LEGISLATIVE EDUCATION STUDY COMMITTEE BILL ANALYSIS

Bill No: SB 101 48th Legislature, 2nd Session, 2008

Short Title: NMSU School Science Teacher Enhancement

Sponsor(s): Senator Leonard Lee Rawson and Others

Analyst: <u>James Ball</u> Date: <u>January 21, 2008</u>

Bill Summary:

SB 101 makes an appropriation to support a science education enhancement and K-12 teacher outreach program at New Mexico State University (NMSU).

Fiscal Impact:

\$300,000 is appropriated from the General Fund to the Board of Regents of NMSU. The bill contains a reversion clause.

Issues:

According to the Public Education Department (PED), SB 101 provides matching funds for a grant from the Howard Hughes Medical Institute (HHMI) intended to improve science education both at the university and in K-12 schools. The state funds would be used for science content refresher and immersion courses for science teachers, the salaries of peer leaders in introductory science courses, and administrative costs of the program. PED also states that SB 101 supports Goal 1 of PED¢s Strategic Action Plan for Advancing Math and Science Education in New Mexico 2007-2010.

According to the Higher Education Department (HED), NMSU will use the \$1.5 million HHMI grant to:

- directly fund the laboratory and field research efforts of 54 undergraduate students every year; 44 undergraduate students in the first year of funding;
- pay many of the expenses associated with revamping the introductory biology sequence at NMSU;
- cover the cost of employing 50 percent of the student peer leaders who teach the workshops that students in introductory biology are now required to attend;
- underwrite the cost of a mobile molecular biology laboratory that will travel the state providing high school students with a first-rate introduction to DNA isolation and analysis; and
- pay for refresher courses for science teachers and help pay for the immersion courses associated with the new Master of Arts in Teaching Science degree.

HED also states that a major contributing factor to low science proficiency among New Mexico public school students is lack of local resources. The latest scientific equipment and technology is prohibitively expensive. Science professors at New Mexico& universities have responded to this challenge by seeking external funding, such as the HHMI grant, in order to introduce the latest technology into the classroom and to provide students with opportunities to be trained in modern research laboratories.

In October 2007, NMSU reported to the LESC on Science, Technology, Engineering and Mathematics (STEM) Education in America. The dean of the NMSU College of Education, reported on a 2006 National Science Foundation report outlining the growing need for stronger public support for student achievement in the STEM subjects, including:

- high-quality teachers with extensive content knowledge;
- increased opportunity to learn for underrepresented students;
- effective guidance counseling on STEM education and careers; and
- program assessment tools that reinforce learning in STEM fields.

The testimony indicated that the solution to the challenge of transforming New Mexicoøs educational system to produce a technologically literate workforce is to:

- encourage communication and knowledge sharing among all STEM activities across the state;
- facilitate collaboration among educators, legislators, government agencies, and private enterprise; and
- create a seamless pipeline for education PreK-20, aligning the goals of New Mexico and the Nation of educational success and economic development.

SB 101 could support NMSUøs commitment to these activities.

Related Bill:

HB 52 Santa Fe Teacher Science Instruction