

SENATE BILL REPORT

SHB 1813

As of Second Reading

Title: An act relating to expanding computer science education.

Brief Description: Expanding computer science education.

Sponsors: House Committee on Appropriations (originally sponsored by Representatives Hansen, Magendanz, Reykdal, Muri, Tarleton, Zeiger, Lytton, Haler, Senn, Harmsworth, Tharinger, Young, Walkinshaw, Stanford, S. Hunt and Pollet).

Brief History: Passed House: 3/05/15, 91-7; 5/28/15, 88-4.

Committee Activity: Early Learning & K-12 Education: 3/19/15.

SENATE COMMITTEE ON EARLY LEARNING & K-12 EDUCATION

Staff: Ailey Kato (786-7434)

Background: Computer Science Learning Standards and Endorsements. One of Washington's statutory goals for basic education is to provide every student the opportunity to develop the knowledge and skills essential to 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. The Office of Superintendent of Public Instruction (OSPI) has developed educational technology literacy and fluency learning standards with a focus on integration and digital citizenship. However, there are no specific learning standards for computer science. In a 2015 report to the Legislature on the status of science, technology, engineering, and mathematics education, OSPI listed several steps it plans to take regarding computer science, which include creating a working definition, increasing the number of computer science career and technical education courses, partnering with strong curriculum providers, and providing resources and tools that will allow districts to engage their students in authentic computer science learning inside and outside of the classroom.

The Professional Educator Standards Board (PESB) is responsible for establishing policies and requirements for endorsement competencies for education professionals including aligning requirements with the state's learning goals and with specialty organization standards where appropriate. PESB has approved a technology education endorsement for teachers working in grades 5–12, but there is currently no specific endorsement for K–12 computer science.

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

Conditional Scholarship. PESB offers the Retooling to Teach Mathematics and Science Conditional Scholarship to current K–12 teachers and individuals with an elementary education certificate who are not employed in positions requiring their certificate to pursue endorsements in high-demand mathematics and science endorsement areas. Current K–12 teachers may use the conditional scholarship to pursue endorsements in secondary mathematics or science, or both, and middle-level mathematics or science, or both. Individuals with an unused elementary education certificate may use the conditional scholarship to pursue endorsements in middle-level mathematics or science, or both. Each recipient may receive up to \$3,000 per fiscal year for each conditional scholarship obtained to pay for endorsement tests and any observations or applicable coursework needed to attain the new endorsement. The scholarships are awarded on a first-come, first-served basis subject to appropriation and no funding was provided for the program in the 2013-15 biennium.

The conditional scholarship is a loan that is forgiven for teacher service in the same endorsement area in which the recipient obtains certification. Teaching service must be in a Washington K–12 public school. The state forgives the loan obligation entirely if the recipient teaches in the endorsement area for two years per scholarship received. Teachers may receive multiple loans if they are pursuing endorsements in both mathematics and science. Eligible veterans or National Guard members must be given preference when selecting scholarship recipients.

Summary of Bill: By the 2015-16 school year, OSPI must adopt computer science learning standards developed by a nationally recognized computer science education organization.

By January 15, 2016, PESB must develop standards for a K–12 computer science endorsement aligned with the computer science standards adopted by OSPI as directed in this act. The endorsement must facilitate dual endorsement in computer science and either mathematics or science, or another related endorsement that school districts indicate is in high-demand.

The Retooling to Teach Mathematics and Science Conditional Scholarship Program is renamed the Educator Retooling Conditional Scholarship Program. Current K–12 teachers and individuals holding an elementary school education certificate may receive a conditional scholarship to pursue an endorsement in a subject or geographic endorsement shortage area, as defined by PESB.

Appropriation: None.

Fiscal Note: Available.

Committee/Commission/Task Force Created: No.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Staff Summary of Public Testimony: PRO: This state does not have enough graduates to fill the computer science jobs in this state. Not enough schools teach computer

science. Computer science learning standards will help prepare students for computer science job opportunities. A computer science endorsement will allow teachers to teach computer science courses. New teaching staff would not be required. Computer science standards will help give underrepresented students a chance to learn and access computer science courses. It is important for students to learn coding.

Persons Testifying: PRO: Rep. Hanson and Rep Magendaz, prime sponsors; Michael Schutzler, CEO / Washington Tech Industry Association; David Brenna, PESB; Andrew Silverman, Microsoft Corporation/TEALS Volunteer Program; Amy Hirotaka, Code.org; Phyllis Harvey-Buschel, Washington MESA; Chris Vance, OSPI; Maddy Thompson, Washington Student Achievement Council; Nova Gattman, Workforce Board.

Persons Signed in to Testify But Not Testifying: No one.