

# HOUSE BILL REPORT

## E2SSB 5849

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**As Reported by House Committee On:**  
Education

**Title:** An act relating to a computer science competency graduation requirement.

**Brief Description:** Concerning a computer science competency graduation requirement.

**Sponsors:** Senate Committee on Ways & Means (originally sponsored by Senators Wellman, Nobles, Boehnke, Frame, Hasegawa, Hunt, Kuderer, Nguyen, Shewmake, Trudeau and Wilson, C.).

**Brief History:**

**Committee Activity:**

Education: 2/15/24, 2/20/24 [DPA].

**Brief Summary of Engrossed Second Substitute Bill  
(As Amended by Committee)**

- Requires graduating students, beginning with the class of 2030, to demonstrate competency in the state learning standards for computer science.
- Establishes options that students may use in demonstrating the required competency and provisions for waiving the requirement.
- Creates data collection and reporting duties related to the computer science competency graduation requirement for the Office of the Superintendent of Public Instruction (OSPI).
- Directs the OSPI to review and update of the state learning standards for computer science.
- Creates data collection and reporting duties for the State Board of Education regarding computer science learning opportunities of school districts and compliance with provisions for the computer science competency graduation requirement.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not part of the legislation nor does it constitute a statement of legislative intent.*

- Requires the Superintendent of Public Instruction to integrate technology literacy and fluency, rather than understanding the importance of work, finance, and effort in future opportunities, into the state learning standards.

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## HOUSE COMMITTEE ON EDUCATION

**Majority Report:** Do pass as amended. Signed by 8 members: Representatives Santos, Chair; Shavers, Vice Chair; Bergquist, Nance, Ortiz-Self, Pollet, Stonier and Timmons.

**Minority Report:** Do not pass. Signed by 2 members: Representatives Harris and Steele.

**Minority Report:** Without recommendation. Signed by 5 members: Representatives Rude, Ranking Minority Member; McEntire, Assistant Ranking Minority Member; Couture, Eslick and McClintock.

**Staff:** Ethan Moreno (786-7386).

### **Background:**

#### Overview of Graduation Requirements.

As established in statute, the purpose of a high school diploma is to declare that a student is ready for success in postsecondary education, gainful employment, and citizenship, and is equipped with the skills to be a lifelong learner. To qualify for a high school diploma, public school students must satisfy credit and subject area requirements established by the Legislature and the State Board of Education (SBE), fulfill any locally established requirements, complete a High School and Beyond Plan, and meet the requirements of at least one graduation pathway option.

Graduation requirements are largely developed at the state level and subject to frequent revisions, but determinations about student compliance with requirements are made at the school district level.

Graduating students must complete 24 credits in specified subject areas as determined by the SBE. Although the SBE adopts rules to implement the credit requirements, the Office of the Superintendent of Public Instruction (OSPI) adopts the state's learning standards that guide the content of courses in accordance with four basic education learning goals in statute. Fourteen state learning standards have been adopted, including standards for mathematics, English language arts, science, social studies, and computer science.

The four basic education learning goals for school districts relate to the opportunity for every student to develop the knowledge and skills essential for practicing certain academic

skills and concepts. The goals are as follows:

- read with comprehension, write effectively, and communicate successfully in a variety of ways and settings and with a variety of audiences;
- know and apply the core concepts and principles of mathematics; social, physical, and life sciences; civics and history, including different cultures and participation in representative government; geography; arts; and health and fitness;
- think analytically, logically, and creatively, and to integrate technology literacy and fluency as well as different experiences and knowledge to form reasoned judgments and solve problems; and
- understand the importance of work and finance and how performance, effort, and decisions directly affect future career and educational opportunities.

Statute provides that the first two goals are primary. To the maximum extent possible, the Superintendent of Public Instruction is directed to integrate goal four (understanding the importance of work, finance, and effort in future opportunities) and the knowledge and skill areas in the other basic education goals for school districts into the state learning standards.

#### High School and Beyond Plans.

Each student must complete a High School and Beyond Plan (HSBP). The purpose of the HSBP is to guide the student's high school experience and inform course taking that is aligned with the student's goals for education or training and career after high school.

