SENATE BILL 1427

By Akbari

AN ACT to amend Tennessee Code Annotated, Title 49,
Chapter 1; Title 49, Chapter 6 and Title 49,
Chapter 7, relative to computer science education.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Title 49, Chapter 6, is amended by adding the following as a new part:

49-6-1501.

As used in this part, unless the context otherwise requires:

(1) "Computer science" means the study of computers and algorithmic processes, including principles of computing, hardware and software design, applications, and the impact of computers on society;

(2) "Computer science content" means computer science instruction that is embedded in other subjects or related materials, including content with a focus on teaching students how to both create and use new technologies;

(3) "Computer science course" means a computer science curriculum offered by an LEA or public charter school as a stand-alone course;

(4) "Computer science course and content plan" means a plan developed by an LEA or public charter school to increase computer science courses and content offered by the LEA or charter school;

(5) "Courses eligible for college credit" means any high school course that provides a student the opportunity to earn college credit in high school, including advanced placement courses and courses taken in an international baccalaureate program;

(6) "High-quality professional learning" means professional development activities that:

(A) Clarify the conceptual foundations of computer science;

(B) Teach research-based practices, including hands-on and inquiry-based learning; and

(C) Are intended for licensed educators with or without prior exposure to computer science; and

(7) "High-quality professional learning providers" means institutions of higher education, nonprofit organizations, or private entities that have successfully designed, implemented, and scaled high-quality computer science professional learning for teachers and are approved by the state board.

49-6-1502.

(a) The department of education shall require each LEA serving students in grades nine through twelve (9-12) and public charter high school to implement a computer science course and content plan by the 2024-2025 school year. A course and content plan developed pursuant to this section must include a wide array of computer science course options. This subsection (a) must not be construed as implementing a computer science graduation requirement.

(b)

(1) Each LEA serving students in grades nine through twelve (9-12) shall:

(A) In the 2021-2022 school year, develop a computer science course and content plan that will be implemented by each high school;

(B) In the 2022-2023 school year, offer at least one (1) introductory computer science course in at least one (1) high school;

(C) In the 2023-2024 school year, offer at least one (1) introductory computer science course in at least fifty percent (50%) of the high schools; and

(D) In the 2024-2025 school year, offer at least one (1) introductory computer science course in all of the high schools.

(2) Each public charter high school shall:

(A) In the 2021-2022 school year, develop a computer science course and content plan to be implemented by the charter school; and

(B) In the 2022-2023 school year, offer at least one (1) introductory computer science course.

(c) The department shall annually publish a list of all computer science courses approved by the state board to meet the requirements of subsection (a). The state board may approve virtual courses in accordance with rules promulgated by the state board for virtual education under § 49-16-102, career and technical education computer science courses, and courses eligible for college credit.

(d) Virtual or distance learning courses must be approved by the state board, prior to being offered by an LEA as part of a computer science course and content plan, and may only be offered when in-person instruction is not practical. If the state board approves a virtual or distance learning course, the state board must document the board's rationale for approving the course. Any virtual learning course approved by the state board must be approved in accordance with rules promulgated by the state board for virtual education under § 49-16-102.

(e) The state board shall develop enrollment goals for inclusion in LEAs' and public charter schools' course and content plans required under this section. The enrollment goals must strive to increase the number and diversity of students enrolled in

computer science courses, including the number of female students, racial and ethnic diversity, students living in rural areas, low-income students, and students taking courses eligible for college credit. LEAs and public charter schools shall strive to achieve enrollment goals developed by the state board within five (5) years of implementing a course and content plan under this part.

(f) LEAs serving students in grades nine through twelve (9-12) and public charter high schools are encouraged to offer multiple computer science courses in a sequential manner to provide students with opportunities to engage in computer science and build on students' knowledge.

