

1 **SCIENCE, TECHNOLOGY, ENGINEERING, AND**
2 **MATHEMATICS EDUCATION PROGRAM AMENDMENTS**

3 2015 GENERAL SESSION

4 STATE OF UTAH

5 **Chief Sponsor: Val L. Peterson**

6 Senate Sponsor: _____

8 **LONG TITLE**

9 **General Description:**

10 This bill modifies provisions related to the STEM (Science, Technology, Engineering,
11 and Mathematics) Action Center.

12 **Highlighted Provisions:**

13 This bill:

- 14 ▶ defines terms;
- 15 ▶ modifies:

- 16 • the membership and duties of the STEM Action Center Board;
- 17 • the duties of the executive director of the STEM Action Center;
- 18 • the rulemaking authority of the State Board of Education related to the award of
19 STEM education endorsement incentives; and

20 • the requirements for a STEM education high quality professional development
21 application;

22 ▶ adds Utah State University Eastern to the list of educational institutions that may
23 partner with a school district or charter school to provide a STEM related
24 certification program; and

- 25 ▶ make technical changes.

26 **Money Appropriated in this Bill:**

27 None



28 **Other Special Clauses:**

29 None

30 **Utah Code Sections Affected:**

31 AMENDS:

32 **63M-1-3202**, as last amended by Laws of Utah 2014, Chapter 318

33 **63M-1-3203**, as last amended by Laws of Utah 2014, Chapters 189 and 318

34 **63M-1-3204**, as last amended by Laws of Utah 2014, Chapters 63 and 318

35 **63M-1-3208**, as enacted by Laws of Utah 2014, Chapter 318

36 **63M-1-3209**, as enacted by Laws of Utah 2014, Chapter 318

37 **63M-1-3211**, as enacted by Laws of Utah 2014, Chapter 318



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

40 Section 1. Section **63M-1-3202** is amended to read:

41 **63M-1-3202. STEM Action Center Board creation -- Membership.**

42 (1) There is created the STEM Action Center Board within the office, composed of the
43 following members:

44 (a) six private sector members who represent business, appointed by the governor;

45 (b) the state superintendent of public instruction or the state superintendent of public
46 instruction's designee;

47 (c) the commissioner of higher education or the commissioner of higher education's
48 designee;

49 (d) one member appointed by the governor;

50 (e) a member of the State Board of Education, chosen by the chair of the State Board of
51 Education;

52 (f) the executive director of the Governor's Office of Economic Development or the
53 executive director of the Governor's Office of Economic Development's designee;

54 (g) the president of the Utah College of Applied Technology or the president of the
55 Utah College of Applied Technology's designee; [~~and~~]

56 (h) the executive director of the Department of Workforce Services or the executive
57 director of the Department of Workforce Services' designee; and

58 [~~h~~] (i) one member who has a degree in engineering and experience working in a

59 government military installation, appointed by the governor.

60 (2) (a) The private sector members appointed by the governor in Subsection (1)(a) shall
61 represent a business or trade association whose primary focus is science, technology, or
62 engineering.

63 (b) Except as required by Subsection (2)(c), members appointed by the governor shall
64 be appointed to four-year terms.

65 (c) The length of terms of the members shall be staggered so that approximately half of
66 the committee is appointed every two years.

67 (d) The members may not serve more than two full consecutive terms except where the
68 governor determines that an additional term is in the best interest of the state.

69 (e) When a vacancy occurs in the membership for any reason, the replacement shall be
70 appointed for the unexpired term.

71 (3) Attendance of a simple majority of the members constitutes a quorum for the
72 transaction of official committee business.

73 (4) Formal action by the committee requires a majority vote of a quorum.

74 (5) A member may not receive compensation or benefits for the member's service, but
75 may receive per diem and travel expenses in accordance with:

76 (a) Section [63A-3-106](#);

77 (b) Section [63A-3-107](#); and

78 (c) rules made by the Division of Finance pursuant to Sections [63A-3-106](#) and
79 [63A-3-107](#).

80 (6) The governor shall select the chair of the board to serve a one-year term.

