House



LEGISLATIVE ACTION

Senate . Comm: RCS . 01/17/2018 .

The Committee on Education (Passidomo) recommended the following:

Senate Amendment (with title amendment)

Delete everything after the enacting clause

4 and insert: 5 Section 1. Section 1007.2616, Florida Statutes, is amended

to read:

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1007.2616 Computer science and technology instruction.-

(1) For the purposes of this section, the term "computer

9 science" means the study of computers and algorithmic processes,

10 including their principles, hardware and software designs,



11 <u>applications, and their impact on society, and includes computer</u> 12 coding and computer programming.

(2) (a) (1) Public schools shall provide students in grades 13 14 K-12 opportunities for learning computer science, including, but not limited to, computer coding and computer programming. Such 15 16 opportunities may include coding instruction in elementary 17 school and middle school and  $\overline{r}$  instruction to develop students' 18 computer usage and digital literacy skills in middle school, and 19 must include courses in computer science, computer coding, and 20 computer programming in middle school and high school, including earning-related industry certifications. Such courses must be 21 22 integrated into each school district's middle and high schools, 23 including combination schools in which any of grades 6 through 24 12 are taught, as follows:

<u>1. Beginning with the 2018-2019 school year, a school</u> <u>district shall provide at least one computer science course in</u> <u>no less than 4 percent of the district's total number of middle,</u> <u>high, and combination schools.</u>

2. Beginning with the 2019-2020 school year, a school district shall provide at least one computer science course in no less than 7 percent of the district's total number of middle, high, and combination schools.

3. Beginning with the 2020-2021 school year, a school district shall provide at least one computer science course in no less than 10 percent of the district's total number of middle, high, and combination schools.

4. Notwithstanding subparagraphs 1.-3., a school district with 10 or fewer public middle, high, and combination schools shall provide at least one computer science course in at least

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40	one middle, high, or combination school no later than the 2020-
41	2021 school year.
42	(b) Computer science courses that count toward the
43	percentage thresholds in paragraph (a) must be identified in the
44	Course Code Directory and published on the Department of
45	Education's website no later than July 1, 2018. Additional
46	computer science courses may be subsequently identified and
47	posted on the department's website.
48	(c) Student enrollment in computer science courses offered
49	by the Florida Virtual School pursuant to subsection (3) may be
50	used to satisfy the requirements of subparagraphs (a)13.
51	(d) A charter school is not required to offer a computer
52	science course; however, enrollment of a charter school's
53	students in a computer science course under this section may be
54	included in the school district's percentage calculation.
55	(3) The Florida Virtual School shall offer computer science
56	courses identified in the Course Code Directory pursuant to
57	paragraph (2)(b). If a school district does not offer an
58	identified course, the district must provide students access to
59	the course through the Florida Virtual School or through other
60	means.
61	(4)(a) Subject to legislative appropriation, a school
62	district or a consortium of school districts may apply to the
63	department, in a format prescribed by the department, for
64	funding to deliver or facilitate training for classroom teachers
65	to earn an educator certificate in computer science pursuant to
66	s. 1012.56 or an industry certification associated with a course
67	identified in the Course Code Directory pursuant to paragraph
68	(2) (b). Such funding shall only be used to provide training for

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69 classroom teachers and to pay fees for examinations that lead to 70 a credential pursuant to this paragraph. (b) Once the department has identified courses in the 71 72 Course Code Directory pursuant to paragraph (2) (b), the 73 department shall establish a deadline for submitting 74 applications. The department shall award funding to school 75 districts in a manner that allows for an equitable distribution 76 of funding statewide based on student population.

(5)(2) Elementary schools and middle schools may establish digital classrooms in which students are provided opportunities to improve digital literacy and competency; to learn digital skills, such as coding, multiple media presentation, and the manipulation of multiple digital graphic images; and to earn digital tool certificates and certifications pursuant to s. 1003.4203 and grade-appropriate, technology-related industry certifications.

<u>(6)</u> (3) High <u>school students must be provided</u> <del>schools may</del> provide students</del> opportunities to take computer science courses to satisfy high school graduation requirements, including, but not limited to, the following:

89 (a) High school computer science courses of sufficient 90 rigor, as identified by the commissioner, such that one credit 91 in computer science and the earning of related industry 92 certifications constitute the equivalent of up to one credit of 93 the mathematics requirement, with the exception of Algebra I or 94 higher-level mathematics, or up to one credit of the science 95 requirement, with the exception of Biology I or higher-level 96 science, for high school graduation. Computer science courses 97 and technology-related industry certifications that are

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98 identified as eligible for meeting mathematics or science 99 requirements for high school graduation shall be included in the 100 Course Code Directory.