The HSBP is initiated for students in grade 7 through the administration of a career interest and skills inventory. The HSBP must contain specific elements prescribed in statute, including: the identification of career goals and interest; an academic plan for course taking; evidence that the student has received certain financial aid program information; and a resume or activity log summarizing the student's education, work experience, extracurricular activities, and community service. The HSBP must be updated annually to review academic progress and inform future course taking, and revised as necessary for changing interests, goals, and needs.

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#### **Summary of Amended Bill:**

##### New Graduation Requirement—Computer Science Competency.

*Student Requirements.* Beginning with the graduating class of 2030, each student graduating from a public high school must demonstrate competency in the computer science state learning standards. Students may demonstrate this competency through:

- completion of a stand-alone computer science course aligned to the state learning standards;
- completion of a different subject matter course where the state learning standards for computer science are embedded with other learning standards; or
- a demonstration of competency of the foundational skills established in the state learning standards for computer science.

A demonstration of competency of the foundational skills could include completion of a competency examination or any option allowed by the rules of the State Board of Education (SBE) that address mastery-based crediting. Any of the options used must include evidence that the student meets or exceeds the state learning standards for computer science.

Consideration of seat time or instructional hours is not required to demonstrate competency, and students must be allowed to present multiple types of evidence for the demonstration of competency.

Students may request a waiver for the requirement to demonstrate competency in the computer science state learning standards from their school principal if their High School and Beyond Plan delineates course taking and education or training and career goals for which demonstrated computer science competencies are not applicable. Principals who receive these waiver requests must approve them. Additionally, students in grade 12 who have not been able to demonstrate competency in the computer science state learning standards because of previous residence outside the state may have the requirement to demonstrate competency waived by their principal.

The computer science competency graduation requirement does not increase the number of high school credits required for graduation as established by the SBE.

*Professional Development, Data Collection, and Reporting.* The Office of the Superintendent of Public Instruction (OSPI) must ensure that sufficient professional development opportunities are made available to educators for the purpose of assisting students in meeting the computer science competency graduation requirement.

The OSPI also must collect relevant disaggregated demographic data on the student completion of the computer science competency graduation requirement to assess whether the requirement has created any negative impacts on any class of students including, students who are currently struggling in school, low-income, persons of color, experiencing homelessness, or enrolled in a school or a school district with high rates of these students. Beginning December 1, 2030, and annually thereafter, the OSPI must submit a report to the education committees of the Legislature summarizing the collected data.

#### Review of State Learning Standards for Computer Science.

The OSPI must initiate a review and update of the state learning standards for computer science for students in kindergarten through grade 12. In performing this task, the OSPI must review computer science learning standards adopted by other states and consult with nonprofit organizations that have a demonstrated expertise in assisting states in developing computer science learning standards. In developing the state learning standards and supporting documents for grades 9 through 12, the OSPI must identify the standards considered to be foundational for graduation purposes.

Provisions directing OSPI's review and update of the state learning standards for computer science expire July 1, 2026.

School District Data Collection.

The SBE must collect information from school districts about the courses and other learning opportunities currently offered in computer science for high school students in their district, how the district assesses or plans to assess competency of the state learning standards for computer science, and what the district may need to ensure that students are ready for the computer science competency graduation requirement.

The data collection may be conducted concurrently with other oversight and monitoring activities conducted by the SBE. The SBE must report a summary of the information collected to the Legislature by October 31, 2025, and must include any recommendations for actions the Legislature could take to assist school districts in meeting needs identified by school districts, including whether the exploration of options for increasing the number of educators endorsed to teach computer science is necessary.

Provisions establishing the data collection and reporting duties of the SBE expire July 1, 2026.

State Learning Standards and Goals for School Districts.

Provisions directing the Superintendent of Public Instruction (SPI), to the maximum extent possible, to integrate goal four (understanding the importance of work, finance, and effort in future opportunities) and the knowledge and skill areas in the other basic education goals of school districts into the state learning standards, are modified. Instead, the SPI, to the maximum extent possible, must integrate technology literacy and fluency from goal three and the knowledge and skill areas in the other goals into the state learning standards.

