

**LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS**

Bill No: HB 450

48th Legislature, 2nd Session, 2008

Short Title: NM Tech Science & Math Career Prep

Sponsor(s): Representative Edward C. Sandoval

Analyst: Eilani Gerstner

Date: February 1, 2008

Bill Summary:

HB 450 appropriates funds to the Board of Regents of the New Mexico Institute of Mining and Technology (NM Tech) for (1) expenses related to enrolling seven public school teachers who teach mathematics and science in a 20-month master's of science teaching program; and (2) data research and analysis of students who have participated in programs that prepared them for careers in mathematics, engineering, and the sciences.

Fiscal Impact:

\$200,000 is appropriated from the General Fund for expenditure in FY 09 as follows:

- \$100,000 for enrolling seven teachers in the master's of science program; and
- \$100,000 for data research and analysis of students who participated in mathematics, engineering, and science career preparation programs.

HB 450 contains a reversion clause.

The analysis of HB 450 by the Higher Education Department (HED) notes that this program is not included in HED's FY 09 funding recommendations.

Issues:

According to NM Tech, the funding in HB 450 would provide:

- scholarships for seven New Mexico public school mathematics and science teachers to obtain a master's of science degree through NM Tech's Master of Science Teaching program; and
- funding to assess the Master of Science Teaching program by tracking the achievement of students in the participating teachers' classes upon completion of the program.

According to NM Tech's website:

- The goals of the Master of Science Teaching program include providing teachers with:
 - access to classroom, laboratory, and field experiences in science, mathematics, engineering, and technology; and
 - examples of applications of subject matter in industrial, technological, and environmental problems.

- The Master of Science Teaching program is primarily offered through two-week intensive summer sessions and distance learning, and some courses are offered in Albuquerque during the academic year.

The analysis by the Public Education Department (PED) adds that the teachers in the program are encouraged to develop classroom and laboratory activities to use with their own students.

During the 2007 interim, the LESC heard a presentation on mathematics and science education, including the results of an LESC survey to high schools to learn what resources they may need to implement the new graduation requirements for freshmen in school year 2009-2010. Of 158 schools contacted, 68 schools responded, representing a wide range of enrollments and geographic areas of the state. Of the respondents,

- 35 (51 percent) said they would need additional mathematics teachers; and
- 21 (31 percent) said they would need additional science teachers.

The presentation also included a discussion of professional development for mathematics and science teachers that integrates content knowledge and pedagogy, including the summer reading, mathematics, and science institutes. Since 2006, the Legislature has appropriated a total of approximately \$4.2 million to PED for the summer institutes. The Mathematics and Science Bureau has awarded these funds to a variety of service providers, including a total of \$104,900 to NM Tech for supercomputing training for teachers.

Related Bill:

SB 456 NM Tech Math & Science Career Preparation