81 (7) The executive director of the Governor's Office of Economic Development or the
82 executive director of the Governor's Office of Economic Development's designee shall serve as
83 the vice chair of the board.

84 Section 2. Section **63M-1-3203** is amended to read:

85 **63M-1-3203. STEM Action Center Board -- Duties.**

86 (1) The board shall:

87 (a) establish a STEM Action Center to:

88 (i) coordinate STEM activities in the state among the following stakeholders:

89 (A) the State Board of Education;

- 90 (B) school districts and charter schools;
- 91 (C) the State Board of Regents;
- 92 (D) institutions of higher education;
- 93 (E) parents of home-schooled students; ~~and~~
- 94 (F) other state agencies; and
- 95 (G) business and industry representatives;
- 96 (ii) align public education STEM activities with higher education STEM activities; and
- 97 (iii) create and coordinate best practices among public education and higher education;
- 98 (b) with the consent of the Senate, appoint an executive director to oversee the
- 99 administration of the STEM Action Center;
- 100 (c) select a physical location for the STEM Action Center;
- 101 (d) strategically engage industry and business entities to cooperate with the board:
- 102 (i) to support high quality professional development and provide other assistance for
- 103 educators and students; and
- 104 (ii) to provide private funding and support for the STEM Action Center;
- 105 (e) give direction to the STEM Action Center and the providers selected through a
- 106 request for proposals process pursuant to this part; and
- 107 (f) work to meet the following expectations:
- 108 (i) that at least 50 educators are implementing best practice learning tools in
- 109 classrooms per each ~~[product specialist or]~~ manager working with the STEM Action Center;
- 110 (ii) performance change in student achievement in each classroom working with a
- 111 STEM Action Center ~~[product specialist or]~~ manager; and
- 112 (iii) that students from at least 50 ~~[high]~~ schools in the state participate in the STEM
- 113 competitions, fairs, and camps described in Subsection [63M-1-3204](#)(2)(d).
- 114 (2) The board may:
- 115 (a) enter into contracts for the purposes of this part;
- 116 (b) apply for, receive, and disburse funds, contributions, or grants from any source for
- 117 the purposes set forth in this part;
- 118 (c) employ, compensate, and prescribe the duties and powers of individuals necessary
- 119 to execute the duties and powers of the board;
- 120 (d) prescribe the duties and powers of the STEM Action Center providers; and

121 (e) in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,
122 make rules to administer this part.

123 (3) The board may establish a foundation to assist in:

124 (a) the development and implementation of the programs authorized under this part to
125 promote STEM education; and

126 (b) implementation of other STEM education objectives described in this part.

127 (4) A foundation established by the board under Subsection (3):

128 (a) may solicit and receive contributions from a private organization for STEM
129 education objectives described in this part;

130 (b) shall comply with Title 51, Chapter 7, State Money Management Act;

131 (c) does not have power or authority to incur contractual obligations or liabilities that
132 constitute a claim against public funds;

133 (d) may not exercise executive or administrative authority over the programs or other
134 activities described in this part, except to the extent specifically authorized by the board;

135 (e) shall provide the board with information detailing transactions and balances of
136 funds managed for the board; and

137 (f) may not:

138 (i) engage in lobbying activities;

139 (ii) attempt to influence legislation; or

140 (iii) participate in any campaign activity for or against:

141 (A) a political candidate; or

142 (B) an initiative, referendum, proposed constitutional amendment, bond, or any other
143 ballot proposition submitted to the voters.

144 (5) Money donated to a foundation established under Subsection (3) may be accounted
145 for in an expendable special revenue fund.

