SENATE BILL REPORT
SHB 1472

As Reported by Senate Committee On:
Early Learning & K-12 Education, April 3, 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].

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)

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.

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

---

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.

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: 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.

If funding is appropriated, OSPI allocates grants to school districts on a competitive basis to increase their capacity to offer AP Computer Science. Priority must be given to rural districts, districts with limited access to technology-based industries, high schools with substantial low-income enrollment, and high schools that do not offer AP Computer Science.

Two grant programs are established. In the first program, school districts establish partnerships to support computer science professionals serving as co-instructors for AP Computer Science on a voluntary basis. Grant recipients must create an opportunity for the certificated teacher to increase the teacher's instructional knowledge and skills in advanced computer science that also qualifies for clock hours of continuing education. OSPI must assure that funds are used to increase the number of such courses, not supplant current funding.

Under the second program, recipients may use grant funds to purchase or upgrade technology and curriculum, and provide professional development to be able to offer additional AP Computer Science courses. OSPI must develop an evaluation and reporting component for the grant programs.

The Workforce Training and Education Coordinating Board (WTECB) must convene a Computer Science Professional Shortage Task Force (Task Force). The Task Force must include technology businesses and business organizations, state education and higher education agencies, education and higher education providers, and computer science teachers and faculty.

The purpose of the Task Force is to develop a strategic plan to increase the number of graduates from high schools, colleges, and universities who are prepared to enter the workforce or continue their education in computer science. An initial report is due to the Legislature by December 15, 2013, with annual reports thereafter until 2016. The Task Force expires on June 30, 2017.

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: 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: PRO: Lew McMurran, WA Technology Industry Assn.; Dave Powell, Stand for Children; Hadi Partovi, Code.org; Caroline King, WA STEM; Justin Montermini, WTECB.