

SENATE BILL REPORT

SB 5813

As Reported By Senate Committee On:
Early Learning & K-12 Education, February 21, 2007
Ways & Means, March 5, 2007

Title: An act relating to improving mathematics and science education.

Brief Description: Improving mathematics and science education.

Sponsors: Senators McAuliffe, Hobbs, Weinstein, Kauffman, Eide, Tom, Rasmussen, Kohl-Welles, Murray, Shin, Marr, Oemig, Kilmer and Delvin.

Brief History:

Committee Activity: Early Learning & K-12 Education: 2/05/07, 2/21/07 [DPS-WM, DNP, w/oRec].

Ways & Means: 2/26/07, 3/05/07 [DP2S, w/oRec].

SENATE COMMITTEE ON EARLY LEARNING & K-12 EDUCATION

Majority Report: That Substitute Senate Bill No. 5813 be substituted therefor, and the substitute bill do pass and be referred to Committee on Ways & Means.

Signed by Senators McAuliffe, Chair; Tom, Vice Chair; Eide, Hobbs, Kauffman, Oemig, Rasmussen and Weinstein.

Minority Report: Do not pass.

Signed by Senators Holmquist, Ranking Minority Member and Zarelli.

Minority Report: That it be referred without recommendation.

Signed by Senators Brandland, Clements and Hewitt.

Staff: Eric Bratton (786-7438)

SENATE COMMITTEE ON WAYS & MEANS

Majority Report: That Second Substitute Senate Bill No. 5813 be substituted therefor, and the second substitute bill do pass.

Signed by Senators Prentice, Chair; Fraser, Vice Chair, Capital Budget Chair; Pridemore, Vice Chair, Operating Budget; Carrell, Fairley, Hatfield, Hobbs, Keiser, Kohl-Welles, Oemig, Rasmussen, Rockefeller and Tom.

Minority Report: That it be referred without recommendation.

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.

Signed by Senators Zarelli, Ranking Minority Member; Brandland, Hewitt, Honeyford, Parlette, Regala, Roach and Schoesler.

Staff: Bryon Moore (786-7726)

Background: In 2005, the Legislature created a steering committee (Washington Learns) comprised of legislators, the Governor, and others, and three sector advisory committees on which legislators and others served. The steering and advisory committees were directed: to conduct a comprehensive study of early learning, K-12, and higher education; to develop recommendations on how the state can best provide stable funding for early learning, public schools, and public colleges and universities; and to develop recommendations on specified policy issues. The steering committee submitted an interim and a final report with recommendations to the Legislature.

Summary of Bill: Many of the recommendations from the November 2006 report of the Washington Learns steering committee related to improving mathematics and science education are implemented.

The after-school mathematics support program is created. The Superintendent of Public Instruction (SPI) will provide grants to selected community-based, nonprofit organizations that have an existing after-school program that includes support to students in learning mathematics. Applicants must demonstrate the capacity to provide assistance in mathematics learning by identifying the mathematics instructional skills of its staff and volunteers, identifying its proposed learning strategies, and articulating plans for connecting with mathematics teachers to coordinate student assistance and for assessing student and program success. Priority will be given to programs serving middle school students. SPI must evaluate program outcomes and provide recommendations on program continuation, modification, and expansion in reports due November 2008 and December 2009.

SPI must develop a mathematics and science instructional coach project to support classroom teachers. The project will include an instructional coach development institute, coaching seminars, coaching activities in schools, and program evaluations. Coaches selected for the project should have expertise in the content area and various instructional methodologies, among other characteristics specified. The coaches role is to support teachers as they apply knowledge, develop skills, polish techniques, and deepen their understanding of content and instructional practices. Washington State Institute for Public Policy (WSIPP) will evaluate the project and report findings by November 2008 and December 2009.

The State Board of Education (SBE) must complete an independent review of mathematics and science standards, and essential academic learning requirements. The findings and recommendations will address the incorporation of international performance standards. Additionally, SBE must identify no more than three basic math and science curriculum that align with new standards, and, as part of the state accountability plan, identify when school districts would be required to use one of the identified curricula. SBE must also revise the high school math graduation requirements to include a minimum of three credits for mathematics and must consider additional changes, including defining the content within the three credits to include Algebra II. SPI will begin the process of revising the Washington Assessment of Student Learning (WASL) mathematics and science assessments at grades four through ten to align content with the new standards resulting from the independent review.

Two new conditional loan programs are created: (1) the Pipeline for Paraeducators Program, to enable a paraeducator with three years of experience to complete a two-year degree and then enter an alternative route program to obtain a math and special education endorsement or a math and English as a Second Language endorsement. The annual conditional scholarship must not exceed \$4,000; (2) the Retooling to Teach Math and Science program, to enable current individuals with a teaching certificate to obtain a math or science endorsement. The annual scholarship must not exceed \$3,000. The condition for both programs is two years of teaching for every one year of scholarship. If recipients of the scholarships fail to teach then the individual must repay the remaining loan principal with interest. The Higher Education Coordinating Board (HECB) will administer these programs with the funds coming from the Future Teachers Conditional Scholarship account.

