

**SCIENCE, TECHNOLOGY, ENGINEERING, AND
MATHEMATICS ACTION CENTER**

2013 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Val L. Peterson

Senate Sponsor: _____

LONG TITLE

General Description:

This bill creates educational programs for science, technology, engineering, and mathematics (STEM).

Highlighted Provisions:

This bill:

- ▶ creates a Science, Technology, Engineering, and Mathematics (STEM) Action Center Board;
- ▶ requires the STEM Action Center Board to:
 - establish a STEM Action Center; and
 - appoint an executive director to oversee administration of the STEM Action Center;
- ▶ requires the Governor's Office of Economic Development to staff the STEM Action Center Board and the STEM Action Center;
- ▶ requires the STEM Action Center Board to select providers, through a request for proposals process, to provide education related instructional technology;
- ▶ requires the STEM Action Center Board to work with private industry to obtain private funding and support for the STEM Action Center;
- ▶ requires the STEM Action Center Board to perform certain duties related to the STEM Action Center;



- 28 ▶ requires the executive director to track student achievement and progress in STEM
- 29 areas;
- 30 ▶ requires the STEM Action Center Board, and all providers selected through a
- 31 request for proposals process, to report to both the Education Interim Committee
- 32 and the Public Education Appropriations Subcommittee once each year; and
- 33 ▶ requires the State Board of Education to award grants to school districts and charter
- 34 schools for STEM related career and technical education courses if certain
- 35 conditions are met.

36 Money Appropriated in this Bill:

37 This bill appropriates in fiscal year 2014:

- 38 ▶ to the General Fund Restricted - Governor's Office of Economic Development, as
- 39 an ongoing appropriation:
 - 40 • from the General Fund, \$14,000,000; and
- 41 ▶ to State Board of Education - State Office of Education, as an ongoing
- 42 appropriation:
 - 43 • from the General Fund, \$1,000,000.

44 Other Special Clauses:

45 This bill provides an effective date.

46 Utah Code Sections Affected:

47 ENACTS:

- 48 **63M-1-3201**, Utah Code Annotated 1953
- 49 **63M-1-3202**, Utah Code Annotated 1953
- 50 **63M-1-3203**, Utah Code Annotated 1953
- 51 **63M-1-3204**, Utah Code Annotated 1953
- 52 **63M-1-3205**, Utah Code Annotated 1953
- 53 **63M-1-3206**, Utah Code Annotated 1953
- 54 **63M-1-3207**, Utah Code Annotated 1953

55 REPEALS:

- 56 **63M-1-608**, as renumbered and amended by Laws of Utah 2008, Chapter 382



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

59 Section 1. Section **63M-1-3201** is enacted to read:

60 **Part 32. Science, Technology, Engineering, and Mathematics Action Center**

61 **63M-1-3201. Definitions.**

62 As used in this part:

63 (1) "Board" means the STEM Action Center Board created in Section 63M-1-3202.

64 (2) "Educator" has the meaning defined in Section 53A-6-103.

65 (3) "Office" means the Governor's Office of Economic Development.

66 (4) "Provider" means a provider, selected by the board through a request for proposals

67 process, to provide services as part of the STEM Action Center pursuant to this part.

68 (5) "STEM" means science, technology, engineering, and mathematics.

69 (6) "STEM Action Center" means the center described in Section 63M-1-3204.

70 Section 2. Section **63M-1-3202** is enacted to read:

71 **63M-1-3202. STEM Action Center Board creation -- Membership.**

72 (1) There is created the STEM Action Center Board within the office, composed of the

73 following members:

74 (a) the governor or the governor's designee;

75 (b) at least four private sector members who represent business, appointed by the

76 governor;

77 (c) the State Superintendent of Public Instruction or the State Superintendent of Public

78 Instruction's designee;

79 (d) the Commissioner of Higher Education or the Commissioner of Higher Education's

80 designee;

81 (e) a representative of the Department of Workforce Services, appointed by the director

82 of the Department of Workforce Services; and

83 (f) the State Science Advisor described in Section 63M-1-606.

84 (2) Except as required by Subsection (3), members appointed by the governor shall be

85 appointed to four-year terms.

86 (3) The length of terms of the members shall be staggered so that approximately half of

87 the committee is appointed every two years.

88 (4) When a vacancy occurs in the membership for any reason, the replacement shall be

89 appointed for the unexpired term.

90 (5) Attendance of a simple majority of the members constitutes a quorum for the
91 transaction of official committee business.

92 (6) Formal action by the committee requires a majority vote of a quorum.

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

95 (a) Section 63A-3-106;

96 (b) Section 63A-3-107; and

97 (c) rules made by the Division of Finance pursuant to Sections 63A-3-106 and
98 63A-3-107.

99 (8) The office shall provide staff support to the board.

