SENATE
STATE OF MINNESOTA
NINETY-THIRD SESSION

S.F. No. 757

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DATE	D-PG	OFFICIAL STATUS
01/26/2023	407	Introduction and first reading Referred to Education Policy
02/08/2023	700a	Comm report: To pass as amended and re-refer to State and Local Government and Veterans See HF2497

A bill for an act

relating to education; providing for computer science education advancement; authorizing rulemaking; appropriating money.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. **COMPUTER SCIENCE EDUCATION ADVANCEMENT PROGRAM.**

Subdivision 1. **Definitions.** (a) "Computer science" means the study of computers and algorithmic processes, including their principles, their hardware and software designs, their implementation, and their impact on society.

(b) "Computer science courses and content" means courses at:

(1) elementary and middle schools that teach computer science as standalone implementations or embedded in other subjects; and

(2) high schools that teach computer science as standalone courses and focus on teaching students how to create new technologies.

(c) "High-quality computer science educator training" means activities that:

(1) clarify the conceptual foundations of computer science;

(2) teach research-based practices, including hands-on and inquiry-based learning;

(3) are primarily intended for existing teachers with or without prior exposure to computer science with options for advanced training for teachers; and

(4) align to existing integrated computer science standards in Minnesota or nationally recognized standards, including the Computer Science Teachers' Association's kindergarten through grade 12 computer science education standards.

(d) "High-quality computer science professional learning providers" means institutions of higher education, nonprofits, other state-funded entities, or private entities that have successfully designed, implemented, and scaled high-quality computer science professional learning for teachers as defined in paragraph (c).

Subd. 2. **Computer science education supervisor and advisory committee.** (a) The Department of Education shall create a full-time computer science supervisor position. The computer science supervisor shall be dedicated to the implementation of this act and the implementation of the computer science education strategic plan.

(b) The Department of Education shall establish a computer science education advisory committee to develop a state strategic plan for long-term and sustained growth of computer science education in all kindergarten through grade 12 public schools and public charter schools.

(c) Public members of the advisory committee may be compensated and reimbursed for expenses in accordance with Minnesota Statutes, section 15.059, subdivision 3.

(d) Meetings of the advisory committee are subject to the Minnesota Open Meeting Law under Minnesota Statutes, chapter 13D.

(e) The computer science education advisory committee shall consist of the following members:

(1) one member of the house of representatives appointed by the speaker of the house and one member appointed by the minority leader of the house;

(2) one senator appointed by the senate majority leader and one senator appointed by the senate minority leader;

(3) one member appointed by the governor;

(4) the commissioner of education or the commissioner's designee;

(5) the commissioner of higher education or the commissioner's designee;

(6) one representative of the Professional Educator Licensing and Standards Board;

(7) one representative of the Computer Science Teachers' Association of Minnesota;

(8) one representative from the business community;

(9) one representative from the Minnesota Technology Association;

(10) one representative from a nonprofit organization working with students and teachers in computer science;

(11) one representative from the Minnesota Association for School Administrators;

(12) one representative from Education Minnesota;

(13) one representative from the Minnesota Association of Colleges for Teacher Education;

(14) one representative from CSforAll Minnesota; and

(15) one computer science teacher from the seven-county metropolitan area and one computer science teacher from outside the seven-county metropolitan area.

(f) The computer science education advisory committee shall develop a state strategic plan for a statewide computer science education program, including the following:

(1) a statement of purpose that describes the objectives or goals the Department of Education will accomplish by implementing a computer science education program, the strategies by which those goals will be achieved, and a timeline for achieving those goals;

(2) a summary of the current state landscape for kindergarten through grade 12 computer science education, including diversity of students taking these courses;

(3) the creation or expansion of flexible options to license computer science teachers, which may include approval codes, technical permits, ancillary licenses, and standard licenses;

(4) a description of how the state will support the expansion of computer science education opportunities in every public school and public charter school in the state within five years, with a focus on ensuring equitable access;

(5) identifying high-quality computer science professional learning providers for teachers;

(6) an ongoing evaluation process that is overseen by the Department of Education;

(7) proposed rules that incorporate the principles of the state strategic plan into the state's public education system as a whole;

(8) recommendations for long-term expansion and sustainability of computer science education, including:

(i) implementation of a requirement that every kindergarten through grade 12 public school and public charter school employs at least one certified or endorsed computer science teacher, which may be met through multiple Department of Education approved processes for certification and endorsement, including but not limited to endorsing a certified teacher endorsed in another subject area;

(ii) implementation of a high school computer science graduation requirement with an appropriate timeline;

(iii) the development of standalone kindergarten through grade 12 standards for computer science;

(iv) training preservice teachers in computer science education; and

(v) college admission requirements for Minnesota State Colleges and Universities taking into account computer science credits; and

(9) a description of existing gaps in computer science education access, participation, and success by geography and subgroup of students and a description of how to equitably address these gaps.

