

Senator Howard A. Stephenson proposes the following substitute bill:

MATH EDUCATION INITIATIVE

2009 GENERAL SESSION

STATE OF UTAH

Chief Sponsor: Howard A. Stephenson

House Sponsor: Merlynn T. Newbold

LONG TITLE

General Description:

This bill creates a program that awards grants for the improvement of math education.

Highlighted Provisions:

This bill:

- ▶ requires the Legislature to annually appropriate money to the State Board of Education for the Math Education Initiative, subject to future budget constraints;
- ▶ directs the State Board of Education to use monies appropriated for the Math Education Initiative to award grants to:
 - school districts and charter schools to help pay for costs to adopt Singapore math; and
 - institutions of higher education or nonprofit education organizations for math teacher training programs;
- ▶ requires a school district or charter school that participates in the Math Education Initiative to:
 - offer Singapore math in grades kindergarten through six and certain courses at the secondary school level; and
 - provide professional development to teachers in Singapore math;
- ▶ requires the State Board of Education to make rules establishing criteria for



57 (1) "Board" means the State Board of Education.

58 (2) "Singapore math" means the math curriculum created by the education ministry in
59 Singapore for use in Singapore schools and encompassing the textbooks, workbooks, and other
60 materials based on the math curriculum.

61 Section 2. Section **53A-13-402** is enacted to read:

62 **53A-13-402. Purposes of the Math Education Initiative -- Public-private**
63 **partnerships encouraged.**

64 (1) The Math Education Initiative is created to:

65 (a) make Utah the premier state for math education and a recognized source of skilled
66 scientists and engineers;

67 (b) meet the demand of Utah employers for workers with high math skills; and

68 (c) entice companies that require a highly skilled technical workforce to locate in the
69 state.

70 (2) The formation of public-private partnerships is encouraged to advance the purposes
71 of the Math Education Initiative.

72 Section 3. Section **53A-13-403** is enacted to read:

73 **53A-13-403. Annual appropriation for Math Education Initiative -- Use of Math**
74 **Education Initiative monies.**

75 (1) Subject to future budget constraints, the Legislature shall:

76 (a) annually appropriate money to the State Board of Education for the Math Education
77 Initiative; and

78 (b) increase appropriations for the Math Education Initiative as the state's capacity to
79 provide professional development to teachers in Singapore math expands.

80 (2) From monies appropriated for the Math Education Initiative, the State Board of
81 Education shall:

82 (a) award grants to:

83 (i) school districts and charter schools to help pay for a school district's or charter
84 school's costs of adopting Singapore math as provided by Section 53A-13-404; and

85 (ii) institutions of higher education or nonprofit educational organizations for math
86 teacher training programs as provided in Section 53A-13-407; and

87 (b) contract with an independent, qualified evaluator, selected through a request for

88 proposals process, to evaluate the effect of instruction in Singapore math on student
89 achievement.

90 Section 4. Section **53A-13-404** is enacted to read:

91 **53A-13-404. Grants to school districts and charter schools.**

92 (1) Participation in the Math Education Initiative is voluntary for school districts and
93 charter schools and is based on a competitive grant proposal process.

94 (2) The board may award grants of up to \$150 per student for the portion of a school
95 district's or charter school's kindergarten through grade eight enrollment that participates in the
96 Math Education Initiative for the first time.

97 (3) A school district or charter school may use the grant monies to pay for Singapore
98 math instructional materials or professional development in teaching Singapore math.

99 Section 5. Section **53A-13-405** is enacted to read:

100 **53A-13-405. Requirements of school districts and charter schools to participate in**
101 **the Math Education Initiative.**

102 (1) A school district or charter school that participates in the Math Education Initiative:

103 (a) (i) shall adopt Singapore math for grades kindergarten through six, except as
104 provided in Subsection (2); and

105 (ii) may adopt Singapore math for grades seven and eight;

106 (b) shall at the secondary school level, offer:

107 (i) honors and regular sections of algebra 1, geometry, and algebra 2, taught from a
108 small group of high quality textbooks recommended by the State Board of Education;

109 (ii) an honors pre-calculus course that corresponds to college algebra and trigonometry
110 at Utah higher education institutions so that high achieving students can receive college credit
111 through concurrent enrollment; and

112 (iii) calculus and statistics courses that meet the standards for the Advanced Placement
113 exams;

114 (c) shall administer math achievement tests at the beginning and the end of the school
115 year; and

116 (d) shall provide professional development to teachers in Singapore math.

117 (2) (a) A school district or charter school may phase in the adoption of Singapore math
118 in grades kindergarten through eight over two or more years.

119 (b) A school district may phase in the adoption of Singapore math throughout schools
120 in the school district over two or more years.

121 (3) If a school district or charter school has insufficient enrollment in a higher level
122 math class listed in Subsection (1)(b) to justify the cost of hiring an instructor for the class, the
123 school district or charter school may offer the class through distance education, including
124 interactive video conferencing or online instruction.