EFFECT OF CHANGES MADE BY RECOMMENDED SUBSTITUTE AS PASSED COMMITTEE (Early Learning & K-12 Education): The after-school mathematics support program is eliminated. The mathematics and science review is subject to appropriations. The independent review of mathematics and science standards must also include: (1) reviewing the Essential Academic Learning Requirements (EALRs) and Grade-Level Expectations (GLEs) for clarity, rigor, content, and reason; (2) structuring EALRs and GLEs as a sequence over grade levels; and (3) ensuring that professional development is in line with standards. The mathematics review must also consider aligning mathematics standards and EALRs to the mathematics college readiness standards developed by the Washington State Board for Community and Technical Colleges. SBE is required to seek approval from the Legislature before incorporating new curricula in science and mathematics. End-of-course assessment options must also be identified for mathematics and science curricula. The conditional scholarship programs are expanded to include special education and English as a second language endorsements.

EFFECT OF CHANGES MADE BY RECOMMENDED SECOND SUBSTITUTE AS PASSED COMMITTEE (Ways & Means): The provisions of Substitute Senate Bill 5814 (opportunities in math, science, and technology) are added. These include: (1) legislative findings around the importance of increasing opportunities for students in math, science, and technology; (2) allowing approved middle school career and technical career programs to receive funding at an enhanced rate; (3) establishing statewide coordination for math, science, and technology including a director position; (4) directing the Office of Superintendent of Public Instruction (OSPI), within funds appropriated for this purpose, to provide support for a variety of efforts aimed at expanding math, science, and technology programs within the public schools; (5) directing the Office of Superintendent of Public Instruction (OSPI), within funds appropriated for this purpose, to develop essential academic learning requirements and grade level expectations as well as classroom based assessments in technology; and (6) directing the Higher Education Coordinating Board to assess the need for baccalaureate programs that specialize in teacher preparation in math, science, and technology and depending on the outcome of this assessment, possibly encourage institutions of higher education to offer these programs.

The language around certain items is changed from "within funds available" to "specifically appropriated for this purpose."

Appropriation: None.

Fiscal Note: Available.

Committee/Commission/Task Force Created: No.

Effective Date: The bill contains an emergency clause and takes effect immediately.

Staff Summary of Public Testimony (Early Learning & K-12 Education): PRO: The most important part of learning math is what goes on in the classroom; having quality teachers with the right tools and training will help increase student achievement. Teachers do not teach just from the textbook, so they need systems in place that will allow them to move beyond the textbook. This bill is part of a comprehensive package of proposals to address the needs of student learning. Several after-school programs already exist and are uniquely positioned to provide students with mathematics assistance programs. After-school programs serve a very important role in the community and provide a more holistic approach to reaching students. Coaching programs have proven to be very successful in improving actual classroom teaching. The bill will significantly help in bringing more mathematics and science teachers into the classroom. Community colleges are well placed to help paraeducators obtain their math endorsements. We continue to teach teachers because there are always new things to learn. Recruiting math and science teachers requires the multiple strategies outlined in SB 5813. The state needs to ensure the menus for math and science curriculum are true menus of options.

OTHER: The state needs more rigorous standards that are sticky so textbooks can be adapted to meet the standards. There is no such thing as international standards in math. Not all coaching programs are successful. The Legislature needs to consider how school districts will pay for new curriculums. Some classrooms need two different approaches to teaching mathematics. If a new mathematics requirement is added to graduation, then there needs to be more funding. Several schools have had math coaches fail to meet expectations. Coaching applicants should be required to prove how they have improved student performance as teachers or administrators before being accepted as a coach. Local school districts should have the power to select the coaches. School districts should not be required to use just one of the state selected curriculums, but should have the ability to make changes to the curriculum as they see fit. The Office of the Superintendent of Public Instruction (OSPI) plays too big of a role in correcting a flawed system it created. An independent third party is needed to conduct the review of math and science instead of OSPI.

Persons Testifying (Early Learning & K-12 Education): PRO: Daniel Johnson, Boys and Girls Club of King County; Janet Frieling, Washington After School Network; Bill Keim, Educational School District 113; Jerry Bender; Association of Washington School Principals; Leslie Heizer Newquist, Washington State Center of Excellence for Careers in Education; Mickey Lahmann, OSPI; Bob Cooper, Washington Association of Colleges for Teacher Education; Barbara Mertens, Washington Association of School Administrators; Dan Steele, Washington State School Directors' Association; Beverly Young Reed, Washington State Parent Teacher Association; Judy Hartmann, Governor's Policy Office; Nasue Nishida, Professional Educators Standards Board; Julie Wright, Where's the Math; Sharon Hanek, citizen; Nick Daniggelis, parent; Dane Anderson, Educational School District 113; Scott Nelson, Boys and Girls Club Greater Washington.

OTHER: Elliot Paull, Where's the Math; Lucinda Young, Washington Education Association; Charles Milligan, Tacoma Public Schools; Sondra Bright, Tacoma Public Schools.

Staff Summary of Public Testimony (Ways & Means): PRO: This bill is part of a comprehensive package of proposals to address the needs of student learning and increasing the quality of instruction in our schools. The instructional coaches program is proven by research. The expansion of opportunities for new teachers through the Alternative Routes program, the pipeline for paraeducators, and the retooling program are vital steps to getting high quality teachers in shortage areas. The focus on new standards and independent review of the curricula are necessary steps to improving the instruction delivered in the education system. The approach outlined in the bill are the right steps.

OTHER: The benefits of the instructional coaches is debatable. There might be better uses for that funding. The Legislature should consider the impacts of the additional math class. Local control of the instructional coach program needs to be considered.

Persons Testifying (Ways & Means): PRO: Senator McAuliffe, prime sponsor; Judy Hartmann, Governor's Policy Office; Julie Wright, Washington State Parent Teacher Association; Jennifer Priddy, OSPI.

OTHER: Lucinda Young, Washington Education Association.