

HOUSE BILL REPORT

HB 2915

As Reported by House Committee On: Education

Title: An act relating to high school mathematics and science graduation requirements.

Brief Description: Regarding mathematics and science high school graduation requirements.

Sponsors: Representatives Quall, Santos, Van De Wege, Kenney and Wallace; by request of Superintendent of Public Instruction.

Brief History:

Committee Activity:

Education: 1/26/10, 2/2/10 [DPS].

Brief Summary of Substitute Bill

- Extends through the class of 2014, instead of the class of 2012, a law that allows students to graduate without earning a Certificate of Academic Achievement (CAA) as a result of not meeting the state standard on the high school mathematics assessment as long as the student earns two additional mathematics credits after 10th grade.
- Requires the class of 2017, rather than the class of 2013, to be the first class that must meet the state standard on the high school science assessment to earn a CAA, which would also be required for graduation.
- Directs the Superintendent of Public Instruction to replace the comprehensive high school science assessment with three end-of-course assessments (EOCs), with two EOCs implemented in 2011-12 and the third in 2012-13.
- Provides that, beginning with the class of 2017, students must meet the state standard on two of the science EOCs to earn a CAA for graduation.

HOUSE COMMITTEE ON EDUCATION

Majority Report: The substitute bill be substituted therefor and the substitute bill do pass. Signed by 7 members: Representatives Quall, Chair; Hunt, Lias, Orwall, Probst, Santos and Sullivan.

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.

Minority Report: Do not pass. Signed by 6 members: Representatives Maxwell, Vice Chair; Priest, Ranking Minority Member; Hope, Assistant Ranking Minority Member; Dammeier, Fagan and Johnson.

Staff: Barbara McLain (786-7383).

Background:

Graduation Requirements.

Since the class of 2008, students must meet the state standard on the high school assessment in reading, writing, and mathematics to earn a Certificate of Academic Achievement (CAA). Students in special education whose knowledge and skills are not appropriately tested using this assessment can earn a Certificate of Individual Achievement (CIA).

In addition to meeting other state and local graduation requirements, students must earn a CAA or CIA to receive a high school diploma, with one exception. Through the class of 2012, a student can graduate without a CAA or CIA if he or she:

- meets the state standard on the reading and writing assessment;
- meets all other graduation requirements; and
- does not meet the standard on the mathematics assessment but earns two mathematics credits after 10th grade.

Beginning with the class of 2013, students must meet the standard on all four high school assessments (reading, writing, mathematics, and science) to earn a CAA, which will be required for graduation. Students in the class of 2013 are currently freshmen in high school.

Mathematics and Science Assessments.

In 2008 the Legislature directed the Superintendent of Public Instruction (SPI) to replace the comprehensive high school mathematics assessment with two end-of-course assessments (EOCs). One will be for Algebra/Integrated Math I and the second will be for Geometry/Integrated Math II. There will be subtests for topics unique to each of these four courses which will not be part of the graduation requirement.

The mathematics EOCs must be implemented statewide in the 2010-11 school year. Because most students in the class of 2013 (and some in the class of 2014) will have already taken their first year of math before the EOCs are implemented, these classes can use results either from the comprehensive assessment or the EOCs for graduation purposes. Beginning with the class of 2015, only results from the EOCs will be used.

The high school science assessment is a comprehensive assessment.

Summary of Substitute Bill:

Graduation Requirements.

The law that allows students to graduate without earning a CAA or CIA if they do not meet the state standard on the high school mathematics assessment but meet other requirements is

extended through the class of 2014, rather than the class of 2012. The requirement that students meet the state standard on the science assessment for graduation purposes begins with the class of 2017 rather than the class of 2013.

Science Assessment.

The SPI is directed to develop EOCs for high school science that cover the content of biology, physical sciences, and earth sciences as well as cross-cutting principles of science such as systems, inquiry, and application. Two of the science EOCs must be implemented statewide in the 2011-12 school year, and the third must be implemented in the 2012-13 school year. Beginning with the class of 2017, students must meet the standard on two of the three science EOCs for a CAA.

A score of three on the Advance Placement examinations in biology, chemistry, physics, or environmental sciences is added as an alternative assessment to meeting the state standard on the state science assessment.

By December 1, 2013, the SPI, in consultation with the State Board of Education (SBE), must submit a report to the Governor and the Education committees of the Legislature on the implementation of the science standards and the science EOCs. Included in the report are the actions taken to disseminate the standards, the extent teachers and students had access to aligned instructional material, and the results of the assessments. The report must also include the SPI's judgment of whether the science EOCs will be sufficiently valid and reliable and whether students in the class of 2017 will have a reasonable opportunity to learn the material in the EOCs. The SPI will make a recommendation whether students in the class of 2017 should be required to meet state standards in science for graduation or the requirement should be postponed.

