

PHYSICS EDUCATION PILOT PROGRAM

2015 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Howard A. Stephenson

House Sponsor: _____

LONG TITLE

General Description:

This bill creates a pilot grant program for physics education in secondary schools.

Highlighted Provisions:

This bill:

- ▶ defines terms;
- ▶ creates the Physics Education Pilot Program;
- ▶ requires the STEM Action Center Board to prequalify one or more physics education consultants to provide high quality professional development, physics curriculum materials, and support for physics teachers;
- ▶ specifies criteria for the STEM Action Center Board to consider in prequalifying physics education consultants and selecting local education agencies to participate in the pilot program;
- ▶ provides a grant for local education agencies to implement the Physics Education Pilot Program; and
- ▶ requires the STEM Action Center Board to contract with an independent evaluator and report to the State Board of Education, the Governor's Office of Economic Development, and the Education Interim Committee.

Money Appropriated in this Bill:

This bill appropriates:

- ▶ to the Governor's Office of Economic Development - STEM Action Center, as a



28 one-time appropriation:

- 29 • from the General Fund, one-time, \$5,000,000.

30 **Other Special Clauses:**

31 This bill provides a special effective date.

32 **Utah Code Sections Affected:**

33 AMENDS:

34 **63I-1-263**, as last amended by Laws of Utah 2014, Chapters 113, 189, 195, 211, 419,
35 429, and 435

36 **63M-1-3201**, as last amended by Laws of Utah 2014, Chapter 318

37 ENACTS:

38 **63M-1-3212**, Utah Code Annotated 1953



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

41 Section 1. Section **63I-1-263** is amended to read:

42 **63I-1-263. Repeal dates, Titles 63A to 63M.**

43 (1) Section **63A-4-204**, authorizing the Risk Management Fund to provide coverage to
44 any public school district which chooses to participate, is repealed July 1, 2016.

45 (2) Subsection **63A-5-104(4)(h)** is repealed on July 1, 2024.

46 (3) Section **63A-5-603**, State Facility Energy Efficiency Fund, is repealed July 1, 2016.

47 (4) Title 63C, Chapter 4a, Constitutional and Federalism Defense Act, is repealed July
48 1, 2018.

49 (5) Title 63C, Chapter 14, Federal Funds Commission, is repealed July 1, 2018.

50 (6) Title 63C, Chapter 15, Prison Relocation Commission, is repealed July 1, 2017.

51 (7) Subsection **63G-6a-1402(7)** authorizing certain transportation agencies to award a
52 contract for a design-build transportation project in certain circumstances, is repealed July 1,
53 2015.

54 (8) Title 63H, Chapter 4, Heber Valley Historic Railroad Authority, is repealed July 1,
55 2020.

56 (9) The Resource Development Coordinating Committee, created in Section
57 **63J-4-501**, is repealed July 1, 2015.

58 (10) Title 63M, Chapter 1, Part 4, Enterprise Zone Act, is repealed July 1, 2018.

59 (11) (a) Title 63M, Chapter 1, Part 11, Recycling Market Development Zone Act, is
60 repealed January 1, 2021.

61 (b) Subject to Subsection (11)(c), Sections 59-7-610 and 59-10-1007 regarding tax
62 credits for certain persons in recycling market development zones, are repealed for taxable
63 years beginning on or after January 1, 2021.

64 (c) A person may not claim a tax credit under Section 59-7-610 or 59-10-1007:

65 (i) for the purchase price of machinery or equipment described in Section 59-7-610 or
66 59-10-1007, if the machinery or equipment is purchased on or after January 1, 2021; or

67 (ii) for an expenditure described in Subsection 59-7-610(1)(b) or 59-10-1007(1)(b), if
68 the expenditure is made on or after January 1, 2021.

69 (d) Notwithstanding Subsections (11)(b) and (c), a person may carry forward a tax
70 credit in accordance with Section 59-7-610 or 59-10-1007 if:

71 (i) the person is entitled to a tax credit under Section 59-7-610 or 59-10-1007; and

72 (ii) (A) for the purchase price of machinery or equipment described in Section
73 59-7-610 or 59-10-1007, the machinery or equipment is purchased on or before December 31,
74 2020; or

75 (B) for an expenditure described in Subsection 59-7-610(1)(b) or 59-10-1007(1)(b), the
76 expenditure is made on or before December 31, 2020.

77 [~~(12) Section 63M-1-3412 is repealed on July 1, 2021.~~]

78 [~~(13)~~] (12) (a) Section 63M-1-2507, Health Care Compact, is repealed on July 1, 2014.

79 (b) (i) The Legislature shall, before reauthorizing the Health Care Compact:

80 (A) direct the Health System Reform Task Force to evaluate the issues listed in
81 Subsection [~~(13)~~] (12)(b)(ii), and by January 1, 2013, develop and recommend criteria for the
82 Legislature to use to negotiate the terms of the Health Care Compact; and

83 (B) prior to July 1, 2014, seek amendments to the Health Care Compact among the
84 member states that the Legislature determines are appropriate after considering the
85 recommendations of the Health System Reform Task Force.