(g) The department shall establish a waiver process for LEAs and public charter schools demonstrating a need, as a result of the COVID-19 pandemic, for additional time to comply with implementing a course and content plan under this section. The department may begin granting waivers to LEAs and public charter schools in the 2022-2023 school year, but may not issue a waiver that would delay the implementation of a course and content plan for more than two (2) school years. The department shall not grant more than one (1) waiver to any one (1) LEA or public charter school.

49-6-1503.

(a) Subject to appropriation, the department of education shall establish and administer a grant program during the 2021-2022, 2022-2023, 2023-2024, and 2024-2025 school years, to provide one-time grants to LEAs serving students in grades nine through twelve (9-12) and public charter high schools to assist the LEAs and charter schools with implementing a course and content plan under this part.

(b)

(1) There is created in the state treasury a fund to be administered by the department of education and to be known as the "computer science grant fund" or the "CSG fund."

(2) Any fund balance remaining unexpended at the end of a fiscal year must remain in the fund and shall not be transferred or revert to the general fund of the state at the end of any fiscal year.

(3) Notwithstanding subdivision (b)(2), at the completion of the 2024-2025 fiscal year, or should the grant program be discontinued, any funds remaining in the CSG fund must revert to the general fund of the state.

(c) The commissioner of education shall develop an application process for LEAs and public charter schools to apply for one-time computer science grants from the CSG fund. An LEA or public charter school shall include in the LEA's or charter school's grant application information on how the LEA or charter school plans to:

(1) Improve access to and participation in computer science courses for students underrepresented in computer science;

(2) Identify new or improved computer science course-offering goals for each public high school within the LEA or for the charter school; and

(3) Target and recruit educators to participate in professional development programs in computer science.

(d) The commissioner shall develop a selection process and determine the amount of grants awarded to applicants under this section.

(e) An LEA or public charter school shall use the grant funds awarded for workshops, high-quality professional learning programs, or facilitator programs that lead to the development and implementation of the LEA's or charter school's course and content plan.

002305

49-6-1504.

(a) Subject to appropriation, the department of education shall establish and administer a grant program during the 2021-2022, 2022-2023, 2023-2024, and 2024-2025 school years to assist with the development and implementation of high-quality professional learning programs for teachers in kindergarten through grade five (K-5).

(b)

(1) There is created in the state treasury a fund to be administered by the department of education and to be known as the "computer science professional learning grant fund" or the "CSPLG fund."

(2) Any fund balance remaining unexpended at the end of a fiscal year must remain in the fund and shall not be transferred or revert to the general fund of the state at the end of any fiscal year.

(3) Notwithstanding subdivision (b)(2), at the completion of the 2024-2025 fiscal year, or should the grant program be discontinued, any funds remaining in the CSPLG fund must revert to the general fund of the state.

(c) A grant recipient must be:

(1) An LEA, public charter school, a consortium of LEAs and public charter schools, or any combination thereof; or

(2) A high-quality professional learning provider, including institutions of higher education in this state, nonprofit organizations, or private entities working in partnership with LEAs or public charter schools.

(d) The commissioner of education shall develop an application process for LEAs, public charter schools, and high-quality professional learning providers to apply for grants from the CSPLG fund. A grant application submitted pursuant to this section must detail how a grant applicant will accomplish the following:

(1) Reach new and existing teachers with little to no computer science background;

(2) Use research- or evidence-based practices for high-quality professional learning programs;

(3) Focus professional learning programs offered by the grant recipient on the conceptual foundations of computer science;

(4) Reach and support groups of students underrepresented in computer science;

(5) Provide teachers concrete experience with hands-on, inquiry-based practices; and

(6) Accommodate teacher and student needs.

(e) The commissioner shall develop a selection process and determine the amount of grants awarded to applicants under this section. The commissioner shall prioritize grant applications that include any one (1) or more of the following:

(1) LEAs or public charter schools that are working in partnership with a high-quality computer science professional learning provider;

(2) Proposals that describe strategies to enroll groups of students underrepresented in computer science, students eligible for free and reduced-price meals, students with disabilities, and English language learners;

(3) Proposals from rural or urban areas with few kindergarten through grade twelve (K-12) computer science course offerings; or

(4) LEAs and public charter schools that partner to form clusters of implementation.

