SENATE BILL REPORT

SHB 1569

As Reported By Senate Committee On:
Education, March 31, 1999

Title: An act relating to improving mathematics proficiency.

Brief Description: Establishing an excellence in mathematics grant program.

Sponsors: House Committee on Appropriations (originally sponsored by Representatives Keiser, Talcott, Schual-Berke, Carlson, Quall and Regala).

Brief History:
Committee Activity: Education: 3/25/99, 3/31/99 [DPA, DNPA].

SENATE COMMITTEE ON EDUCATION

Majority Report: Do pass as amended.
Signed by Senators McAuliffe, Chair; Eide, Vice Chair; Bauer, Brown, Goings, Kohl-Welles and Rasmussen.

Minority Report: Do not pass as amended.
Signed by Senators Sellar and Swecker.

Staff: William Bridges (786-7424)

Background: In 1995, the United States participated in the Third International Mathematics and Science Study (TIMSS), which tested a half million public and private school students from 41 countries. The U.S. portion of the study was financed by the U.S. Department of Education and the National Science Foundation. In addition, the Department of Education financed two supplemental components of TIMSS comparing the U.S. with Japan and Germany.

According to a U.S. Department of Education report on TIMSS, American fourth graders scored above the international average in mathematics, but eighth graders scored below the international average. The report concluded that attention needs to be focused on the curriculum and teaching methods used in U.S. eighth grade mathematics classes.

The Washington Assessment of Student Learning (WASL) is designed to measure a student's proficiency in the essential academic learning requirements. In 1998, 31 percent of the students met the WASL's fourth-grade mathematics standard. Of the students who took the seventh grade trial WASL, 20 percent met the mathematics standard.

Summary of Amended Bill: The intent is to improve proficiency in mathematics through the accountability system.

SPI Determines Best Use of Training Programs and Assistance. To the extent funds are appropriated, SPI must analyze the WASL results and determine the best use of training programs and assistance. For the 1999-2000 and 2000-01 school years, SPI must place appropriate emphasis on programs that enhance teaching skills in mathematics. SPI must consider teaching methods that are supported by empirical research. SPI, through the Center for the Improvement of Student Learning, may contract for the review and dissemination of best practices literature concerning elementary and middle-school mathematics instruction and staff development.

When schools and school districts are developing student learning improvement plans under the accountability system, they must determine if the plans provide for improving instruction in mathematics if a significant number of their students performed below the fourth or seventh- grade WASL standards. The schools and districts must document whether their proposed instructional models are supported by empirical research.

Amended Bill Compared to Substitute Bill: All language in the substitute house bill is stricken. A new intent section is added. The grant program is removed. Instead, SPI must analyze the WASL results and use its analysis to determine the best use of training programs and assistance. SPI may contract for a literature review of best practices in mathematics instruction in elementary and middle schools. When student learning plans are developed under the accountability system, schools and school districts must determine if their plans provide for improving mathematics instruction if a significant number of their students perform below the WASL. Proposed instructional models in mathematics must be supported by empirical research.

Appropriation: None.

Fiscal Note: Available.

Effective Date: Ninety days after adjournment of session in which bill is passed.

Testimony For: The 21st century person will need interdisciplinary math and science skills. The WASL and TIMSS results show that the state needs to focus on these higher-level math skills, particularly from fifth to eighth grades. Teachers know how to teach math content, such as adding, subtracting, and multiplying. But many teachers need training in how to teach math process, such as interdisciplinary problem solving. When math is combined with other disciplines, reading scores improve. It is good that the grants must be based on empirical research. It is good that the bill recognizes that math opportunities need to be expanded for all sexes. The grant program is very important to school principals; it is fourth in priority after compensation, remedial education, and disruptive students. The grant programs should be expanded to include grades K-9. The grant program should also include high school teachers. The bill should take into account the Iowa Test of Basic Skills. It should be clarified that the grants can be used to purchase instructional materials. All schools need this money, so the grants should not be awarded on a competitive basis.

Testimony Against: None.

Testified: PRO: Representative Karen Keiser, prime sponsor; Linda Lou Austin, Kent School Dist.; Bob Butts, OSPI; Virginia DeForest, American Assn. of Univ. Women; Rainer Houser, Assn. of WA School Principals; Bev. Neitzel, OSPI.