**Amended Bill Compared to Engrossed Second Substitute Bill:**

As compared to the engrossed second substitute bill, the amended bill:

- delays the requirement to demonstrate competency in the computer science state learning standards by one year, making the graduation requirement begin with the graduating class of 2030;
- permits students to request a waiver for the computer science competency requirement from their school principal if their High School and Beyond Plan delineates course taking and education or training and career goals for which demonstrated computer science competencies are not applicable;
- requires school principals to approve the waiver requests from students;
- requires the Office of the Superintendent of Public Instruction (OSPI) to ensure that sufficient professional development opportunities are made available to educators for the purpose of assisting students in meeting the requirement to demonstrate competency in the computer science state learning standards; and
- requires the OSPI's first issuance of a report on student completions of the computer

science competency graduation requirement to be on December 1, 2030, instead of December 1, 2029.

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**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Amended Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) Technology changes, and those changes create significant implications for employment. Artificial intelligence is now everywhere and incorporated into the portfolios of major companies. Washington is a technology leader, and 85 percent of high schools make a computer science math credit available to their students. Policymakers have set up the bones to start this process of computer competencies, but it is mostly young men that take the courses. Many future positions will require technology knowledge. This bill directs the Office of the Superintendent of Public Instruction to identify the computer science learning standards that students will need.

In today's job market, technology skills are essential. Computer competency should be a requirement to ensure that everyone can have needed skills for their professional lives. This is an opportunity that will promote equitable access for needed technology skills.

Computer science is becoming more and more integrated into society with each day. There is more need for expertise and this trend will continue. This bill will increase the number of people of color moving into science, technology, engineering, and mathematics fields.

The main goal of school is to prepare students for the real world. Ninety-two percent of jobs require at least one technical skill. Technology skills will create new opportunities for students that they can apply in their futures.

Computer science is the new literacy, and is as foundational as reading, writing, and math. Students must be prepared for this reality. Students need to become technology creators, not just technology users. This bill is also about equity: if students are not required to take computer science courses, many will not.

(Opposed) The requirements of the bill will create outsized requirements for students. Computer science is not a prerequisite. Policymakers should not force students to take courses if they are not needed.

This bill will require students to take computer science classes instead of other classes they

want or need. Computer science is not computer literacy.

The requirements created in this bill are redundant; computer skills are already acquired by students through life experiences.

This bill disproportionately impacts lower income students. Students with financial resources can take classes outside of their campuses while other students will be forced to use a precious elective to meet the new graduation requirement.

(Other) Looking at graduation requirements in isolation can be problematic. Instead, the Legislature should examine the strategic plan of the State Board of Education (SBE). A more comprehensive look at graduation requirements is preferable to passing bills in isolation.

School directors are concerned about additional graduation requirements, which will mean fewer electives for students. School districts are meeting significant challenges and are underfunded, but are focused on providing the best education for students. Please give schools more flexibility and funding, not more stress and strain.

Not everyone needs computer science classes for career and higher education pathways. The bill does provide for staff training and the 2029 timeline is narrow. If the bill is moved forward, please allow more time for planning and consult the SBE's strategic plan.

Foundational education standards need to be articulated, as do standards for teachers. A credible plan for implementing the requirements of the bill must include the necessary resources. The date of implementation must be delayed until at least 2030. Without these changes, the promise and goals of the legislation will fall short.

**Persons Testifying:** (In support) Senator Lisa Wellman, prime sponsor; and Dave Brown, CS Forward; Natalie Wong, Paree Raval, Connor Williams, Ian Chen, and Rediet Tassew, 2412 Robototes.

(Opposed) Lydia Gruner, Katharine Rouse, Megan Klamik, and Jillian Behrman, Lake Washington High School.

(Other) Natalya Yudkovsky, Washington State Parent Teacher Association; Cindy McMullen, Washington State School Directors' Association; Jeff Charbonneau, Zillah School District and Zillah High School; and Lawrence Tanimoto, Puget Sound Computer Science Teachers Association and CS for All Washington.

**Persons Signed In To Testify But Not Testifying:** Amy Zhou and Jagriti Agrawal, CS Forward; Laura Hu; Kelly Ogilvie, Kira Learning; Maggie Glennon, Code.org; J. Lee Schultz, Washington State Board of Education; Nasue Nishida, Washington Education Association; and Anna Hernandez-French, Office of the Superintendent of Public Instruction.