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LEGISLATIVE EDUCATION STUDY COMMITTEE
BILL ANALYSIS
54th Legislature, 2nd Session, 2020

Bill Number	<u>HB58</u>	Sponsor	<u>Trujillo, C.</u>
Tracking Number	<u>.216136.1</u>	Committee Referrals	<u>HEC/H AFC</u>
Short Title	<u>ENMU Robotics Funding</u>		
Analyst	<u>Porter</u>	Original Date	<u>1/27/2020</u>
		Last Updated	<u>2/7/2020</u>

BILL SUMMARY

Synopsis of Bill

House Bill 58 (HB58) appropriates \$300 thousand from the general fund to board of regents at Eastern New Mexico University (ENMU) for expenditure in FY21 to manage and conduct statewide play shops for students in third grade through 12th grade to learn, design, build, program and test payload delivering, firefighting, or other autonomous robot challenges that culminate in an international collaborative robotics program held annually in New Mexico.

FISCAL IMPACT

The bill appropriates \$300 thousand from the general fund to board of regents at ENMU for expenditure in FY21. Any unexpended or unencumbered balance remaining at the end of FY21 shall revert to the general fund.

House Appropriations and Finance Committee Substitute for House Bills 2 and 3 (HB2/HAFCS) contains \$100 thousand for this “youth challenge.”

SUBSTANTIVE ISSUES

The appropriation in HB58 is intended to support the nonprofit Inquiry Facilitators Inc., in offering RoboRAVE “playshops” in New Mexico public schools. ENMU will act as the fiscal agent for Inquiry Facilitators Inc. RoboRAVE playshops blend robotics with the public school curriculum, offering children hands-on experience with designing, building, programming, and testing a simple autonomous robot. Students are tasked with creating a robot that can complete a task, like firefighting, carrying cargo, or completing a maze. It is unclear how many students, schools, and school districts were impacted by the appropriation in previous years. The nonprofit also receives support from Intel, Sandia National Laboratories, Los Alamos National Security, UNM School of Engineering, New Mexico Institute of Mining and Technology, and others.

ENMU received General Appropriations Act (GAA) funding for this purpose in the past. ENMU received \$100 thousand to support a “youth robotic competition” for FY15 and \$225 thousand for

FY16; however, GAA funding was discontinued for FY17 and FY18. ENMU received \$50 thousand in FY19 and in FY20.

Student involvement in extracurricular activities can improve student engagement and help students begin a career pathway. According to a 2013 study by Brandies University, students who participate in high quality science, technology, engineering, and math (STEM) extracurricular activities are more likely than similar peers who do not participate to attend college, major in a STEM field, participate in internships or apprenticeships, and work in high-skill STEM careers.

Despite significant investment in science, technology, engineering, art, and math (STEAM) programs, statewide proficiency rates in science have decreased 5 percent in the last three years. In 2017, PED adopted the NM STEM Ready! Science Standards (NMSRSS), which combine the national Next Generation Science Standards and six New Mexico-specific standards, to improve the rigor of STEAM instruction. State funding for STEAM initiatives has increased considerably in the past several years, from a low of \$1.9 million in FY18 to \$5 million in FY20. HB2/HAFCS also contains a special appropriation of \$200 thousand to PED for STEAM initiatives and \$75 thousand for the mathematics, engineering, science achievement program. Investment in new forms of effective STEAM programs can help to improve student outcomes.

ADMINISTRATIVE IMPLICATIONS

ENMU would act as the fiscal agent for the nonprofit, Inquiry Facilitators, Inc., to support the latter in coordinating and conducting playshops in third grade through 12th grade classrooms statewide and holding an international robotics competition.

OTHER SIGNIFICANT ISSUES

According to the Higher Education Department (HED), ENMU did not submit this request to the HED for possible incorporation into its funding recommendation. HED and LFC have a formal peer review process for reviewing earmarked budget requests, called the research and public service project (RPSP) process. Additionally, neither the Executive Recommendation nor the LFC recommendations include continued funding for FY21.

RELATED BILLS

Relates to SB21, Development & Support of Robotics Teams, which appropriates funds to PED for STEM programs, including robotics teams in middle and high school.

Relates to HB125, Portable Planetarium for Bilingual STEM Ed, which makes an appropriation to PED to contract with a nonprofit to provide bilingual STEM education, including a portable planetarium.

Relates to SB21, Development and Support of Robotic Teams, which appropriates money for STEM programs, including robotics teams in middle and high schools.

Relates to HB71, Teen Technology Center Programs, which appropriates funds to the Department of Workforce Solutions to administer teen technology center programs.

Relates to HB204, NM Tech Supercomputing Challenge, which appropriates money to New Mexico Institute of Mining and Technology for the supercomputing challenge program.

SOURCES OF INFORMATION

- LESC Files
- Higher Education Department (HED)

LAP/tb/mc/sgs