

**Senator Howard A. Stephenson** proposes the following substitute bill:

**COMPUTER SCIENCE INITIATIVE FOR PUBLIC SCHOOLS**

2016 GENERAL SESSION

STATE OF UTAH

**Chief Sponsor: Howard A. Stephenson**

House Sponsor: Bradley G. Last

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**LONG TITLE**

**General Description:**

This bill enacts provisions regarding computer science instruction in public schools.

**Highlighted Provisions:**

This bill:

- ▶ defines terms;
- ▶ creates the computer science initiative;
- ▶ requires the STEM Action Center Board and the State Board of Education to collaborate to develop and implement the initiative; and
- ▶ requires the STEM Action Center Board to include information on the initiative in the board's annual report to the Education Interim Committee.

**Money Appropriated in this Bill:**

This bill appropriates:

- ▶ to the Governor's Office of Economic Development - STEM Action Center, as an ongoing appropriation:
  - from the General Fund, \$770,000.

**Other Special Clauses:**

This bill provides a special effective date.

**Utah Code Sections Affected:**



26 ENACTS:

27 [63N-12-213](#), Utah Code Annotated 1953



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

30 Section 1. Section [63N-12-213](#) is enacted to read:

31 **[63N-12-213](#). Computer science initiative for public schools.**

32 (1) As used in this section:

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

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

38 (c) "Educator" means the same as that term is defined in Section [53A-6-103](#).

39 (d) "Endorsement" means a stipulation, authorized by the State Board of Education and  
40 appended to a license, that specifies the areas of practice to which the license applies.

41 (e) (i) "Institution of higher education" has the same meaning as that term is defined in  
42 Section [53B-3-102](#).

43 (ii) "Institution of higher education" includes the Utah College of Applied Technology.

44 (f) "Employer" means a private employer, public employer, industry association, the  
45 military, or a union.

46 (g) "License" means the same as that term is defined in Section [53A-6-103](#).

47 (h) "Stackable sequence of credentials" means a sequence of credentials that:

48 (i) an individual can build upon to access an advanced job or higher wage;

49 (ii) is part of a career pathway system;

50 (iii) provides a pathway culminating in the equivalent of an associate's or bachelor's  
51 degree;

52 (iv) facilitates multiple exit and entry points; and

53 (v) recognizes sub-goals or momentum points.

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

- 57 (a) creating an online repository that:  
58 (i) is available for school districts and charter schools to use as a resource; and  
59 (ii) includes high quality computer science instructional resources that are designed to  
60 teach students in all grade levels:  
61 (A) computational thinking skills; and  
62 (B) computer coding skills;  
63 (b) providing for professional development on teaching computer science by:  
64 (i) including resources for educators related to teaching computational thinking and  
65 computer coding in the STEM education high quality professional development application  
66 described in Section 63N-12-210; and  
67 (ii) providing statewide or regional professional development institutes; and  
68 (c) distributing grants to a school district or charter school, on a competitive basis, that  
69 may be used for the purposes described in Subsection (4).  
70 (3) A school district or charter school may enter into an agreement with one or more of  
71 the following entities to jointly apply for a grant under Subsection (2)(c):  
72 (a) a school district;  
73 (b) a charter school;  
74 (c) an employer;  
75 (d) an institution of higher education; or  
76 (e) a non-profit organization.  
77 (4) A grant described in Subsection (2)(c) may be used for the following purposes  
78 related to computer science:  
79 (a) providing incentives for an educator to earn a computer science endorsement;  
80 (b) conducting industry engagement activities;  
81 (c) providing face-to-face mentoring, coaching, or training;  
82 (d) creating a stackable sequence of credentials; or  
83 (e) conducting student outreach, recruitment, and retention efforts.  
84 (5) To apply for a grant described in Subsection (2)(c), a school district or charter  
85 school shall submit a plan to the board for the use of the grant, including a statement of  
86 purpose that describes the learning objectives, goals, and measurable outcomes the school  
87 district or charter school will accomplish by conducting one or more of the purposes described

88 in Subsection (4).

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

92 (7) The board shall include information on the status of the computer science initiative  
93 in the annual report described in Section [63N-12-208](#).

94 **Section 2. Appropriation.**

95 Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for  
96 the fiscal year beginning July 1, 2016, and ending June 30, 2017, the following sums of money  
97 are appropriated from resources not otherwise appropriated, or reduced from amounts  
98 previously appropriated, out of the funds or amounts indicated. These sums of money are in  
99 addition to amounts previously appropriated for fiscal year 2017.

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

101 From General Fund \$770,000

102 Schedule of Programs:

103 STEM Action Center \$770,000

104 The Legislature intends that:

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

106 (a) at least \$620,000 of the appropriation provided in this section for grants described  
107 in Subsection [63N-12-213](#)(2)(c), including at least \$320,000 for providing incentives described  
108 in Subsection [63N-12-213](#)(4)(a); and

109 (b) up to \$150,000 of the appropriation provided in this section for administration of  
110 the initiative described in Section [63N-12-213](#); and

111 (2) under Section [63J-1-603](#), appropriations under this section not lapse at the close of  
112 fiscal year 2017.

113 **Section 3. Effective date.**

114 If approved by two-thirds of all the members elected to each house, this bill takes effect  
115 upon approval by the governor, or the day following the constitutional time limit of Utah  
116 Constitution, Article VII, Section 8, without the governor's signature, or in the case of a veto,  
117 the date of veto override.