125 Section 6. Section **53A-13-406** is enacted to read:

126 **53A-13-406. Advisory committee.**

127 (1) The board shall appoint an advisory committee to:

128 (a) evaluate Singapore math instructional materials and make recommendations to
129 school districts and charter schools for the adoption of Singapore math instructional materials;

130 (b) make recommendations to school districts and charter schools that participate in the
131 Math Education Initiative on professional development in math, including:

132 (i) the qualifications of individuals who provide professional development in
133 Singapore math; and

134 (ii) the extent and content of initial and continuing professional development in
135 Singapore math; and

136 (c) review grant proposals submitted by school districts and charter schools to adopt
137 Singapore math and make recommendations to the board on awarding grants.

138 (2) In reviewing and making recommendations to the board on grant proposals, the
139 advisory council shall consider:

140 (a) the extent and content of professional development for teachers of Singapore math;

141 (b) the quality of instructional materials;

142 (c) the grade seven and eight math curricula; and

143 (d) elementary and secondary math class schedules, including the number of days and
144 hours per week each class is scheduled.

145 (3) The advisory committee appointed under Subsection (1) shall consist of five
146 members of whom:

147 (a) three members shall be mathematicians who serve or have served as a math
148 professor at a higher education institution in Utah that offers graduate level degrees in math;

149 and

150 (b) two additional members shall have a high level of expertise in mathematics.

151 Section 7. Section **53A-13-407** is enacted to read:

152 **53A-13-407. Grants for math teacher training programs.**

153 (1) Subject to funding for the programs, beginning on July 1, 2010, the board may
154 award grants to institutions of higher education or nonprofit educational organizations for
155 programs that provide training leading to a secondary education license with an endorsement in
156 mathematics for an individual who:

157 (a) is not a teacher in a public or private school;

158 (b) does not have a teaching license;

159 (c) has a bachelor's degree or higher; and

160 (d) demonstrates a high level of mathematics competency by:

161 (i) successfully completing substantial coursework in mathematics; and

162 (ii) passing a mathematics content exam.

163 (2) (a) The board shall make rules in accordance with Title 63G, Chapter 3, Utah
164 Administrative Rulemaking Act, that establish criteria for awarding grants under this section.

165 (b) In awarding grants, the board shall consider the amount or percent of matching
166 funds provided by the grant recipient.

167 Section 8. Section **53A-13-408** is enacted to read:

168 **53A-13-408. Annual report.**

169 (1) Through 2012, the State Board of Education shall make a report to the Education
170 Interim Committee after each year of instruction in Singapore math in Utah schools.

171 (2) The report shall include an evaluation of the effect of instruction in Singapore math
172 on student achievement.

173 Section 9. Section **63I-2-253** is amended to read:

174 **63I-2-253. Repeal dates -- Titles 53, 53A, and 53B.**

175 (1) Section 53A-1-403.5 is repealed July 1, 2012.

176 (2) Subsection 53A-1-603(5) is repealed July 1, 2010.

177 (3) Title 53A, Chapter 1a, Part 10, UPSTART, is repealed July 1, 2014.

178 (4) Section 53A-3-702 is repealed July 1, 2008.

179 (5) Section 53A-6-112 is repealed July 1, 2009.

180 (6) Subsection 53A-13-110(3) is repealed July 1, 2013.

181 (7) Section 53A-13-408 is repealed July 1, 2013.

182 [~~7~~] (8) Section 53A-17a-152 is repealed July 1, 2010.

183 [~~8~~] (9) Section 53A-17a-162 is repealed July 1, 2012.

184 Section 10. **Appropriation.**

185 As an ongoing appropriation subject to future budget constraints, there is appropriated
186 \$500,000 from the Uniform School Fund for fiscal year 2009-10 to the State Board of
187 Education for:

188 (1) grants to school districts and charter schools to adopt Singapore math as provided
189 in Title 53A, Chapter 13, Part 4, Math Education Initiative; and

190 (2) an evaluation of the effect of instruction in Singapore math on student achievement.

191 Section 11. **Effective date.**

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

196 (2) Uncodified Section 10, Appropriation, takes effect on July 1, 2009.

S.B. 159 1st Sub. (Green) - Math Education Initiative

Fiscal Note

2009 General Session
State of Utah

State Impact

Enactment of this bill appropriates \$500,000 in ongoing Uniform School Funds to the State Board of Education to implement the Math Education Initiative outlined in the bill.

| | <u>2009</u> <u>Approp.</u> | <u>2010</u> <u>Approp.</u> | <u>2011</u> <u>Approp.</u> | <u>2009</u> <u>Revenue</u> | <u>2010</u> <u>Revenue</u> | <u>2011</u> <u>Revenue</u> |
|---------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Uniform School Fund | \$0 | \$500,000 | \$500,000 | \$0 | \$0 | \$0 |
| Total | \$0 | \$500,000 | \$500,000 | \$0 | \$0 | \$0 |

Individual, Business and/or Local Impact

Enactment of this bill likely will not result in direct, measurable costs and/or benefits for individuals, businesses, or local governments.