

# SENATE BILL REPORT

## SHB 1472

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As Reported by Senate Committee On:  
Early Learning & K-12 Education, April 3, 2013  
Ways & Means, April 9, 2013

**Title:** An act relating to initiatives to improve and expand access to computer science education.

**Brief Description:** Providing initiatives to improve and expand access to computer science education.

**Sponsors:** House Committee on Education (originally sponsored by Representatives Hansen, Habib, Freeman and Magendanz).

**Brief History:** Passed House: 3/08/13, 95-3.

**Committee Activity:** Early Learning & K-12 Education: 3/25/13, 4/03/13 [DP-WM].  
Ways & Means: 4/08/13, 4/09/13 [DPA].

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### SENATE COMMITTEE ON EARLY LEARNING & K-12 EDUCATION

**Majority Report:** Do pass and be referred to Committee on Ways & Means.

Signed by Senators Litzow, Chair; Dammeier, Vice Chair; McAuliffe, Ranking Member; Rolfes, Assistant Ranking Member; Billig, Brown, Cleveland, Fain, Hill, Mullet and Rivers.

**Staff:** Katherine Taylor (786-7434)

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### SENATE COMMITTEE ON WAYS & MEANS

**Majority Report:** Do pass as amended.

Signed by Senators Hill, Chair; Baumgartner, Vice Chair; Honeyford, Capital Budget Chair; Hargrove, Ranking Member; Nelson, Assistant Ranking Member; Bailey, Becker, Braun, Conway, Dammeier, Fraser, Hasegawa, Hatfield, Hewitt, Keiser, Kohl-Welles, Murray, Padden, Parlette, Ranker, Rivers, Schoesler and Tom.

**Staff:** Elise Greef (786-7708)

**Background:** According to data maintained by the Office of Superintendent of Public Instruction (OSPI), there are 35 high schools in the state approved to offer Advanced Placement (AP) Computer Science. Just under 700 students enrolled in AP Computer Science courses in 2011-12.

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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 a part of the legislation nor does it constitute a statement of legislative intent.*

Although computer science is a career and technical education (CTE) course, school districts directed to examine their credit-granting policies and award academic credit for CTE courses that are determined to be equivalent to an academic course. OSPI developed a Course Equivalency Toolkit to assist districts in making these determinations. School districts are encouraged to consider computer programming as equivalent to a mathematics course. There is no data collected on district credit-granting policies.

To meet state high school graduation requirements, students must take Algebra I and Geometry in order to pass the state end-of-course assessments in those subjects. The State Board of Education established Algebra II as the third credit of mathematics required for graduation, but students may select an alternative course based on their High School and Beyond Plan. Two credits of science are required for graduation, one of which must be a laboratory science. One of the minimum admissions requirements for public four-year institutions of higher education is that students take a math-based quantitative course in their senior year.

The Technology, Education, and Literacy in Schools (TEALS) program is a private initiative to place computer science professionals in high school classrooms on a voluntary basis to coteach advanced computer science courses along with the regular classroom teacher. Participating high schools must provide a \$5,000 stipend to the professionals. The Microsoft Corporation supports the TEALS program, and most of the professionals are Microsoft employees. The TEALS program currently operates in more than 20 high schools in Washington.

**Summary of Bill (Recommended Amendments):** School districts must approve AP Computer Science as equivalent to a high school mathematics or science course, and must denote on a student's transcript that AP Computer Science qualifies as a math-based quantitative course for students who take it in their senior year. For AP Computer Science to be equivalent to high school mathematics, a student must be enrolled in or have completed Algebra II.

**EFFECT OF CHANGES MADE BY WAYS & MEANS COMMITTEE (Recommended Amendments):** The AP computer science grant program is removed. Also removed is the requirement that the Workforce Training and Education Coordinating Board convene a computer science professional shortage taskforce, eliminating the associated fiscal impact.

**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 (Early Learning & K-12 Education):** PRO: The information technology industry is growing but many of the jobs in this industry are going to people from out of state because we do not educate enough qualified people in-state. STEM

education is getting better in Washington and this bill will improve it further. We are in strong support of this bill. This is a simple bill that will create the first steps in building interest in computer science. We need to build national momentum around computer science. Of these jobs, 67 percent are outside of the technology industry, for example banking. Giving credit for AP Computer Science will not make other math and science less popular. If students take this in high school, they are more likely to major in it in college. The taskforce will help to plan for shortages in this area.

**Persons Testifying (Early Learning & K-12 Education):** PRO: Lew McMurran, WA Technology Industry Assn.; Dave Powell, Stand for Children; Hadi Partovi, Code.org; Caroline King, WA STEM; Justin Montermini, WTECB.

**Staff Summary of Public Testimony on Substitute House Bill (Ways & Means):** PRO: The bill comes about because Kitsap County has a lot of employers hiring large numbers of computer science professionals. But these employers have a common problem – they cannot find enough people locally to fill all the jobs they need to fill. The Business Roundtable, last month, issued a report that there are 8000 computer science jobs that are going unfilled in the state right now. Employers cannot find qualified employees in this field; not in Washington and not globally. Add those jobs to the tens of thousands of Washington state technology jobs that are being filled with people from outside the state and we have a real problem on our hands. This bill addresses the problem three ways. First, the bill makes AP computer science classes qualify as math or science credits. States that did that have seen upticks in enrollment. Second, it creates a grant program to support computer science education. Third and finally, it creates the Task Force to look strategically at the long-term problem and solutions.

**Persons Testifying (Ways & Means):** PRO: Representative Hansen, prime sponsor; Lew McMurran, WA Technology Industry Assn.