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FISCAL IMPACT REPORT

SPONSOR	Kernan		ORIGINAL DATE LAST UPDATED	01/30/13	HB	
SHORT TITL	Æ	ENMU Robot Wor	kshop & Competition		SB	150

ANALYST Roberts

APPROPRIATION (dollars in thousands)

Appropr	iation	Recurring	Fund Affected	
FY13	FY14	or Nonrecurring		
	\$300.0	Recurring	General Fund	

(Parenthesis () Indicate Expenditure Decreases)

Duplicate to House Bill 25

SOURCES OF INFORMATION LFC Files

<u>Responses Received From</u> Higher Education Department (HED) Public Education Department (PED)

SUMMARY

Synopsis of Bill

Senate Bill 150 appropriates \$300 thousand from the general fund to the Board of Regents of Eastern New Mexico University for the purpose of statewide workshops for students in grades three through twelve, to learn to design, build, program and test autonomous robots and to start an international robot competition for students teams to demonstrate skills and knowledge as academic athletes.

FISCAL IMPLICATIONS

The appropriation of \$300 thousand contained in this bill is a recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of fiscal year 2014 shall revert to the general fund.

SIGNIFICANT ISSUES

The PED cites that according to Carnegie Mellon University's robotics academy, the use of robotics education supports STEM (science, technology, engineering, and math) and language

Senate Bill 150 – Page 2

education standards. Teachers report that robot competitions effectively engage students of all academic levels, especially disengaged students who struggle in school.

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 leaning programs are: 1) significantly more likely to attend college; 2) twice as likely to major in science and engineering; 3) ten times more likely to have had an apprenticeship, internship or coop, in their college freshman year; and 4) more than twice as likely to expect to have a science or technology related career after college.

PERFORMANCE IMPLICATIONS

The HED notes that this bill does not provide performance measures however, if funded the Board of Regents at ENMU should develop performance measures in coordination with the HED.

The PED notes that this bill supports the department's strategic level 3: ready for success initiative: goal 1) increases the percentage of students who score proficient and advanced on the NMSBA and goal 6) increase the number of students prepared for college and career. By participating in this robotics program, students have the opportunity to have contextual and applied learning experiences in mathematics, science, and language arts, which will enhance their learning and promote higher scores on the NMSBA and prepare them for STEM college programs and careers.

ADMINISTRATIVE IMPLICATIONS

The Board of Regents of Eastern New Mexico University would be responsible for administering the funds for a statewide robot competition.

OTHER SUBSTANTIVE ISSUES

The PED is concerned because the bill does not indicate the number of schools impacted nor does it indicate whether funding is for all schools or targeted schools and districts.

MIR/svb