100 Section 3. Section **63M-1-3203** is enacted to read:

101 **63M-1-3203. STEM Action Center Board -- Duties.**

102 (1) The board shall:

103 (a) establish a STEM Action Center Program to:

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

105 (A) the State Board of Education;

106 (B) school districts and charter schools;

107 (C) the State Board of Regents;

108 (D) institutions of higher education;

109 (E) private schools;

110 (F) parents of home-schooled students; and

111 (G) other state agencies;

112 (ii) align public education STEM activities with higher education STEM activities; and

113 (iii) create and coordinate best practices among public education and higher education;

114 (b) select a physical location for the STEM Action Center described in Section
115 63M-1-3204;

116 (c) strategically engage industry and business entities to cooperate with the board:

117 (i) to provide professional development and other assistance to educators and students;

118 and

119 (ii) to provide private funding and support for the STEM Action Center;

120 (d) give direction to the office, the STEM Action Center, and the providers selected

121 through a request for proposals process pursuant to this part; and
 122 (e) work to meet the following expectations:
 123 (i) that at least 50 educators are implementing best practice learning tools in
 124 classrooms per each product specialist or manager working with the STEM Action Center;
 125 (ii) performance change in student achievement in each classroom working with a
 126 STEM Action Center product specialist or manager; and
 127 (iii) that students from at least 50 high schools participate in the STEM competitions,
 128 fairs, and camps described in Subsection 63M-1-3204(2)(d).
 129 (2) The board may:
 130 (a) enter into contracts for the purposes of this part;
 131 (b) apply for, receive, and disburse funds, contributions, or grants from any source for
 132 the purposes set forth in this part;
 133 (c) employ, compensate, and prescribe the duties and powers of individuals necessary
 134 to execute the duties and powers of the board; and
 135 (d) prescribe the duties and powers of the STEM Action Center providers.
 136 Section 4. Section **63M-1-3204** is enacted to read:
 137 **63M-1-3204. STEM Action Center Program.**
 138 (1) The board shall:
 139 (a) establish a STEM Action Center;
 140 (b) appoint an executive director to oversee the administration of the STEM Action
 141 Center;
 142 (c) ensure that the STEM Action Center:
 143 (i) is accessible by the public; and
 144 (ii) includes the components described in Subsection (2); and
 145 (d) engage at least 25 private entities to provide financial support or employee time for
 146 STEM activities in schools in addition to what is currently provided by private entities.
 147 (2) The executive director of the STEM Action Center shall:
 148 (a) provide professional development to educators regarding:
 149 (i) blended learning models; and
 150 (ii) education related instructional technology;
 151 (b) ensure that the STEM Action Center acts as a research and development center for

152 education related instructional technology acquired through a request for proposals process
153 described in Section 63M-1-3205;

154 (c) review and acquire education related technology for:

155 (i) educator professional development; and

156 (ii) public school instruction;

157 (d) organize and host interscholastic STEM related competitions, fairs, and camps;

158 (e) engage private industry in the development and maintenance of the STEM Action
159 Center;

160 (f) use resources to bring the latest STEM education learning tools into public
161 education classrooms;

162 (g) identify at least 10 best practice innovations used in Utah schools that have resulted
163 in at least 80% of students performing at grade level in STEM areas;

164 (h) identify at least 25 best practices being used outside the state and implement at least
165 10 of the best practices through a pilot program;

166 (i) identify:

167 (i) three learning tools per grade in each of grades kindergarten through grade 6
168 identified as best practices; and

169 (ii) three learning tools per STEM subject in each of grades 7 through grade 12
170 identified as best practices;

171 (j) provide a Utah best practices database including best practices from public
172 education, higher education, the Utah Education Network, and other STEM related entities;

173 (k) keep track of the following items related to the best practices database described in
174 Subsection (2)(j):

175 (i) how the best practices database is being used; and

176 (ii) how many individuals are using the database, including the demographics of the
177 users, if available;

178 (l) join and participate in a national STEM network;

179 (m) identify performance changes linked to use of the best practices database described
180 in Subsection (2)(j);

181 (n) implement at least five applied learning curriculum pilots in classrooms;

182 (o) implement best methods of professional development, including methods of

183 professional development that reduce cost and increase effectiveness, to help educators learn
184 how to most effectively implement best practice learning tools in classrooms;

185 (p) recognize a high school's achievement in the STEM competitions, fairs, and camps
186 described in Subsection (2)(d);

187 (q) send student results from STEM competitions, fairs, and camps described in
188 Subsection (2)(d) to media and ask that the media report on them in a similar manner;

189 (r) develop and distribute STEM toolkits to parents of students being tracked by STEM
190 Action Center;

191 (s) produce a newsletter at least once a week to be made available to interested
192 individuals, including legislators;

193 (t) track the performance of educators who receive a competency-based license in
194 accordance with Section 53A-6-104.5;

195 (u) target professional development for improved instruction in STEM in grades 6, 7,
196 and 8, including:

197 (i) improved instructional materials that are more dynamic and stimulating for
198 students;

199 (ii) targeted instruction for students who traditionally avoid enrolling in STEM
200 courses; and

201 (iii) introduction of stimulating engineering courses;

202 (v) ensure that an online college readiness assessment tool developed by the State
203 Board of Regents be accessible by:

204 (i) public education students; and

205 (ii) higher education students; and

206 (w) develop and produce a low cost, highly-interactive, print and online mathematics
207 textbook, for students in grades 7 and 8, that will meet the State Board of Education's core
208 curriculum standards for mathematics.

