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

Bill Number	<u>HB296</u>	Sponsor	<u>Brown</u>
Tracking Number	<u>.216859.2</u>	Committee Referrals	<u>HEC/HAFC</u>
Short Title	<u>Student Prep for STEM Careers</u>		
Analyst	<u>Kennedy</u>	Original Date	<u>2/3/2020</u>
		Last Updated	<u>2/10/2020</u>

BILL SUMMARY

Synopsis of Bill

House Bill 296 (HB296) would appropriate \$250 thousand to the board of regents of New Mexico Institute of Mining and Technology (NM Tech) for pre-college after-school and summer enrichment programs that prepare students for careers in science, technology, engineering, and mathematics (STEM).

FISCAL IMPACT

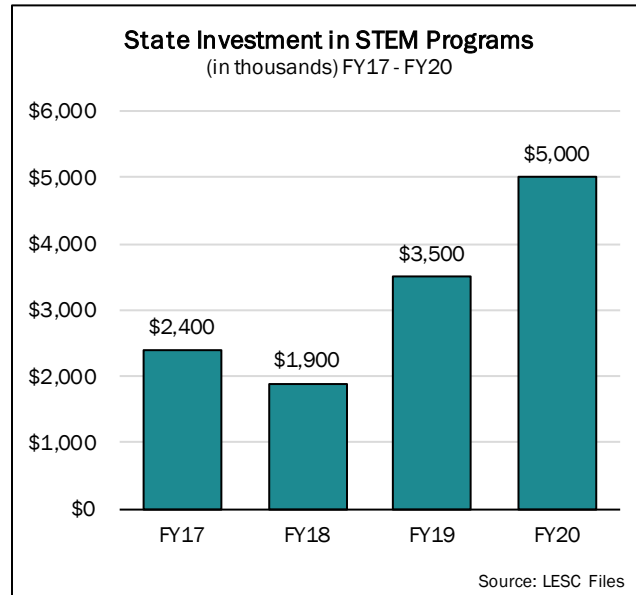
HB296 appropriates \$250 thousand from the general fund to the board of regents of NM Tech for expenditure in FY21. Any unexpended or unencumbered balance remaining at the end of FY21 shall revert to the general fund.

SUBSTANTIVE ISSUES

Analysis from the Higher Education Department (HED) states, according to a budget expansion request submitted by NM Tech, the appropriation included in HB296 would fund the establishment of Mathematics, Engineering & Science Achievement (MESA) programs at 10 additional schools, add one additional FTE to serve these schools, reestablish a statewide professional development conference to serve over 150 teachers, provide professional development in computer science instruction to 18 teachers, update MESA's longitudinal study, and increase NM MESA student participation in NM Tech's invention and entrepreneurial workshop and the "Wolves Den" competition.

Despite significant investment in science, technology, engineering, art, and mathematics (STEAM) programs, statewide science proficiency rates have decreased 5 percentage points in the last three years. Investment in effective, differentiated STEAM programs is needed to improve student outcomes. In 2017, the Public Education Department (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 STEM instruction. State funding for STEAM initiatives has increased considerably in the past several years. The House

Appropriations and Finance Committee Substitute for House Bills 2 and 3 includes \$5 million for PED’s STEAM initiative. Despite these investments and new initiatives, only 35 percent of New Mexico students were proficient in science in FY19.



Analyses by the National Science Foundation suggest STEAM education plays a critical role in preparing students to enter STEAM majors and careers. According to the U.S. Bureau of Labor Statistics, STEAM-related job sectors are projected to grow significantly through 2026. The Department of Workforce Solutions (DWS) reports qualified candidates in fields such as engineering, medicine, physics, and computer technology are in high demand, especially in rural areas of New Mexico.

HED’s analysis notes NM Tech submitted this funding request through the research and public service project process for possible incorporation into the department’s FY21 higher education funding recommendation. However, HED staff state the budget recommendations from the department, the executive, and the Legislative Finance Committee maintain NM Tech’s FY20 funding level and do not include NM Tech’s request for an additional \$250 thousand.

Analysis from NM Tech states the appropriation included in HB296 would enable the university to support programs including distance education classes delivered to rural and tribal communities, K-12 outreach programs throughout the state, and college preparation and credential skills in STEAM.

ADMINISTRATIVE IMPLICATIONS

HB296 would require the board of regents of NM Tech to develop new or support existing after-school and summer enrichment STEAM programs that satisfy legislative intent.

OTHER SIGNIFICANT ISSUES

The Interagency Working Group on Youth Programs reports effective after-school programs can boost academic performance, reduce risky behaviors, promote physical health, and provide structured environment for the children of working parents.

HB296 does not specify a target age group for the program. NM Tech's analysis notes the emphasis would presumably be on high school students. However, similar programs operating in New Mexico serve students as young as 6th grade.

RELATED BILLS

Relates to HB71, Teen Technology Center Programs, which appropriates \$2 million to DWS to establish and administer teen technology center programs in five New Mexico cities to immerse students in STEAM.

Relates to HB287, Grant County School STEAM Programs, which appropriates \$150 thousand to PED to contract with an organization in Grant County that will provide summer academy camps in STEAM to seventh through 12th grade students.

Relates to SB42, Pilot Project for Early Physics Education, which establishes a five-year early physics education pilot project to serve students in sixth, seventh, and eighth grades, creates an early physics education fund, and appropriates \$600 thousand from the general fund to the early physics education fund.

Relates to SB155, Early Physics Education Pilot Project Funding, which appropriates \$600 thousand to PED to design and implement a five-year pilot project for early physics education for sixth through eighth grade students.

Relates to SB205, Southwest NM School STEM Programs, which appropriates \$225 thousand to PED to provide real-world and hands-on STEM training for students in southwest New Mexico.

SOURCES OF INFORMATION

- LESC Files
- Higher Education Department (HED)
- New Mexico Institute of Mining and Technology (NM Tech)

NAK/tb/mc/sgs