LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS

Bill Number: HB 138 **51st Legislature, 2nd Session, 2014**

Tracking Number: .195673.1

Short Title: ENMU Robot Workshops & Competition

Sponsor(s): Representative James E. Smith

Analyst: James Ball **Date: February 1, 2014**

Bill Summary:

HB 138 makes an appropriation to manage and conduct statewide workshops for students in grades 3 through 12, together with their teachers, to learn how to design, build, program, and test payload-delivering, firefighting, or other autonomous robots, culminating in an international robot competition.

Fiscal Impact:

$300,000 is appropriated from the General Fund to the Board of Regents of Eastern New Mexico University (ENMU) for expenditure in FY 15. Unexpended or unencumbered funds revert to the General Fund.

Fiscal Issues:

The Fiscal Impact Report (FIR) from the Legislative Finance Committee (LFC) states that ENMU received a General Fund special appropriation of $200,000 in FY 14 for RoboRAVE International to:

- provide workshops to prepare teachers and students to build, program, and test robots for use at an international robotics competition;
- cover event facility rentals, support, and materials; and
- administer a robot education and competition program.

According to the Higher Education Department (HED), the Public Education Department received a General Fund appropriation of $322,000 for FY 13 to plan, design, purchase, and install robot systems to equip students for science, technology, engineering, and math competitions at public schools statewide.

Substantive Issues:

According to the LFC analysis of a similar bill in 2013, a study by Brandies University comparing students engaged in contextual learning programs, such as robotics, to a group of students with comparable backgrounds and achievements in high school math and science, reports that students engaged in contextual learning programs are:

- significantly more likely to attend college;
- twice as likely to major in science and engineering;
- ten times more likely to have had an apprenticeship, internship or co-op, in their college freshman year; and
- more than twice as likely to expect to have a science or technology related career after college.

Background:

The FIR states that RoboRAVE International reports that students aged 8-18 from the following schools and districts attended their workshops in FY 14:

- Peñasco;
- Las Vegas;
- Santa Fe;
- Bernalillo;
- Rio Rancho;
- Albuquerque;
- Sandia Park;
- Los Lunas;
- Ruidoso;
- Carlsbad;
- Roswell;
- Las Cruces;
- Gallup;
- Farmington;
- Shiprock;
- Mesa Vista;
- Los Alamos;
- Tesuque;
- Española;
- Anton Chico;
- Taos;
- Dixon;
- Dulce;
- Crownpoint; and
- Gadsden.

Committee Referrals:

HEC/HAFC

Related Bills:

SB 102 *Statewide Robot Workshops & Competition* (Identical)