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576-03007-18

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Proposed Committee Substitute by the Committee on Appropriations (Appropriations Subcommittee on Pre-K - 12 Education)

A bill to be entitled

2 An act relating to computer science instruction; 3 amending s. 1007.2616, F.S.; defining the term 4 "computer science"; providing requirements for 5 specified instruction relating to computer science; 6 requiring school districts to provide computer science 7 courses in a specified number of schools by certain 8 dates; requiring certain computer science courses to 9 be included in the Course Code Directory and published 10 on the Department of Education's website by a 11 specified date; providing that student enrollment in 12 certain courses offered by the Florida Virtual School 13 meet specified requirements; providing that a charter 14 school is not required to offer computer science 15 courses; providing that charter schools that offer 16 such courses may be used in meeting a school district's percentage thresholds; requiring the 17 18 Florida Virtual School to offer certain computer 19 science courses; requiring school districts to provide 20 access to computer science courses offered by the Florida Virtual School or by other means under certain 21 2.2 circumstances; providing funds for school districts to 23 provide professional development for classroom 24 teachers, subject to legislative appropriation; 25 providing Department of Education responsibilities for 26 the distribution of such funds; requiring that high 27 school students be provided opportunities to take

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44 including their principles, hardware and software designs, 45 applications, and their impact on society, and includes computer 46 coding and computer programming. 47 (2) (a) (1) Public schools shall provide students in grades 48 K-12 opportunities for learning computer science, including, but 49 not limited to, computer coding and computer programming. Such 50 opportunities may include coding instruction in elementary 51 school and middle school <u>and</u> , instruction to develop students'	1	576-03007-18
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50 opportunities may include coding instruction in elementary 51 school and middle school <u>and</u> , instruction to develop students'	48	K-12 opportunities for learning computer science, including, but
51 school and middle school \underline{and}_{τ} instruction to develop students'	49	not limited to, computer coding and computer programming. Such
	50	opportunities may include coding instruction in elementary
52 computer usage and digital literacy skills in middle school, and	51	school and middle school $\underline{ ext{and}}_{ au}$ instruction to develop students'
	52	computer usage and digital literacy skills in middle school, and
53 <u>must include</u> courses in computer science, computer coding, and	53	must include courses in computer science , computer coding, and
54 computer programming in middle school and high school,	54	computer programming in <u>middle school and</u> high school,
55 including, but not limited to, earning-related industry	55	including, but not limited to, earning-related industry
56 certifications. <u>Such courses must be integrated into each school</u>	56	certifications. Such courses must be integrated into each school

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57	district's middle and high schools, including combination
58	schools in which any of grades 6 through 12 are taught, as
59	follows:
60	1. Beginning with the 2018-2019 school year, a school
61	district shall provide at least one computer science course in
62	no less than 4 percent of the district's total number of middle,
63	high, and combination schools.
64	2. Beginning with the 2019-2020 school year, a school
65	district shall provide at least one computer science course in
66	no less than 7 percent of the district's total number of middle,
67	high, and combination schools.
68	3. Beginning with the 2020-2021 school year, a school
69	district shall provide at least one computer science course in
70	no less than 10 percent of the district's total number of
71	middle, high, and combination schools.
72	4. Notwithstanding subparagraphs 13., a school district
73	with 10 or fewer public middle, high, and combination schools
74	shall provide at least one computer science course in at least
75	one middle, high, or combination school no later than the 2020-
76	2021 school year.
77	(b) Computer science courses that count toward the
78	percentage thresholds in paragraph (a) must be identified in the
79	Course Code Directory and published on the Department of
80	Education's website no later than July 1, 2018. The State Board
81	of Education shall develop rules so that additional computer
82	science courses may be subsequently identified and posted on the
83	department's website.
84	(c) Student enrollment in computer science courses offered
85	by the Florida Virtual School pursuant to subsection (3) may be
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86 used to satisfy the requirements of subparagraphs (a)1.-3. 87 (d) A charter school is not required to offer a computer science course; however, enrollment of a charter school's 88 89 students in a computer science course under this section may be 90 included in the school district's percentage calculation. 91 (3) The Florida Virtual School shall offer computer science 92 courses identified in the Course Code Directory pursuant to 93 paragraph (2)(b). If a school district does not offer an 94 identified course, the district must provide students access to 95 the course through the Florida Virtual School or through other 96 means. 97 (4) (a) Subject to legislative appropriation, a school 98 district or a consortium of school districts may apply to the 99 department, in a format prescribed by the department, for 100 funding to deliver or facilitate training for classroom teachers to earn an educator certificate in computer science pursuant to 101 102 s. 1012.56 or an industry certification associated with a course 103 identified in the Course Code Directory pursuant to paragraph 104 (2) (b). Such funding may only be used to provide training for 105 classroom teachers and to pay fees for examinations that lead to 106 a credential pursuant to this paragraph. 107 (b) Once the department has identified courses in the 108 Course Code Directory pursuant to paragraph (2) (b), the 109 department shall establish a deadline for submitting 110 applications. The department shall award funding to school 111 districts in a manner that allows for an equitable distribution 112 of funding statewide based on student population. (5) (2) Elementary schools and middle schools may establish 113