146 Section 3. Section **63M-1-3204** is amended to read:

147 **63M-1-3204. STEM Action Center.**

148 (1) As funding allows, the board shall:

149 (a) establish a STEM Action Center;

150 (b) ensure that the STEM Action Center:

151 (i) is accessible by the public; and

- 152 (ii) includes the components described in Subsection (2);
- 153 (c) work cooperatively with the State Board of Education to:
- 154 (i) further STEM education; and
- 155 (ii) ensure best practices are implemented as described in Sections 63M-1-3205 and
- 156 63M-1-3206; ~~and~~
- 157 (d) engage private entities to provide financial support or employee time for STEM
- 158 activities in schools in addition to what is currently provided by private entities~~[-]; and~~
- 159 (e) work cooperatively with stakeholders to support and promote activities that align
- 160 STEM education and training activities with the employment needs of business and industry in
- 161 the state.
- 162 (2) As funding allows, the executive director of the STEM Action Center shall:
- 163 (a) support high quality professional development for educators regarding STEM
- 164 education;
- 165 (b) ensure that the STEM Action Center acts as a research and development center for
- 166 STEM education through a request for proposals process described in Section 63M-1-3205;
- 167 (c) review and acquire STEM education related materials and products for:
- 168 (i) high quality professional development;
- 169 (ii) assessment, data collection, analysis, and reporting; and
- 170 (iii) public school instruction;
- 171 (d) facilitate participation in interscholastic STEM related competitions, fairs, camps,
- 172 and STEM education activities;
- 173 (e) engage private industry in the development and maintenance of the STEM Action
- 174 Center and STEM Action Center projects;
- 175 (f) use resources to bring the latest STEM education learning tools into public
- 176 education classrooms;
- 177 (g) identify at least 10 best practice innovations used in Utah that have resulted in ~~[at~~
- 178 ~~least 80% of students performing at grade level]~~ a measurable improvement in student
- 179 performance or outcomes in STEM areas;
- 180 (h) identify best practices being used outside the state and, as appropriate, develop and
- 181 implement selected practices through a pilot program;
- 182 (i) identify:

- 183 (i) learning tools for kindergarten through grade 6 identified as best practices; and
184 (ii) learning tools for grades 7 through 12 identified as best practices;
- 185 (j) provide a Utah best practices database, including best practices from public
186 education, higher education, the Utah Education and Telehealth Network, and other STEM
187 related entities;
- 188 (k) keep track of the following items related to the best practices database described in
189 Subsection (2)(j):
- 190 (i) how the best practices database is being used; and
191 (ii) how many individuals are using the database, including the demographics of the
192 users, if available;
- 193 (l) as appropriate, join and participate in a national STEM network;
- 194 ~~[(m) identify performance changes linked to use of the best practices database~~
195 ~~described in Subsection (2)(j);]~~
- 196 ~~[(n)]~~ (m) work cooperatively with the State Board of Education to designate schools as
197 STEM schools, where the schools have agreed to adopt a plan of STEM implementation in
198 alignment with criteria set by the State Board of Education and the board;
- 199 ~~[(o)]~~ (n) support best methods of high quality professional development for STEM
200 education in kindergarten through grade 12, including methods of high quality professional
201 development that reduce cost and increase effectiveness, to help educators learn how to most
202 effectively implement best practice learning tools in classrooms;
- 203 ~~[(p)]~~ (o) recognize a high school's achievement in the STEM competitions, fairs, and
204 camps described in Subsection (2)(d);
- 205 ~~[(q)]~~ (p) send student results from STEM competitions, fairs, and camps described in
206 Subsection (2)(d) to media and ask the media to report on them;
- 207 ~~[(r)]~~ (q) develop and distribute STEM information to parents of students ~~[being served~~
208 ~~by the STEM Action Center]~~ in the state;
- 209 ~~[(s)]~~ (r) support targeted high quality professional development for improved
210 instruction in STEM education, including:
- 211 (i) improved instructional materials that are dynamic and engaging for students;
212 (ii) use of applied instruction; and
213 (iii) introduction of other research-based methods that support student achievement in

214 STEM areas; and

215 [(+) (s) ensure that an online college readiness assessment tool be accessible by:

216 (i) public education students; and

217 (ii) higher education students.

218 (3) The board may prescribe other duties for the STEM Action Center in addition to
219 the responsibilities described in this section.

