H-1269.2 _____

SUBSTITUTE HOUSE BILL 1472
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State of Washington   **63rd Legislature**   **2013 Regular Session**

By House Education (originally sponsored by Representatives Hansen, Habib, Freeman, and Magendanz)

READ FIRST TIME 02/22/13.

1   AN ACT Relating to initiatives to improve and expand access to
2 computer science education; amending RCW 28A.230.097; adding a new
3 section to chapter 28A.630 RCW; creating new sections; and providing an
4 expiration date.

5 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

6   NEW SECTION. **Sec. 1.** (1) The legislature finds that:
7   (a) Through such initiatives as grants for high-demand career and
8 technical education programs and participation in the Microsoft IT
9 academy, the state has previously supported K-12 computer science
10 education;
11   (b) However, even though there were nearly sixty-five thousand
12 student enrollments in high school computer science courses in the
13 2011-12 school year, more than half of those enrollments were in
14 beginning or exploratory courses. Fewer than twelve hundred students
15 enrolled in AP computer science courses;
16   (c) National studies of K-12 computer science education indicate
17 that, in part because computer science is not treated as an academic
18 subject, students may not perceive advanced computer science as
19 relevant to their future academic or career success;

(d) Public institutions of higher education have expanded capacity to grant certificates and degrees in computer science and related fields in response to high employer demand and high student demand. Additional expansion and improvement will be dependent on new resources, updated equipment, and the availability of expert faculty;

(e) Information technology job vacancies exist at all levels of training and education and across all industries that are critical to Washington's economy; and

(f) Strategies are needed to support additional opportunities for Washington students to have careers in the innovative, technology-based or technology-enhanced industries located in our state.

(2) Therefore the legislature intends to take additional steps to improve and expand access to computer science education, particularly in advanced courses that could prepare students for careers in the field.

Sec. 2. RCW 28A.230.097 and 2008 c 170 s 202 are each amended to read as follows:

(1) Each high school or school district board of directors shall adopt course equivalencies for career and technical high school courses offered to students in high schools and skill centers. A career and technical course equivalency may be for whole or partial credit. Each school district board of directors shall develop a course equivalency approval procedure. Boards of directors must approve AP computer science courses as equivalent to high school mathematics or science, and must denote on a student's transcript that AP computer science qualifies as a math-based quantitative course for students who take the course in their senior year. In order for a board to approve AP computer science as equivalent to high school mathematics, the student must be concurrently enrolled in or have successfully completed algebra II.

(2) Career and technical courses determined to be equivalent to academic core courses, in full or in part, by the high school or school district shall be accepted as meeting core requirements, including graduation requirements, if the courses are recorded on the student's transcript using the equivalent academic high school department designation and title. Full or partial credit shall be recorded as appropriate. The high school or school district shall also issue and

keep record of course completion certificates that demonstrate that the
career and technical courses were successfully completed as needed for
industry certification, college credit, or preapprenticeship, as
applicable. The certificate shall be either part of the student's high
school and beyond plan or the student's culminating project, as
determined by the student. The office of the superintendent of public
instruction shall develop and make available electronic samples of
certificates of course completion.

NEW SECTION. **Sec. 3.** A new section is added to chapter 28A.630
RCW to read as follows:
    (1) Subject to funds appropriated specifically for the purpose of
this section, the office of the superintendent of public instruction
shall allocate, on a competitive basis, grants to school districts to
increase the capacity of high schools to offer AP computer science
courses. In making grant allocations, the office must give priority to
rural school districts, school districts with limited local access to
technology-based industries, high schools with substantial enrollment
of low-income students, and high schools that do not offer AP computer
science courses.
    (2) School districts may apply to receive either or both of the
following grants:
    (a) A grant to establish partnerships with technology businesses,
business organizations, or other nonprofit organizations to support
computer science professionals from private industry serving on a
voluntary basis as coinstructors along with a certificated teacher for
AP computer science courses. The computer science professional may
coinstruct the course from a remote location using synchronous video
technology. Grant recipients must work with a provider of in-service
training to create a complimentary professional development opportunity
that qualifies for clock hours of continuing education under RCW
28A.415.020, for the classroom teacher to increase his or her
instructional knowledge and skills in advanced computer science. In
making grant awards, the office must take steps to assure that the
funds are used to increase the number of AP courses coinstructed by
computer science professionals and are not used to supplant funding for
courses coinstructed under partnerships established before the
effective date of this section; or

(b) A grant to purchase or upgrade technology and curriculum needed for AP computer science, as well as provide opportunities for professional development and training for classroom teachers to have the requisite knowledge and skills to teach an AP computer science course. In making grant awards, the office must take steps to assure that the funds are used to increase the number of AP computer science courses available and are not used to supplant funding for courses offered before the effective date of this section.

(3) The office of the superintendent of public instruction shall develop an evaluation and reporting component for the grants awarded under this section, to include input data such as increases in the number of AP computer science courses and course enrollments, as well as outcome data such as scores on AP computer science exams, postsecondary follow-up for participating students, and indicators of teacher professional development.

NEW SECTION. **Sec. 4.** (1) The workforce training and education coordinating board shall convene and provide staff support for a computer science professional shortage task force as provided in this section. The task force must include representatives from technology businesses and business organizations; state education agencies including the office of the superintendent of public instruction, the Washington student achievement council, and the state board for community and technical colleges; education providers such as school districts, skill centers, public and private colleges and universities, and technical schools; and computer science teachers and faculty.

(2) The purpose of the task force is to develop a strategic plan with specific short and longer-term strategies to increase the number of graduates from high schools, community and technical colleges, and four-year colleges and universities who are prepared to enter the workforce or continue their education in computer science.

(3) The task force must consider at least the following issues:

(a) The status and potential for improvement of computer science education at the secondary and postsecondary level, including issues of capacity and barriers for increased numbers of students to enroll in advanced courses;

(b) Strategies to increase access to and success in computer

science education and careers for disadvantaged students and students
living in rural communities;

(c) Strategic opportunities for public and private investment in increasing computer science education, including employer coinvestment options; and

(d) Opportunities for collaboration among education providers, public agencies, and businesses at the local, regional, and state level.

(4) The task force must submit a report with recommendations to the education, higher education, and labor and workforce committees of the legislature by December 15, 2013, and submit annual status reports each December 15th thereafter until 2016.

(5) This section expires June 30, 2017.

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