
OLR Bill Analysis

sSB 957 (File 595, as amended by Senate "A")*

AN ACT CONCERNING THE INCLUSION OF COMPUTER SCIENCE INSTRUCTION IN THE PUBLIC SCHOOL CURRICULUM, PROGRAMS OF TEACHER PREPARATION AND ALTERNATE ROUTE TO CERTIFICATION PROGRAMS AND THE CREATION OF AN ADJUNCT COMPUTER SCIENCE INSTRUCTOR PERMIT AND A COMPUTER SCIENCE ENDORSEMENT.

SUMMARY

This bill adds computer science to the list of subjects that must be taught in public schools (§ 1). It makes computer programming a required component of computer science instruction, rather than a stand-alone instruction topic as under current law.

The bill also makes the following changes in teacher preparation and certification laws relating to computer science or subject shortage areas:

1. requires teacher preparation programs leading to professional certification to revise their computer science curriculum (§ 2);
2. requires the Office of Higher Education (OHE), in collaboration and consultation with the State Department of Education (SDE), to develop an alternate route to certification (ARC) program for computer science teachers, which must include mentored apprenticeships and program admission criteria (§ 3);
3. requires the State Board of Education (SBE) to adopt regulations by July 1, 2020, that provide computer science teaching certification standards, which must (a) create a computer science endorsement and (b) allow applicants to fulfill certification requirements by completing prescribed courses of study or other experience that SBE deems appropriate (§ 4);
4. requires SBE to approve and adopt, by January 1, 2020, a

computer science subject area assessment for teacher certification (§ 5);

5. requires SBE, beginning July 1, 2020, to allow applicants for teacher certification in a subject shortage area who receive a “satisfactory” rather than “excellent” score on the subject area assessment to substitute the score for the subject area certification requirements in law (§ 6);
6. requires SBE, beginning July 1, 2020, to allow computer science certificate applicants or currently certified teachers in other subject areas seeking to teach computer science to substitute a satisfactory score on the assessment for the subject area certification requirements in law (§ 6); and
7. establishes the “computer science education account” in the General Fund (§ 10).

Additionally, the bill makes the following changes to laws relating to job training and placement in technological industries:

1. allows the Department of Economic and Community Development (DECD) to (a) develop by July 1, 2020, and within available appropriations, a model internship program to help Connecticut businesses provide college internships in the fields of technology and advanced manufacturing and (b) make the model available on its website (§ 7);
2. adds computer science to the list of training and job placement areas in the Connecticut Employment and Training Commission’s (CETC) statewide plan for implementing, expanding, or improving upon career certificate, middle college, early college high school, and Early College Opportunity programs (§ 8);
3. allows DECD to identify and coordinate state resources to meet the needs of industries with anticipated job growth areas, in consultation with other state agencies (§ 9); and

4. requires that student success plans for public school students in grades 6 - 12 consider career and academic choices in computer science, science, technology, engineering, and math (§ 11).

*Senate Amendment "A" (1) removes provisions from the underlying bill that allow SBE to issue adjunct computer science instructor permits and (2) amends provisions in the underlying bill about teacher preparation program curriculum relating to computer science (§ 2). It also adds provisions on teacher certification, model internship programs, and the computer science education account, among other things (§5-11).

EFFECTIVE DATE: July 1, 2019, except the provisions on (1) the new teacher preparation program curriculum take effect July 1, 2020, and (2) SBE's development of the computer science subject area assessment and DECD's coordination of state resources for industry talent needs take effect upon passage.

§ 2 — CURRICULUM FOR TEACHER PREPARATION PROGRAMS

The bill requires that teacher preparation programs leading to professional certification provide instruction in information technology skills that is grade-level and subject area-appropriate for student learning and classroom instruction. The programs must do so as part of their existing "computer and information technology skills" curriculum. The bill also renames this curriculum "computer science."

Additionally, the bill removes the requirement that the instruction provided in this area of the teacher preparation program be applicable to communications and data management.

§ 9 — DECD COORDINATION OF RESOURCES TO MEET INDUSTRY TALENT NEEDS

The bill allows DECD, in consultation with the Labor Department and OHE, to identify the following:

1. anticipated areas of statewide and regional job growth in Connecticut over the next five and 10 years;

2. existing or projected needs for certificate programs, degree programs, and short- and long-term noncredit training programs to support job growth areas;
3. the certificate programs, degree programs, and noncredit training programs in the state that are most in demand by employers and students;
4. the percentage of graduates from these programs employed in Connecticut two years after graduation and the fields and industries in which they are employed; and
5. growth capacity in high-demand academic programs offered by in-state higher education institutions.

DECD may also consult with the above agencies to coordinate with state and quasi-public agencies to prioritize and align state resources to meet the existing and future talent needs of the state. Additionally, the department may coordinate with municipal leaders to (a) share the results of the above analysis with employers, public and private Connecticut colleges and universities, and other stakeholders and (b) develop a program to award grants to support evidence-based solutions to cultivate, attract, hire, and retain workers in high-demand fields and industries. This grant program may include internship programs, education programs, incentives to attract mid-career workers, and fellowship programs to attract and retain recent graduates.

§ 10 — COMPUTER SCIENCE EDUCATION ACCOUNT

The bill establishes the computer science education account as a separate, nonlapsing account in the General Fund. It must contain (1) money required or allowed by law to be deposited in the account and (2) funds received from any public or private contributions, gifts, grants, donations, bequests, or devises.

Under the bill, SDE may spend the account funds to support curriculum development, teacher professional development, capacity development for school districts, and other programs that support

computer science education.

§ 11 — STUDENT SUCCESS PLANS

By law, local and regional boards of education must create a student success plan that includes a student’s career and academic choices for each public school student in grades 6 - 12. The bill requires that consideration be given to academic and career choices in computer science, science, technology, engineering, and math when creating these plans.

COMMITTEE ACTION

Education Committee

Joint Favorable Substitute

Yea 35 Nay 0 (03/25/2019)

Appropriations Committee

Joint Favorable

Yea 26 Nay 22 (05/28/2019)