

1

2

3

4

5

6

8

9

10

11

12

1.3

14

15

16

17 18

19

20

21 2.2

23

24

25

26

27

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

A bill to be entitled

An act relating to computer science instruction; amending s. 1007.2616, F.S.; defining the term "computer science"; providing requirements for specified instruction relating to computer science; requiring school districts to provide computer science courses in a specified number of schools by certain dates; requiring certain computer science courses to be included in the Course Code Directory and published on the Department of Education's website by a specified date; providing that student enrollment in certain courses offered by the Florida Virtual School meet specified requirements; providing that a charter school is not required to offer computer science courses; providing that charter schools that offer such courses may be used in meeting a school district's percentage thresholds; requiring the Florida Virtual School to offer certain computer science courses; requiring school districts to provide access to computer science courses offered by the Florida Virtual School or by other means under certain circumstances; providing funds for school districts to provide professional development for classroom teachers, subject to legislative appropriation; providing Department of Education responsibilities for the distribution of such funds; requiring that high school students be provided opportunities to take



counter science courses to meet certain graduation requirements; providing funds for bonuses for certain classroom teachers, subject to legislative appropriation; providing funding for high-need technology grants for school districts, subject to legislative appropriation; requiring, rather than authorizing, the State Board of Education to adopt rules; providing an effective date.

35 36

28

29

30

31 32

33

34

Be It Enacted by the Legislature of the State of Florida:

37 38

39

40

Section 1. Section 1007.2616, Florida Statutes, is amended to read:

41

1007.2616 Computer science and technology instruction.-

42 43

44

(1) For the purposes of this section, the term "computer science" means the study of computers and algorithmic processes, including their principles, hardware and software designs, applications, and their impact on society, and includes computer

45 46 47

48

49

50

51

52

53

54

55

56

(2) (a) (1) Public schools shall provide students in grades K-12 opportunities for learning computer science, including, but not limited to, computer coding and computer programming. Such opportunities may include coding instruction in elementary school and middle school and  $\tau$  instruction to develop students' computer usage and digital literacy skills in middle school, and must include courses in computer science, computer coding, and computer programming in middle school and high school, including, but not limited to, earning-related industry

certifications. Such courses must be integrated into each school

coding and computer programming.



district's middle and high schools, including combination schools in which any of grades 6 through 12 are taught, as follows:

- 1. Beginning with the 2018-2019 school year, a school district shall provide at least one computer science course in no less than 4 percent of the district's total number of middle, high, and combination schools.
- 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 one middle, high, or combination school no later than the 2020-2021 school year.
- (b) Computer science courses that count toward the percentage thresholds in paragraph (a) must be identified in the Course Code Directory and published on the Department of Education's website no later than July 1, 2018. The State Board of Education shall develop rules so that additional computer science courses may be subsequently identified and posted on the department's website.
- (c) Student enrollment in computer science courses offered by the Florida Virtual School pursuant to subsection (3) may be



86

87

88 89

90

91

92

93

94

95

96

97

98

99

100

101 102

103

104

105

106

107

108

109

110

111

112

113 114 used to satisfy the requirements of subparagraphs (a) 1.-3.

- (d) A charter school is not required to offer a computer science course; however, enrollment of a charter school's students in a computer science course under this section may be included in the school district's percentage calculation.
- (3) The Florida Virtual School shall offer computer science courses identified in the Course Code Directory pursuant to paragraph (2)(b). If a school district does not offer an identified course, the district must provide students access to the course through the Florida Virtual School or through other means.
- (4) (a) Subject to legislative appropriation, a school district or a consortium of school districts may apply to the department, in a format prescribed by the department, for funding to deliver or facilitate training for classroom teachers to earn an educator certificate in computer science pursuant to s. 1012.56 or an industry certification associated with a course identified in the Course Code Directory pursuant to paragraph (2) (b). Such funding may only be used to provide training for classroom teachers and to pay fees for examinations that lead to a credential pursuant to this paragraph.
- (b) Once the department has identified courses in the Course Code Directory pursuant to paragraph (2)(b), the department shall establish a deadline for submitting applications. The department shall award funding to school districts in a manner that allows for an equitable distribution of funding statewide based on student population.
- (5) Elementary schools and middle schools may establish digital classrooms in which students are provided opportunities



115

116 117

118 119

120

121

122

123

124

125

126

127 128

129

130 131

132 133

134 135

136

137 138

139

140

141

142 143

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.

- (6) <del>(3)</del> High school students must be provided schools may provide students opportunities to take computer science courses to satisfy high school graduation requirements, including, but not limited to, the following:
- (a) High school computer science courses of sufficient rigor, as identified by the commissioner, such that one credit in computer science and the earning of related industry certifications constitute the equivalent of up to one credit of the mathematics requirement, with the exception of Algebra I or higher-level mathematics, or up to one credit of the science requirement, with the exception of Biology I or higher-level science, for high school graduation. Computer science courses and technology-related industry certifications that are identified as eligible for meeting mathematics or science requirements for high school graduation shall be included in the 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



144

145 146

147

148

149

150

151

152

153

154

155

156

157

158

159

160 161

162

163

164

165

166

167

that are identified as eligible for meeting mathematics requirements for high school graduation shall be included in the 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 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 identified in the Course Code Directory pursuant to paragraph (2) (b) at a public middle, high, or combination school in the 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.

168 169

170

171 172 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 her bonus upon completion of the school year in which he or she



173

174

175

176 177

178

179

180

181 182

183

184

185

186

187

188

189

taught the course. A teacher may not receive more than one bonus per year under this subsection.

(8) Subject to legislative appropriation, the department shall award high-need technology grants to eligible school districts if the funds provided in the Florida digital classrooms allocation pursuant to s. 1011.62(12) are insufficient to meet the costs specified in that subsection and the district has no remaining instructional materials funds under s. 1011.67. The department shall establish an application process and eligibility criteria. Such criteria must be based on a school district's technology needs and must provide for an equitable distribution of funding based on the geographic distribution of the student population among school districts determined to have a high need for technology.

(9) (4) The State Board of Education shall may adopt rules to administer this section.

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