(g) By December 31, 2023, the Department of Education shall publish the proposed state strategic plan for public feedback.

(h) By February 28, 2024, the Department of Education shall present the adopted state strategic plan described in paragraph (c) to the chairs of the legislative committees with jurisdiction over education.

(i) The commissioner of education, or the commissioner of education's designee, may approve updates and changes to the state strategic plan described in paragraph (c) as necessary for the successful implementation of kindergarten through grade 12 computer science education.

(j) The Department of Education shall update the legislative committees with jurisdiction over education on all changes to the strategic plan described in paragraph (c) approved by the commissioner of education's designee since the last presentation to each respective entity.

(k) The computer science education advisory committee expires on February 28, 2024. The committee may remain operational for an additional two years at the discretion of the commissioner of education.

Subd. 3. **Computer science educator training.** (a) Funding from the computer science education advancement appropriation must be used by the Department of Education to develop and implement, or award grants or subcontract with eligible entities, for the development and implementation of high-quality, coordinated teacher recruitment and educator training programs for the required computer science courses and content as defined in subdivision 1 and aligned to the state strategic plan as developed under subdivision 3.

(b) For the purposes of this subdivision, eligible entities include:

(1) a consortium of local educational agencies in the state; and

(2) high-quality computer science professional learning providers, including institutions of higher education in the state, nonprofits, other state-funded entities, or private entities working in partnership with a consortium of local educational agencies.

(c) For purposes of this subdivision, eligible uses of funding include:

(1) high-quality professional learning opportunities for kindergarten through grade 12 computer science content that:

(i) are created and delivered in a consistent manner across the state;

(ii) are made available with no out-of-pocket expenses to educators, including teachers, counselors, administrators, and other district employees as approved by the Department of Education, schools, and school districts;

(iii) are made available asynchronously online, in person, and online or hybrid as determined appropriate by the Department of Education;

(iv) include introductory, intermediate, and advanced trainings aligned to the kindergarten through grade 12 academic standards or, as necessary, other standards approved by the Department of Education, specified for each of the grade bands kindergarten through grade 2, grades 3 to 5, grades 6 to 8, and grades 9 to 12;

(v) include Advanced Placement Computer Science Principles, Advanced Placement Computer Science A trainings, and concurrent enrollment credit computer science courses; and

(vi) are reasonably accessible geographically to all Minnesota educators;

(2) travel expenses for kindergarten through grade 12 computer science teachers:

(i) for attending training opportunities under clause (1); and

(ii) deemed appropriate and approved by the commissioner of education, or the commissioner of education's designee;

(3) any future credentialing for kindergarten through grade 12 computer science teachers, including Career and Technical Education and academic endorsements;

(4) supports for kindergarten through grade 12 computer science professional learning, including mentoring and coaching;

(5) creation and deployment of resources to promote training opportunities and recruitment of kindergarten through grade 12 computer science teachers;

(6) creation or purchase of resources to support implementation approved by the commissioner of education or the commissioner of education's designee;

(7) creation and deployment of resources to promote learning opportunities or recruit students to engage in the learning opportunities; and

(8) employ, or grant for employment of, personnel or contractors to oversee the statewide initiative, develop programs and trainings, and deliver training opportunities under clause (1).

(d) As a condition of receiving any funding through grants or subcontracts, eligible entities must submit an application to the Department of Education. The application must, at a minimum, address how the entity will:

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

(2) attract and support educators from schools that do not have established computer science education programs;

(3) use research- or evidence-based practices for high-quality professional development;

(4) focus the professional learning on the conceptual foundations of computer science;

(5) reach and support subgroups underrepresented in computer science;

(6) provide teachers with concrete experience through hands-on, inquiry-based practices;

(7) accommodate the particular teacher and students needs in each district and school; and

(8) ensure that participating districts must begin offering courses or content within the same or subsequent school year after the teacher receives the professional learning.

(e) The Department of Education shall prioritize the following applications:

(1) consortiums of local educational agencies that are working in partnership with providers of high-quality professional learning for kindergarten through grade 12 computer science;

(2) proposals that describe strategies to increase enrollment overall, including but not limited to subgroups of students that are traditionally underrepresented in computer science; and

(3) proposals from rural or urban areas with a low penetration of kindergarten through grade 12 computer science offerings, including local education consortiums within these areas.

(f) The award recipient shall report, for all funding received under this act annually, at a minimum:

(1) the number of teachers:

(i) trained within each of elementary, middle, and high school; and

(ii) trained within each training offering as outlined in paragraph (c), clause (1), items (iv) and (v);

(2) students reached;

(3) the number and percent of students reached in all computer science courses disaggregated by gender, race, ethnicity, free and reduced-price lunch status, Individuals with Disabilities Education Act status, 504 status, and English language learner status;

(4) the number and percent of students with passing advanced placement (AP) exam scores for high school AP computer science courses disaggregated by gender, race, ethnicity, free and reduced-price lunch status, Individuals with Disabilities Education Act status, 504 status, and English language learner status, once that data is available; and

(5) the number and percent of students taking AP computer science placement exams and the number and percent of students passing AP computer science placement exams.

