehensive software solution described in Subsection (3), a school district or charter school shall submit a plan to the board for the use of the software solution, including:

(i) a statement of purpose that describes the learning objectives, goals, and measurable outcomes the school district or charter school will accomplish by using the software; and

(ii) a commitment to use the software for a sufficient amount of instructional time to achieve the learning objectives described in the statement of purpose.

(6) On behalf of the board, the staff of the board and the staff of the State Board of Education shall:

(a) award the grants described in Subsection (2)(b)(iii) to school districts and charter schools on a competitive basis, giving priority to applicants whose plans are timely and well developed; and

(b) make the comprehensive software solution described in Subsection (3) available to school districts and charter schools on a competitive basis, giving priority to applicants:

(i) whose plans are timely and well developed; and

(ii) who commit to providing sequential learning opportunities for a coding pathway across multiple grades.

(7) The board and the State Board of Education shall encourage schools to independently pursue computer science and coding initiatives, subject to local school board or charter school governing board approval, based on the unique needs of the school's students.

(8) (a) On or before November 1, 2015, and on or before November 1 each year thereafter, the board and the State Board of Education shall collaborate to provide a verbal and written report to the Education Interim Committee on the status of the initiative.

(b) (i) On behalf of the board, the staff of the board and the staff of the State Board of Education shall collaborate and select an independent evaluator, through a request for proposals process, to act as an independent contractor to evaluate the comprehensive software solution described in Subsection (3).

(ii) The independent evaluator shall:

(A) evaluate the comprehensive software solution using criteria established by the board and the State Board of Education; and

(B) report the results of the evaluation to the Education Interim Committee by the Education Interim Committee's October 2018 meeting.

Section 2. **Appropriation.**

Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for the fiscal year beginning July 1, 2015, and ending June 30, 2016, the following sums of money are appropriated from resources not otherwise appropriated, or reduced from amounts previously appropriated, out of the funds or accounts indicated. These sums of money are in addition to any amounts previously appropriated for fiscal year 2016.

To Governor's Office of Economic Development — STEM Action Center

From General Fund $2,070,000

Schedule of Programs:

STEM Action Center $2,070,000

The Legislature intends that:

(1) the Governor's Office of Economic Development use:

(a) at least $1,500,000 of the appropriation provided in this section for licenses for the comprehensive computer coding instructional software solution described in Subsection 63M-1-3212(3);

(b) at least $320,000 of the appropriation provided in this section for professional

development on teaching computer science as described in Subsection 63M-1-3212(2)(b);

(c) up to $150,000 of the appropriation provided in this section for administration of the initiative described in Section 63M-1-3212; and

(d) up to $100,000 of the appropriation provided in this section for the evaluation described in Subsection 63M-1-3212(7)(b); and

(2) the appropriation provided in this section is:

(a) ongoing; and

(b) non-lapsing.

Section 3. **Effective date.**

(1) Except as provided in Subsection (2), if approved by two-thirds of all the members elected to each house, this bill takes effect upon approval by the governor, or the day following the constitutional time limit of Utah Constitution, Article VII, Section 8, without the governor's signature, or in the case of a veto, the date of veto override.

(2) Uncodified Section 2, Appropriation, takes effect on July 1, 2015.

Legislative Review Note
as of 1-15-15 11:18 AM

Office of Legislative Research and General Counsel