

**LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS**

Bill No: SB 273

49th Legislature, 1st Session, 2009

Short Title: Teacher Reading, Math & Science Training

Sponsor(s): Senators Cynthia Nava and Mary Jane M. García

Analyst: Eilani Gerstner

Date: February 18, 2009

Bill Summary:

SB 273 makes an appropriation from the General Fund for expenditure in FY 10 to fund training and development of reading, mathematics, and science teachers and to promote public awareness of the importance of reading, mathematics, and science education.

Fiscal Impact:

\$4,049,500 is appropriated from the General Fund for FY 10 to the Public Education Department (PED) and to the Higher Education Department (HED) as follows:

- \$2.8 million to PED:
 - (1) \$2.5 million for a reading, mathematics, and science summer professional development program;
 - (2) \$240,000 for travel expenses for volunteers and incentives to public schools to support subject-matter expert volunteers to (1) assist teaching of mathematics and science subjects in public schools, and (2) mentor public school teachers and students in those subjects; and
 - (3) \$60,000 to begin a public awareness campaign to emphasize the importance of mathematics and science education in the state; and

- \$1,249,500 to HED:
 - (1) \$1,204,500 to revise teacher education programs and create a system of incentives to attract more New Mexico college and university students to elementary and high school mathematics and science teacher careers;
 - (2) \$45,000 to convene a statewide conference to develop an implementation plan for improving mathematics and science teacher education in New Mexico.

Unexpended or unencumbered funds revert to the General Fund.

For FY 10, HB 3a, *Education Appropriation Act*, includes an appropriation of \$2.5 million to PED for summer reading, mathematics, and science institutes.

Since 2006, the Legislature has appropriated a total of \$6.7 million for summer reading, mathematics, and science institutes for teacher professional development as follows:

- in 2006, approximately \$1.7 million for FY 07;
- in 2007, \$2.5 million for FY 08; and
- in 2008, \$2.5 million for FY 09.

Issues:

According to PED's analysis of SB 273, the funding directed to PED will provide for:

- (1) continued funding for the summer reading, mathematics, and science institutes that the Legislature has funded each year since 2006; PED notes that, although student achievement scores are improving, they are still below desired levels and therefore indicate a need for ongoing professional development for teachers;
- (2) travel expenses for subject-matter expert volunteers and incentives to public schools to support those volunteers in order to provide additional resources to help improve student achievement; according to PED,
 - New Mexico has the third-largest per-capita ratio of engineers, mathematicians, and scientists in its workforce of any state; and
 - an evaluation of the "scientist in the classroom" model of science outreach intervention found that, with such a model, "K-12 students are engaged in authentic hands-on activities that generate interest in science and new views of science and scientists"; and
- (3) a public awareness program that would work to achieve long-term cultural change in attitudes toward mathematics and science and help students better understand how and why they should get involved in science and mathematics activities; this program also supports the bureau's strategic action plan.

According to HED's analysis of SB 273, the funding directed to HED will provide for:

- (1) recruitment and retention of K-12 mathematics and science teachers in order to help meet the demand for new teachers as a result of increased mathematics and science graduation requirements (HED notes that New Mexico teacher preparation programs produce just enough teachers to account for current attrition rates, but New Mexico will need approximately 100 additional mathematics teachers to meet the increased graduation requirements, also noted below); and
- (2) a statewide conference to (1) design a system of incentives for recruiting and retaining future mathematics and science teachers, and (2) update teacher preparation programs.

In November 2008, the LESC received reports from PED and the Mathematics and Science Advisory Council regarding mathematics and science education in New Mexico. According to the reports, among other issues:

- New Mexico will need approximately 100 more mathematics teachers to meet the new graduation requirement that, beginning with students entering their freshman year in

school year 2009-2010, students must take four credits of mathematics, including the equivalent of Algebra II or higher; and

- PED has serious concerns about teacher supply because New Mexico's public universities produced 26 high school math teachers and 27 high school science teachers in school year 2007-2008 (there were also 30 high school math teachers on Internship licenses while working toward alternative Level 1 licensure).

The projects in SB 273 were among the recommendations from the Mathematics and Science Advisory Council for the implementation New Mexico Project 2012. The goal of Project 2012 is that, by the year 2012, New Mexico's students will be among the nation's leaders in mathematics and science achievement.

In 2008, legislation was introduced to provide tax credits for "New Mexico 2012 volunteers" to teach mathematics and science subjects in the public schools or to mentor public school teachers; however, it did not pass.

Related Bills:

HB 3a *Education Appropriation Act*

HB 322 *Increase Teacher License Math Requirement*

SB 462 *UNM Preschool-through-College Math Education*