86 (ii) The Health System Reform Task Force shall evaluate and develop criteria for the
87 Legislature regarding:

88 (A) the impact of the Supreme Court ruling on the Affordable Care Act;

89 (B) whether Utah is likely to be required to implement any part of the Affordable Care

90 Act prior to negotiating the compact with the federal government, such as Medicaid expansion
91 in 2014;

92 (C) whether the compact's current funding formula, based on adjusted 2010 state
93 expenditures, is the best formula for Utah and other state compact members to use for
94 establishing the block grants from the federal government;

95 (D) whether the compact's calculation of current year inflation adjustment factor,
96 without consideration of the regional medical inflation rate in the current year, is adequate to
97 protect the state from increased costs associated with administering a state based Medicaid and
98 a state based Medicare program;

99 (E) whether the state has the flexibility it needs under the compact to implement and
100 fund state based initiatives, or whether the compact requires uniformity across member states
101 that does not benefit Utah;

102 (F) whether the state has the option under the compact to refuse to take over the federal
103 Medicare program;

104 (G) whether a state based Medicare program would provide better benefits to the
105 elderly and disabled citizens of the state than a federally run Medicare program;

106 (H) whether the state has the infrastructure necessary to implement and administer a
107 better state based Medicare program;

108 (I) whether the compact appropriately delegates policy decisions between the
109 legislative and executive branches of government regarding the development and
110 implementation of the compact with other states and the federal government; and

111 (J) the impact on public health activities, including communicable disease surveillance
112 and epidemiology.

113 (13) Section 63M-1-3212 is repealed on July 1, 2020.

114 (14) Section 63M-1-3412 is repealed on July 1, 2021.

115 ~~[(14)]~~ (15) (a) Title 63M, Chapter 1, Part 35, Utah Small Business Jobs Act, is
116 repealed January 1, 2021.

117 (b) Section 59-9-107 regarding tax credits against premium taxes is repealed for
118 calendar years beginning on or after January 1, 2021.

119 (c) Notwithstanding Subsection ~~[(14)]~~ (15)(b), an entity may carry forward a tax credit
120 in accordance with Section 59-9-107 if:

121 (i) the person is entitled to a tax credit under Section 59-9-107 on or before December
122 31, 2020; and

123 (ii) the qualified equity investment that is the basis of the tax credit is certified under
124 Section 63M-1-3503 on or before December 31, 2023.

125 ~~[(15)]~~ (16) The Crime Victim Reparations and Assistance Board, created in Section
126 63M-7-504, is repealed July 1, 2017.

127 ~~[(16)]~~ (17) Title 63M, Chapter 11, Utah Commission on Aging, is repealed July 1,
128 2017.

129 Section 2. Section 63M-1-3201 is amended to read:

130 **63M-1-3201. Definitions.**

131 As used in this part:

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

133 (2) "Educator" ~~[has the meaning]~~ means the same as that term is defined in Section
134 53A-6-103.

135 (3) "High quality professional development" means professional development that
136 meets:

137 (a) high quality standards developed by the State Board of Education[-]; and

138 (b) the professional learning standards described in Section 53A-3-701.

139 (4) "Office" means the Governor's Office of Economic Development.

140 (5) "Provider" means a provider, selected by staff of the board and staff of the Utah
141 State Board of Education, on behalf of the board:

142 (a) through a request for proposals process; or

143 (b) through a direct award or sole source procurement process for a pilot described in
144 Section 63M-1-3205.

145 (6) "STEM" means science, technology, engineering, and mathematics.

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

147 Section 3. Section 63M-1-3212 is enacted to read:

148 **63M-1-3212. Physics Education Pilot Program.**

149 (1) As used in this section:

150 (a) "Endorsement" means the same as that term is defined in Section 53A-6-103.

151 (b) "Local education agency" or "LEA" means:

- 152 (i) a school district;
153 (ii) a charter school; or
154 (iii) the Utah Schools for the Deaf and the Blind.
- 155 (c) "Physics education consultant" means a physics education consultant identified
156 under Subsection (3).
- 157 (d) "Program" means the Physics Education Pilot Program.
- 158 (2) (a) There is created the Physics Education Pilot Program to promote physics
159 education and increase the number of Utah secondary school students who take physics.
- 160 (b) Subject to funding for the program, the board shall develop and implement the
161 program to promote physics education in secondary schools.
- 162 (c) The program shall operate for five years, beginning on the first day of the 2015-16
163 school year.
- 164 (3) (a) In consultation with the State Board of Education, the board shall, through a
165 prequalification process under Section [63G-6a-403](#), prequalify physics education consultants
166 that an LEA, selected by the board under Subsection (6), may work with to implement the
167 program.
- 168 (b) The board may not prequalify a physics education consultant who does not have
169 experience implementing a physics education program in a secondary school.
- 170 (c) In evaluating statements of qualification submitted for the prequalification process
171 described in Subsection (3)(a), the board, in coordination with the State Board of Education,
172 shall ensure that the evaluation criteria weighs heavily the extent to which a physics education
173 consultant who submits a statement of qualification has demonstrated efficacy in:
- 174 (i) increasing enrollment in secondary education physics classes;
175 (ii) providing high quality professional development in physics education in
176 coordination with an institute of higher education;
177 (iii) providing professional development to teachers to prepare them to teach
178 mathematically rigorous physics; and
- 179 (iv) improving outcomes for students participating in physics classes.
- 180 (d) The request for statements of qualification shall require that a proposed physics
181 education consultant disclose all exclusive financial arrangements with education publishers,
182 education technology providers, or other education companies.