Substitute Bill Compared to Original Bill:

A provision is removed that would have allowed students, beginning with the class of 2015, to graduate without passing the mathematics assessment if they achieved a "Basic" score on the assessment and earned four credits of mathematics in high school. A provision is also removed that students would be able to meet the state standard for graduation in science by earning a "Basic" score, beginning in 2017. The SBE is not directed to define a "Basic" score for the purposes of these assessments.

Appropriation: None.

Fiscal Note: Requested on January 19, 2010.

Effective Date of Substitute 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) In math, only 50 percent of students are meeting the state standard. For Native Americans and African-Americans, the figure is close to 20 percent. The EOCs are going to be a good thing, but it is not right to ask students to take one of those new tests one or two years after they have completed the course. The whole purpose behind the EOCs was to achieve better alignment between teaching and testing. We hear about lowering standards, but staying the course is not fair to students. Goal setting is good, but if you set a goal that is not real, it takes the energy away from all those fine people who are trying to reach the goal. Do students need more math and science? The answer is yes, but this is an alignment issue and a fairness issue. Our current standard is approximately a "B" average. There should be an option for "C" students. In a recent survey of Washington teachers, 20 percent of them said they teach less than one hour per week of science in 4th grade. How could it be fair to place the same expectations on students in science as we do in math and reading, both of which are taught for more than an hour per day at all grade levels. If we do nothing, there will be more testing costs because we will have to test not only students who took the math courses last year and this year, but also those who are taking them next year.

The graduation requirement is a moving target. How are students in 8th or 9th grade this year supposed to know what to do? They are in Algebra, but they cannot take the test that they will be required to pass for graduation. This is a huge issue. It is proper and appropriate to extend the deadlines. The education community was promised that there would be no sweeping changes to education without provision of the time, people, and resources necessary to implement those changes. We have to be realistic about what we are asking from our teachers, principals, and superintendents. School districts are not focusing enough attention on those who are unlikely to pass the test; they are giving attention to those who, with some help, might get over the bar. It is disingenuous that we continue to say we want all students to meet high standards in a global economy, but then we do not provide our school system with the resources to get the job done.

(In support with concerns) The delay of the math and science requirement is fair. The education system is simply not ready for this requirement. Extending the current approach to math out through the class of 2014 is fully supported. The system needs time to adjust to the new EOC. We don't believe in testing and holding students accountable before the system has time to change. But we are uncomfortable with the part of the proposal that reduces the standard. It sounds as though we are returning to the old ways of thinking, back to teaching on the bell curve. This sounds as though we expect some students to fail. One of the premises of education reform is that we have high expectations for all kids.

(Opposed) The state standard should not be moved to "Basic" for math and science. We are deeply concerned that without a plan to make improvements, student performance in math and science will continue to stagnate. If math and science are important, then we need to make a commitment to teaching them. It is a transition period in terms of the EOCs, but we cannot support a two-tiered level of performance that allows some to graduate at a lower level. Lowering the bar is not acceptable; it is a disservice to students. Our state's science, technology, engineering, and mathematics (STEM) employers are asking for more, not less. It is critically important to keep standards high and encourage students to aspire to high expectations. Regardless of the career path students choose, they will need to demonstrate what they have learned in math and science. We need to hold firm to our commitment to excellence. Students will have five opportunities to pass the math test; they will have

received more than two years of instruction using the new math standards. The science standards were not substantially revised, so there is no need for adjustment. We cannot keep retreating from math and science challenges. School districts have just changed their curriculum and are placing a heavy emphasis on math instruction. Without pressure, this may not be happening in all districts.

Persons Testifying: (In support) Representative Quall, prime sponsor; Randy Dorn, Superintendent of Public Instruction; Eric Wolgemuth, Washington Education Association; Barbara Mertens, Washington Association of School Administrators; Pat Montgomery, Auburn Washington State Parent Teacher Association; and Ricardo Sanchez, Latino Educational Achievement Project.

(In support with concerns) Dan Steele, Washington State School Directors' Association; and Kim Howard, Washington State Parent Teacher Association.

(Opposed) Jerry Bender, Association of Washington School Principals; Brad Burnham, State Board of Education; Heather Cope, League of Education Voters; Lew McMurren, Washington Technology Industry Association; Glenn Gregory, Tabor 100; Caroline King, Washington Roundtable and Partnership for Learning; Jim Kainbir, Stand for Children; Chad Magendanz; and Dawn McCravey, Northshore School Board.

Persons Signed In To Testify But Not Testifying: None.