

By: Representatives Creekmore IV, Miles,
Smith, Calvert, Lancaster

To: Education

HOUSE BILL NO. 110

1 AN ACT TO REQUIRE COURSES IN COMPUTER SCIENCE IN MIDDLE
2 SCHOOL AND HIGH SCHOOL; TO PROVIDE FOR DEFINITIONS OF TERMS; TO
3 PROVIDE FOR A PHASE-IN OF SUCH REQUIREMENT IN ALL SCHOOLS OVER THE
4 COURSE OF THREE YEARS BEGINNING WITH THE 2021-2022 SCHOOL YEAR,
5 WITH FULL STATEWIDE IMPLEMENTATION IN THE 2023-2024 SCHOOL YEAR;
6 TO PROVIDE FOR COURSES THROUGH THE MISSISSIPPI VIRTUAL SCHOOL
7 PROGRAM; TO REQUIRE THE STATE DEPARTMENT OF EDUCATION TO PROVIDE
8 FOR GRANTS FOR PROFESSIONAL DEVELOPMENT PROGRAMS FOR TEACHERS
9 PROVIDING INSTRUCTION IN COMPUTER SCIENCE COURSES AND CONTENT,
10 SUBJECT TO THE APPROPRIATION OF FUNDS FOR THAT PURPOSE; TO PROVIDE
11 FOR ANNUAL REPORTING; AND FOR RELATED PURPOSES.

12 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MISSISSIPPI:

13 **SECTION 1.** The Mississippi Legislature finds that:

14 (a) Education in computer science is a critical need
15 for the students of Mississippi for the twenty-first century;

16 (b) Less than five-tenths percent (0.5%) of high school
17 graduates take a computer science course;

18 (c) There are thousands of unfulfilled computer science
19 jobs in the state; and

20 (d) The logical thinking skills taught by computer
21 science are now very valuable in many noncomputer science jobs, as
22 technology has become embedded in most professions.



23 **SECTION 2.** As used in this act, the following terms shall
24 have the meaning ascribed in this section, unless context of use
25 clearly requires otherwise:

26 (a) "Computer science" means the study of computers,
27 algorithmic processes, coding, and logical thinking, including
28 computer principles, their hardware and software designs, their
29 implementation and their impact on society.

30 (b) "Computer science courses and content" means high
31 school courses that teach computer science as stand-alone
32 implementations and elementary and middle school courses that
33 provide instruction in computer science in stand-alone
34 implementations or embedded in other subjects and focus on how to
35 create and understand technology, rather than simply using
36 technology.

37 (c) "High-quality professional learning" means
38 professional development activities that:

39 (i) Clarify the conceptual foundations of computer
40 science;

41 (ii) Teach research based practices, including
42 hands-on and inquiry based learning; and

43 (iii) Are intended for teachers with or without
44 prior exposure to computer science.

45 (d) "High-quality professional learning providers"
46 means institutions of higher education in this state, local school
47 districts, nonprofit organizations, or private entities that have



48 successfully designed, implemented and scaled high-quality
49 professional learning for teachers and are approved or recommended
50 by the State Board of Education in coordination with the
51 Department of Education.

52 (e) "Offer" means providing a course taught by a
53 computer science teacher:

54 (i) Who is onsite at the physical location of the
55 school; or

56 (ii) Who is not onsite at the physical location of
57 the school but conducts the course through virtual means with a
58 proctor onsite at the physical location of the school.

59 **SECTION 3.** (1) Beginning in the 2021-2022 school year:

60 (a) Each local school district shall provide that at
61 least one (1) high school in its school system offers a course in
62 computer science;

63 (b) Each local school district shall provide that all
64 middle schools in its school system offer instruction in
65 exploratory computer science;

66 (c) Each local school district shall provide that all
67 elementary schools in its school system offer a minimum of one (1)
68 hour of instruction in exploratory computer science each week;

69 (d) Each charter school that serves high school
70 students shall offer a course in computer science;



71 (e) Each charter school that serves middle school
72 students shall offer instruction in exploratory computer science;
73 and

74 (f) Each charter school that serves elementary school
75 students may offer instruction in exploratory computer science.

76 (2) Beginning in the 2022-2023 school year, each local
77 school district shall provide that at least fifty percent (50%) of
78 the high schools in its school system offer a course in computer
79 science.

80 (3) Beginning in the 2023-2024 school year, each local
81 school district shall provide that all high schools in its school
82 system offer a course in computer science.

83 (4) The course content for computer science shall comply
84 with approved curricula that are age, grade and developmentally
85 appropriate. At a minimum, the course curricula for comprehensive
86 and exploratory computer science course offered at public schools
87 and charter schools shall provide for the development of a
88 systematic plan to create technological learning environments and
89 experiences for students as follows:

90 (a) For high schools, instruction in the following
91 competencies and objectives:

92 (i) Photoshop;

93 (ii) Garage Band;

94 (iii) Website development; and



95 (iv) IOS applications development with Xcode and
96 Swift;

97 (b) For middle schools, instruction in the following
98 competencies and objectives:

99 (i) Computer science discoveries;

100 (ii) Computer programing;

101 (iii) Computer science;

102 (iv) Basics of Swift;

103 (v) Java Script Coding;

104 (vi) HTML5 coding;

105 (vii) Creating animation and games; and

106 (viii) Data and privacy;

107 (c) For elementary schools offerings Grade 3 through
108 Grade 5, instruction in the following competencies and objectives:

109 (i) Powerpoint, Keynote and Google slides;

110 (ii) Word, Docs and Pages;

111 (iii) Computer science fundamentals; and

112 (iv) Basics of computer hardware (hard drive, Ram,
113 etc.); and

114 (d) For elementary schools offering kindergarten
115 through Grade 2, the instruction in the following competencies and
116 objectives:

117 (i) Keyboarding;

118 (ii) Trackpad basics;

119 (iii) Basics of Internet searches and safety; and



120 (iv) Basics of Internet search engines.

121 **SECTION 4.** The State Department of Education shall ensure
122 that the Mississippi Virtual School operated pursuant to Code
123 Section 37-161-3 has sufficient capacity to enable schools to
124 utilize high quality instruction computer science courses to meet
125 the needs of such schools as a result of this act.

126 **SECTION 5.** (1) Subject to appropriations made by the
127 Legislature, the State Department of Education shall provide
128 grants to eligible entities to deliver professional development
129 programs for teachers providing instruction in computer science
130 courses and content.

131 (2) Eligible entities shall include local school districts,
132 consortia of local school districts, charter schools and
133 high-quality professional learning providers working in
134 partnership with local school districts.

135 (3) Criteria for grant awards to eligible entities pursuant
136 to this subsection shall include:

137 (a) The number of teachers in a local school district
138 that require training and the number of teachers in a local school
139 district that have already received training; and

140 (b) The willingness of local school districts to make
141 available, teachers who have received training in computer science
142 courses and content to provide computer science instruction in
143 another local school district or systems.



144 (4) The State Department of Education shall submit a report
145 on December 1 of each year to the Governor, the Lieutenant
146 Governor, the Speaker of the House of Representatives, the
147 Chairman of the Senate Education Committee, and the Chairman of
148 the House Committee on Education. The report shall include the
149 number of teachers trained, the number of schools offering
150 training, the number of students served and the demographics of
151 such students, and a list of the eligible entities that provided
152 the training.

153 **SECTION 6.** This act shall take effect and be in force from
154 and after its passage.

