LEGISLATIVE EDUCATION STUDY COMMITTEE BILL ANALYSIS

Bill Number: HB 64 52nd Legislature, 2nd Session, 2016

Tracking Number: <u>.202442.1</u>

Short Title: ENMU Statewide Robot Workshops

Sponsor(s): Representative James Smith

Analyst: Robin Shaya Date: January 22, 2016

Bill Summary:

HB 64 appropriates \$400,000 to the board of regents of Eastern New Mexico University (ENMU) 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 annual international robot competition.

Fiscal Impact:

The bill appropriates \$400,000 from the General Fund to the board of regents of ENMU for expenditure in FY17. Any unexpended or unencumbered balance remaining at the end of FY17 shall revert to the General Fund.

Substantive Issues:

According to the Public Education Department, a study by Brandeis 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;
- 10 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 career in science or technology after college.

Background:

RoboRAVE Competition

According to the RoboRAVE website, the competition is scheduled for May 5, 2016 through May 7, 2016 at the Albuquerque Convention Center. Participation is open to all individuals eight years of age or older and on a team of two to four players. The age of the oldest person determines the team division in which a team competes, as follows:

- Elementary School (grades 3 to 5);
- Middle School (grades 6 to 8);
- High School (grades 9 to 12); and
- Big kids (anyone beyond high school).

Group registration fees for the competition vary based on the number of teams, as follows:

- one to three teams: \$100 per team;
- four to six teams: \$90 per team;
- seven to nine teams: \$80 per team;
- 10 to 14 teams: \$70 per team; and
- 15 or more teams: \$60 per team.

The 2016 Robot Challenges include such activities as jousting, triathlon, and firefighting.

History of Legislative Appropriations

The Legislature previously appropriated funding for statewide robotic competitions, including:

- \$227,000 in FY16; and
- \$200,000 combined for use in FY14 and FY15.

Related Bills:

None as of January 22, 2016.