101 (b) High school computer technology courses in 3D rapid 102 prototype printing of sufficient rigor, as identified by the 103 commissioner, such that one or more credits in such courses and 104 related industry certifications earned may satisfy up to two 105 credits of mathematics required for high school graduation with 106 the exception of Algebra I. Computer technology courses in 3D 107 rapid prototype printing and related industry certifications 108 that are identified as eligible for meeting mathematics 109 requirements for high school graduation shall be included in the 110 Course Code Directory.

(7) Subject to legislative appropriation, a classroom teacher who was evaluated as effective or highly effective pursuant to s. 1012.34 in the previous school year or who is newly hired by the district school board and has not been evaluated pursuant to s. 1012.34 must receive a bonus as follows:

(a) If the classroom teacher holds an educator certificate in computer science pursuant to s. 1012.56 or if he or she has 119 passed the computer science subject area examination and holds an adjunct certificate issued by a school district pursuant to s. 1012.57, he or she shall receive a bonus of \$1,000 after each year the individual completes teaching a computer science course 123 identified in the Course Code Directory pursuant to paragraph (2) (b) at a public middle, high, or combination school in the 125 state, for up to 3 years. (b) If the classroom teacher holds an industry

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127	certification associated with a course identified in the Course
128	Code Directory pursuant to paragraph (2)(b), he or she shall
129	receive a bonus of \$500 after each year the individual completes
130	teaching the identified course at a public middle, high, or
131	combination school in the state, for up to 3 years.
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133	A school district shall report a qualifying classroom teacher to
134	the department by a date and in a format established by the
135	department. An eligible classroom teacher shall receive his or
136	her bonus upon completion of the school year in which he or she
137	taught the course. A teacher may not receive more than one bonus
138	per year under this subsection.
139	(8) Subject to legislative appropriation, the department
140	shall award high-need technology grants to eligible school
141	districts if the funds provided in the Florida digital
142	classrooms allocation pursuant to s. 1011.62(12) are
143	insufficient to meet the costs specified in that subsection and
144	the district has no remaining instructional materials funds
145	under s. 1011.67. The department shall establish an application
146	process and eligibility criteria. Such criteria must be based on
147	a school district's technology needs and must provide for an
148	equitable distribution of funding based on the geographic
149	distribution of the student population among school districts
150	determined to have a high need for technology.
151	<u>(9)<del>(</del>4)</u> The State Board of Education <u>shall</u> may adopt rules
152	to administer this section.
153	Section 2. This act shall take effect upon becoming a law.
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155	========== T I T L E A M E N D M E N T =================================



156	And the title is amended as follows:
157	Delete everything before the enacting clause
158	and insert:
159	A bill to be entitled
160	An act relating to computer science instruction;
161	amending s. 1007.2616, F.S.; providing a definition;
162	providing requirements for specified instruction
163	relating to computer science; requiring school
164	districts to provide computer science courses in a
165	specified number of schools by certain dates;
166	requiring certain computer science courses to be
167	included in the Course Code Directory and published on
168	the Department of Education's website by a specified
169	date; providing that student enrollment in certain
170	courses offered by the Florida Virtual School meet
171	specified requirements; providing that a charter
172	school is not required to offer computer science
173	courses; providing that charter schools that offer
174	such courses may be used in meeting a school
175	district's percentage thresholds; requiring the
176	Florida Virtual School to offer certain computer
177	science courses; requiring school districts to provide
178	access to computer science courses offered by the
179	Florida Virtual School or by other means under certain
180	circumstances; providing funds for school districts to
181	provide professional development for classroom
182	teachers; providing Department of Education
183	responsibilities for the distribution of such funds;
184	requiring high school students to be provided

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185 opportunities to take certain courses to meet certain 186 graduation requirements; providing funds for bonuses 187 for certain classroom teachers; providing funding for 188 high-need technology grants for school districts; 189 requiring, rather than authorizing, the State Board of 190 Education to adopt rules; providing an effective date.