183 (e) After receiving an LEA grant application described in Subsection (5), the board
184 may prequalify a physics education consultant proposed in an LEA grant application, who was
185 not identified through the prequalification process described in Subsection (3)(a), as a
186 prequalified physics education consultant if:

187 (i) the physics education consultant proposed in the LEA's grant application meets the
188 qualification criteria described in Subsection (3);

189 (ii) the LEA had a contract or other relationship with the physics education consultant
190 proposed in the LEA's grant application prior to the LEA submitting the application under
191 Subsection (3)(a); and

192 (iii) the LEA's contract or other relationship with the physics education consultant
193 proposed in the LEA's grant application was granted in compliance with Title 63G, Chapter 6a,
194 Utah Procurement Code.

195 (4) The board shall require a prequalified physics education consultant to provide:

196 (a) high quality professional development in physics education, in consultation with the
197 State Board of Education and in coordination with an institute of higher education, that enables
198 an educator to receive an endorsement to teach physics;

199 (b) physics education curriculum resources of sufficient depth and breadth to eliminate
200 the need for physics textbooks; and

201 (c) support for an educator to further the teaching of physics through:

202 (i) classroom and physics laboratory technology that may include an interactive white
203 board; and

204 (ii) hands-on activities and experiments.

205 (5) (a) An LEA may apply to the board, through a competitive process, to receive a
206 grant to participate in the program.

207 (b) In a grant application, an LEA shall present a plan and describe how the LEA will
208 work with a physics education consultant prequalified under Subsection (3) to provide:

209 (i) high quality professional development in physics education;

210 (ii) physics education curricula; and

211 (iii) classroom technologies to further the teaching of physics.

212 (c) An LEA grant application may propose a physics education consultant who was not
213 identified as a prequalified physics education consultant under Subsection (3)(a) if the physics

214 education consultant proposed in the LEA grant application meets the criteria described in
215 Subsection (3)(e).

216 (6) (a) The board shall select LEAs to receive a grant.

217 (b) In selecting an LEA to receive a grant, the board shall consider the LEA's
218 willingness and plans to:

219 (i) sequence science classes so that students take physics before taking chemistry and
220 biology;

221 (ii) increase the number of students taking physics;

222 (iii) incorporate classroom education technology, which may include an interactive
223 white board, into physics classes; and

224 (iv) devote LEA resources, including instructional technology, to teaching physics.

225 (c) In selecting an LEA to receive a grant, the board shall select a diverse set of LEAs
226 representing a range of urban and rural locations, school districts, and charter schools.

227 (7) An LEA that receives a grant described in Subsection (6):

228 (a) shall use the grant to contract with a physics education consultant prequalified
229 under Subsection (3) to implement the LEA plan in the LEA grant application described in
230 Subsection (5); and

231 (b) may contract with a physics education consultant prequalified under Subsection (3)
232 without following the standard procurement process described in Title 63G, Chapter 6a, Utah
233 Procurement Code.

234 (8) The board shall contract with an independent evaluator to evaluate the pilot
235 program on:

236 (a) school level outcomes, including changes in the number of students taking physics
237 and advanced physics;

238 (b) individual student outcomes;

239 (c) educator outcomes, including the number of teachers receiving endorsements to
240 teach physics; and

241 (d) any other outcomes requested by the board.

242 (9) (a) The board shall report to the Education Interim Committee on the status of the
243 program on or before November 1 of each year of the pilot program, beginning in 2016.

244 (b) The board shall:

245 (i) submit a final report on the program to the Education Interim Committee on or
246 before November 1, 2019; and

247 (ii) ensure that the final report described in Subsection (9)(b)(i) includes the results of
248 the evaluation described in Subsection (8).

249 **Section 4. Appropriation.**

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

255 To Governor's Office of Economic Development - STEM Action Center

256 From General Fund, one-time \$5,000,000

257 Schedule of Programs:

258 STEM Action Center \$5,000,000

259 The Legislature intends that:

260 (1) the STEM Action Center Board expend appropriations under this section for the
261 physics education program described in Section [63M-1-3212](#) in fiscal years 2016, 2017, 2018,
262 2019, and 2020; and

263 (2) under Section [63J-1-603](#), the appropriations provided under this section not lapse at
264 the close of fiscal year 2016, 2017, 2018, or 2019.

265 **Section 5. Effective date.**

266 (1) Except as provided in Subsection (2), this bill takes effect on May 12, 2015.

267 (2) Uncodified Section 4, Appropriation, takes effect on July 1, 2015.