(f) Grant funds may be used to:

(1) Develop and administer high-quality professional learning programs for computer science educators in kindergarten through grade five (K-5);

(2) Provide mentoring, coaching, and support computer science educators in kindergarten through grade five (K-5);

(3) Create resources to support computer science course implementation; and

(4) Recruit new computer science teachers.

(g) A grant recipient shall report the following information to the department each school year the recipient receives a grant:

(1) The number of teachers who participated in a high-quality professional learning program funded by a grant award under this section; and

(2) Any other information requested by the department.

49-6-1505.

(a) By February 15, 2022, and by February 15 of each of the following four (4) years, the department of education shall submit a report to the education committee of the senate and the education instruction committee of the house of representatives detailing:

(1) The implementation of computer science course and content plans developed by LEAs and public charter schools under this part;

(2) The rationale used by the state board for approving the offering of any virtual or distance learning computer science courses pursuant to § 49-6-1502(g);

(3) The number of licensed educators with an endorsement in computer science who are employed by each LEA and public charter school;

(4) The number of educators who participated in high-quality professional learning programs and the number of students taught by such educators in the most recent school year;

(5) The number of educators who participated in high-quality professional learning programs, but who have not taught a computer science course;

(6) The number and names of computer science courses offered in each public high school and each public charter high school;

(7) Student participation in computer science courses broken down by course and disaggregated by student demographic, including, but not limited to, gender, race and ethnicity, rural students, low-income students, students taking exams for college credit, and students taking courses eligible for college credit;

(8) LEAs' and public charter schools' progress toward meeting enrollment goals developed by the state board under § 49-6-1502(d);

(9) The number of waivers granted under § 49-6-1502(g), rationale provided by each waiver recipient, and the duration of each waiver;

(10) Information regarding computer science grants awarded under § 49-6-1503, including:

(A) The number of grants awarded;

(B) The total amount of grant funding awarded;

(C) How the grant funding was used by each recipient; and

(D) Improvements, if any, in the number and quality of computer science course offerings provided by LEAs serving students in grades nine through twelve (9-12) and public charter high schools; and

(11) Information regarding computer science professional learning grants awarded under § 49-6-1504, including:

(A) The number of grants awarded;

(B) The total amount of grant funding awarded;

(C) How the grant funding was used by each recipient; and

(D) Improvements, if any, in the computer science course and

content offerings provided by LEAs and public charter schools serving

students in kindergarten through grade five (K-5).

(b) The report created by the department pursuant to this section must exclude

any personally identifiable information and must be created in accordance with the

Family Education Rights and Privacy Act (FERPA)(20 U.S.C. § 1232g), § 10-7-504, and

any other relevant state or federal privacy law.

SECTION 2. Tennessee Code Annotated, Title 49, Chapter 7, Part 1, is amended by

adding the following as a new section:

49-7-173.

(a) The Tennessee higher education commission shall encourage each public

institution of higher education to:

(1) Review admission requirements and allow high school computer

science courses to be used for admission purposes as a math or science course;

(2) Clearly articulate in admissions and placement requirements a

student's ability to fulfill certain math or science admissions requirements with

high school computer science courses; and

(3) Create and implement a communications plan that explains to

prospective students how computer science courses can be used for higher

education admissions purposes.

(b) The Tennessee higher education commission, in coordination with the

department of education, shall annually convene a gathering to connect postsecondary

computer science educators with kindergarten through grade twelve (K-12) computer science educators.

SECTION 3. This act is not an appropriation of funds, and funds shall not be obligated or expended pursuant to this act unless the funds are specifically appropriated by the general appropriations act.

SECTION 4. This act takes effect upon becoming a law, the public welfare requiring it.

002305