220 (4) (a) The executive director shall track and compare the student performance of
221 students participating in a STEM Action Center program to all other similarly situated students
222 in the state, in the following [STEM-related] activities, at the beginning and end of each year:

223 (i) public education high school graduation rates;

224 (ii) the number of students taking a remedial mathematics course at an institution of
225 higher education described in Section 53B-2-101;

226 (iii) the number of students who graduate from a Utah public school and begin a
227 postsecondary education program; and

228 (iv) the number of students, as compared to all similarly situated students, who are
229 performing at grade level in STEM classes.

230 (b) The State Board of Education and the State Board of Regents shall provide
231 information to the board to assist the board in complying with the requirements of Subsection
232 (4)(a) if allowed under federal law.

233 Section 4. Section 63M-1-3208 is amended to read:

234 **63M-1-3208. STEM education endorsements and incentive program.**

235 (1) The State Board of Education shall collaborate with the STEM Action Center to:

236 (a) develop STEM education endorsements; and

237 (b) create and implement financial incentives for:

238 (i) an educator to earn an elementary or secondary STEM education endorsement
239 described in Subsection (1)(a); and

240 (ii) a school district or a charter school to have STEM endorsed educators on staff.

241 (2) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, the
242 State Board of Education shall make rules [to establish how a] establishing the uses of STEM
243 education endorsement [~~incentive~~] incentives described in Subsection (1)[~~(a) will be valued on~~
244 ~~a salary scale for educators.~~], including that:

245 (a) an incentive for an educator to take a course leading to a STEM education
246 endorsement may only be given for a course that carries higher-education credit; and
247 (b) a school district or a charter school may consider a STEM education endorsement
248 as part of an educator's salary schedule.

249 Section 5. Section **63M-1-3209** is amended to read:

250 **63M-1-3209. Acquisition of STEM education high quality professional**
251 **development.**

252 (1) The STEM Action Center shall, through a request for proposals process, select
253 technology providers for the purpose of providing a STEM education high quality professional
254 development application.

255 (2) The high quality professional development application described in Subsection (1)
256 shall:

257 (a) allow the State Board of Education, a school district, or a school to define the
258 application's input and track results of the high quality professional development;

259 (b) allow educators to access automatic tools, resources, and strategies, including
260 instructional materials with integrated STEM content;

261 (c) allow educators to work in online learning communities, including giving and
262 receiving feedback via uploaded video;

263 (d) track and report data on the usage of the components of the application's system
264 and the relationship to improvement in classroom instruction;

265 (e) include video examples of highly effective STEM education teaching that:

266 (i) cover a cross section of grade levels and subjects;

267 (ii) under the direction of the State Board of Education, include videos of highly
268 effective Utah STEM educators; and

269 (iii) contain tools to help educators implement what they have learned; and

270 (f) allow for additional STEM education video content to be added.

271 (3) In addition to the high quality professional development application described in
272 Subsections (1) and (2), the STEM Action Center may create STEM education hybrid or
273 blended high quality professional development that allows for face-to-face applied learning.

274 Section 6. Section **63M-1-3211** is amended to read:

275 **63M-1-3211. High school STEM education initiative.**

276 (1) Subject to legislative appropriations, after consulting with State Board of Education
277 staff, the STEM Action Center shall award grants to school districts and charter schools to fund
278 STEM related certification for high school students.

279 (2) (a) A school district or charter school may apply for a grant from the STEM Action
280 Center, through a competitive process, to fund the school district's or charter school's STEM
281 related certification training program.

282 (b) A school district's or charter school's STEM related certification training program
283 shall:

284 (i) prepare high school students to be job ready for available STEM related positions of
285 employment; and

286 (ii) when a student completes the program, result in the student gaining [~~a nationally~~
287 an industry-recognized employer STEM related certification.

288 (3) A school district or charter school may partner with one or more of the following
289 to provide a STEM related certification program:

290 (a) a Utah College of Applied Technology college campus;

291 (b) Salt Lake Community College;

292 (c) Snow College; [~~or~~]

293 (d) Utah State University Eastern; or

294 [~~(d)~~] (e) a private sector employer.

Legislative Review Note
as of 2-9-15 9:52 AM

Office of Legislative Research and General Counsel