

**LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS**

Bill Number: HB 219

49th Legislature, 2nd Session, 2010

Tracking Number: .181117.1

Short Title: Computational Math & Science Class Training

Sponsor(s): Representative Nick L. Salazar and Others

Analyst: Ally Hudson

Date: February 4, 2010

Bill Summary:

HB 219 makes an appropriation from the General Fund to the New Mexico Institute of Mining and Technology (NM Tech) to provide training in computational methods for middle school and high school students in science, technology, engineering and math (STEM); and to prepare teachers to use computational science techniques in their classrooms.

Fiscal Impact:

\$100,000 is appropriated from the General Fund to NM Tech for FY 11.

Any unexpended or unencumbered balance remaining at the end of FY 11 shall revert to the General Fund.

Fiscal Issues:

In recent years, NM Tech has received similar appropriations to the one in HB 219:

- In FY 09, \$56,400 was appropriated for the training of middle and high school students on supercomputers. This appropriation was subsequently reduced to \$55,000.
- The Higher Education Department (HED) analysis notes that the original FY 10 appropriation was reduced to \$28,600.
 - Following the special legislative session in October 2009, institutions were allowed flexibility on how they would allocate reduced appropriations. NM Tech reallocated \$6,700 for training middle and high school students on supercomputers.

House Appropriations and Finance Committee, Committee Substitute for HB 2, 3, 4, 5 & 6 does not contain an appropriation for NM Tech for this initiative in FY 11.

Substantive Issues:

The analysis by the Public Education Department (PED) explains that computational science is “the field of study concerned with constructing mathematical models and numerical solution techniques and using computers to analyze and solve scientific, social, and engineering

problems.” The work of various scientific disciplines can require large amounts of calculations and are often supported by the functionality of supercomputers.

Accordingly, HED’s analysis explains that the appropriation in HB 219 would be used to support the Supercomputing Challenge by:

- training teachers to become supercomputing coaches; and
- sponsoring competitive Supercomputing Challenge events.

HED’s analysis states that approximately 350 students annually participate in the Supercomputing Challenge. In addition to promoting STEM-related skills, “the Supercomputer Challenge encourages teamwork and rewards excellence by giving savings bonds, equipment, and scholarships to winners in their annual competitions.”

HED’s analysis further suggests that “students who have had the Supercomputer Challenge experience are particularly prepared to pursue degrees in STEM fields.”

Related Bill(s):

HJM 21 *Math & Science Teacher Yearly Development*
SB 82 *Minority Math, Engineering & Science Program*