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

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

- 214 (i) public education high school graduation rates;
- 215 (ii) the number of students taking a remedial mathematics course at an institution of
- 216 higher education described in Section 53B-1-102;
- 217 (iii) the number of students who graduate from a Utah public school and begin a
- 218 postsecondary education program; and
- 219 (iv) the number of students, as compared to all similarly situated students, who are
- 220 performing at grade level in STEM classes.

221 (b) The State Board of Education shall provide information to the board to assist the

222 board in complying with the requirements of Subsection (4)(a) if allowed under federal law.

223 Section 5. Section **63M-1-3205** is enacted to read:

224 **63M-1-3205. Acquisition of education related instructional technology -- Research**

225 **and development of education related instructional technology.**

226 (1) The board shall select one or more providers, through a request for proposals

227 process, to provide education related instructional technology for educators and students.

228 (2) Before issuing a request for proposals described in Subsection (1), the board shall

229 find the best known methods of purchasing learning tools, including education related

230 instructional technology, at the lowest possible cost.

231 Section 6. Section **63M-1-3206** is enacted to read:

232 **63M-1-3206. Grants to schools for STEM career and technical education.**

233 (1) Subject to legislative appropriations, the State Board of Education shall award a

234 grant to a school district or charter school to fund STEM career and technical education courses

235 if the school district or charter school provides matching funds for at least 100% of the grant

236 amount.

237 (2) The money awarded to a school district or charter school described in Subsection

238 (1) may not be used to supplant funds for existing STEM career and technical education

239 courses, but shall be used to supplement STEM career and technical education courses.

240 Section 7. Section **63M-1-3207** is enacted to read:

241 **63M-1-3207. Report to Legislature.**

242 (1) The board and all providers shall report the progress of the STEM Action Center,

243 including the information described in Subsection (2), to both the Education Interim

244 Committee and the Public Education Appropriations Subcommittee once each year.

245 (2) The report described in Subsection (1) shall include information that demonstrates
246 the effectiveness of the program, including:

247 (a) the number of educators receiving professional development;

248 (b) the number of students receiving services from the STEM Action Center;

249 (c) a list of the providers selected pursuant to this part;

250 (d) a report on the STEM Action Center's fulfilment of its duties described in

251 Subsection 63M-1-3204; and

252 (e) performance results of students participating in a STEM Action Center program as
253 collected in Subsection 63M-1-3204(4).

254 Section 8. **Repealer.**

255 This bill repeals:

256 Section **63M-1-608, Science education program.**

257 Section 9. **Appropriation.**

258 Under the terms and conditions of Title 63J, Chapter 1, Budgetary Procedures Act, for
259 the fiscal year beginning July 1, 2013, and ending June 30, 2014, the following sums of money
260 are appropriated from resources not otherwise appropriated, or reduced from amounts
261 previously appropriated, out of the funds or accounts indicated. These sums of money are in
262 addition to any amounts previously appropriated for fiscal year 2014.

263 To General Fund Restricted - Governor's Office of Economic Development

264 From General Fund \$14,000,000

265 Schedule of Programs:

266 Administration \$14,000,000

267 To State Board of Education - State Office of Education

268 From General Fund \$1,000,000

269 Schedule of Programs:

270 Career and Technical Education \$1,000,000

271 The Legislature intends that:

272 (1) the appropriation for Administration be used:

273 (a) to establish a STEM Action Center as described in Section 63M-1-3204;

274 (b) to provide or establish a physical location for the STEM Action Center; and

275 (c) for education related instructional technology as described in Section 63M-1-3205;

276 (2) the appropriation for Career and Technical Education be used by the State Board of
277 Education to award grants to school districts and charter schools for STEM related career and
278 technical education courses as described in Section 63M-1-3206; and

279 (3) the appropriations described in Subsections (1) and (2):

280 (a) be ongoing; and

281 (b) not lapse at the close of fiscal year 2014.

282 Section 10. **Effective date.**

283 (1) Except as provided in Subsection (2), this bill takes effect on May 14, 2013.

284 (2) Uncodified Section 9, Appropriation, takes effect on July 1, 2013.

Legislative Review Note
as of 2-12-13 2:10 PM

Office of Legislative Research and General Counsel