digital classrooms in which students are provided opportunities

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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.

121 (6) (3) High school students must be provided schools may 122 provide students opportunities to take computer science courses 123 to satisfy high school graduation requirements, including, but 124 not limited to, the following:

125 (a) High school computer science courses of sufficient 126 rigor, as identified by the commissioner, such that one credit in computer science and the earning of related industry 127 128 certifications constitute the equivalent of up to one credit of the mathematics requirement, with the exception of Algebra I or 129 higher-level mathematics, or up to one credit of the science 130 131 requirement, with the exception of Biology I or higher-level science, for high school graduation. Computer science courses 132 133 and technology-related industry certifications that are identified as eligible for meeting mathematics or science 134 135 requirements for high school graduation shall be included in the 136 Course Code Directory.

(b) High school computer technology courses in 3D rapid prototype printing of sufficient rigor, as identified by the commissioner, such that one or more credits in such courses and related industry certifications earned may satisfy up to two credits of mathematics required for high school graduation with the exception of Algebra I. Computer technology courses in 3D rapid prototype printing and related industry certifications

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144 that are identified as eligible for meeting mathematics 145 requirements for high school graduation shall be included in the 146 Course Code Directory.

147 <u>(7) Subject to legislative appropriation, a classroom</u> 148 <u>teacher who was evaluated as effective or highly effective</u> 149 <u>pursuant to s. 1012.34 in the previous school year or who is</u> 150 <u>newly hired by the district school board and has not been</u> 151 <u>evaluated pursuant to s. 1012.34 must receive a bonus as</u> 152 follows:

153 (a) If the classroom teacher holds an educator certificate 154 in computer science pursuant to s. 1012.56 or if he or she has 155 passed the computer science subject area examination and holds 156 an adjunct certificate issued by a school district pursuant to 157 s. 1012.57, he or she shall receive a bonus of \$1,000 after each 158 year the individual completes teaching a computer science course 159 identified in the Course Code Directory pursuant to paragraph (2) (b) at a public middle, high, or combination school in the 160 161 state, for up to 3 years.

(b) If the classroom teacher holds an industry certification associated with a course identified in the Course Code Directory pursuant to paragraph (2) (b), he or she shall receive a bonus of \$500 after each year the individual completes teaching the identified course at a public middle, high, or combination school in the state, for up to 3 years.

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A school district shall report a qualifying classroom teacher to
 the department by a date and in a format established by the
 department. An eligible classroom teacher shall receive his or

172 her bonus upon completion of the school year in which he or she

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173 taught the course. A teacher may not receive more than one bonus 174 per year under this subsection. 175 (8) Subject to legislative appropriation, the department shall award high-need technology grants to eligible school 176 177 districts if the funds provided in the Florida digital 178 classrooms allocation pursuant to s. 1011.62(12) are 179 insufficient to meet the costs specified in that subsection and 180 the district has no remaining instructional materials funds under s. 1011.67. The department shall establish an application 181 182 process and eligibility criteria. Such criteria must be based on 183 a school district's technology needs and must provide for an 184 equitable distribution of funding based on the geographic 185 distribution of the student population among school districts 186 determined to have a high need for technology. 187 (9) (4) The State Board of Education shall may adopt rules 188 to administer this section.

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Section 2. This act shall take effect upon becoming a law.