(g) The Department of Education shall make these reports public. The publicly released data shall not include student-level personally identifiable information.

Subd. 4. **Making computer science count.** (a) By December 31, 2023, the Department of Education shall develop a high school graduation policy that allows students:

(1) to fulfill a maximum of one credit in mathematics for computer science courses approved by the Department of Education to meet a math graduation requirement. The Department of Education shall approve at least one computer science course to meet a math graduation requirement;

(2) to fulfill a maximum of one credit in science, only for computer science courses approved by the Department of Education to meet a math graduation requirement. The Department of Education shall approve at least one computer science course to meet a science graduation requirement, and this course shall be a different course than the course

approved by the Department of Education to meet a math graduation requirement. A computer science course may not replace a student's requirement to complete biology;

(3) to fulfill any number of the state or district elective credit requirements with computer science courses. The Department of Education shall approve at least five computer science courses to meet the elective credit requirements, which shall include the course approved to meet a math graduation requirement and the course approved to meet a science graduation requirement;

(4) to enroll in multiple computer science courses to meet math, science, and elective credits. One course may not be used to meet more than one graduation requirement.

(b) Beginning with the graduating class of 2025, any student will be eligible to receive a math, science, or elective credit for the student's computer science course.

Subd. 5. **Incentives for teacher preparation.** On and after July 1, 2027, any program of teacher preparation leading to professional certification shall include, as part of the curriculum, instruction in computer science as applied to student learning and classroom instruction that are grade-level and subject-area appropriate.

Subd. 6. **Kindergarten through grade 12 data collection system and mandated reporting.** (a) The Department of Education shall develop a plan to allow for the secure and automatic regular reporting of data and information from all kindergarten through grade 12 public schools and public charter schools.

(b) The data collection process described in paragraph (a) shall include but not be limited to sufficient course enrollment data disaggregated by gender, race, ethnicity, free and reduced-price lunch status, Individuals with Disabilities Education Act status, 504 status, and English language learner status.

(c) The plan described in paragraph (a) shall include:

(1) a timeline for and identified supports to ensure full implementation of all kindergarten through grade 12 public schools and public charter schools by the 2024-2025 school year;

(2) identification of mechanisms to ensure compliance with the daily reporting requirements by all kindergarten through grade 12 public schools and public charter schools beginning with the 2024-2025 school year and continuing thereafter; and

(3) methods for making aggregated data publicly available.

(d) By December 31, 2023, the Department of Education shall publish the proposed data collection plan for public feedback.

(e) By February 28, 2024, the Department of Education shall present the adopted state data collection plan described in paragraph (a) to the chairs of the legislative committees with jurisdiction over education.

(f) In cases of documented and reported systems failures, daily reporting requirements shall be considered met if all data reported using the secure and automated process developed under this subdivision are submitted no more than 30 calendar days after the date of the last submission. By July 30 annually, the Department of Education shall publish a list of all schools that did not comply with the daily reporting requirements and all reported systems failures.

Subd. 7. **Adoption of rules.** The Department of Education and Professional Educator Standards and Licensing Board may adopt rules to administer the computer science education advancement program, including rules for flexible options to license computer science teachers, approval codes, technical permits, ancillary licenses, and standard licenses.

Sec. 2. **APPROPRIATION.**

Subdivision 1. **Department of Education.** The sums indicated in this section are appropriated from the general fund to the Department of Education for the fiscal years designated.

Subd. 2. **STEM grants.** (a) For grants to STEM-focused programs that work directly with students providing additional STEM education through after-school programming or new in-school programs:

$ 4,000,000 2024

$ 4,000,000 2025

(b) Eligible grant recipients are schools and school districts or nonprofits that are currently offering STEM-focused programming for kindergarten through grade 12 students in after-school programs. Priority must be given to programs with high free and reduced-priced lunch populations and programs in schools or districts receiving sparsity revenue under Minnesota Statutes, section 126C.10.

(c) Grant awards must not exceed $125,000 per recipient.

(d) Any balance in the first year does not cancel and is available in the second year.

Subd. 3. **Computer science education advancement.** (a) For computer science advancement:

$ 4,000,000 2024

$ 4,000,000 2025

(b) Eligible uses of the appropriation include expenses related to the implementation of section 1, and expenses related to the development, advancement, and promotion of kindergarten through grade 12 computer science education.

(c) Any balance in the first year does not cancel and is available in the second year.

(d) The base appropriation for fiscal year 2026 and later is $4,000,000.