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LEGISLATIVE EDUCATION STUDY COMMITTEE BILL ANALYSIS

56th Legislature, 1st Session, 2023

Bill Number	SB347	Sponsor Pope
Tracking Nur	nber 223283.2	Committee Referrals SEC/SFC
Short Title	NMSU STEM Plus Cer	nter
		Original Date 2/10/23
Analyst Bed	eaux	Last Updated

BILL SUMMARY

Synopsis of Bill

Senate Bill 347 (SB347) creates a new section in Chapter 21 pertaining to higher education institutions to establish the Science, Technology, Engineering and Mathematics (STEM) Plus Center of Excellence for Teaching and Learning at New Mexico State University (NMSU). The bill appropriates \$5 million to the NMSU Board of Regents for expenditure from FY24 through FY26 to staff the STEM Plus Center.

SB347 requires the STEM Plus Center to accomplish the following:

- Research best practices for STEM learning statewide, with a specific emphasis on improving opportunities for low-income students, Native American students, English learners, and students with disabilities;
- Align and expand STEM educational opportunities with the needs of the workforce and promote economic development;
- Study and promote STEM and the relationship between education, career options, and social mobility;
- Collect and maintain data on STEM programs and activities in New Mexico to determine their success and inform educational and employment needs in the future; and
- Promote enhanced STEM learning through experiential learning techniques, including teacher training programs.

The bill further requires the STEM Plus Center to foster excellence in STEM through collaboration among state agency leaders, higher education institutions, the business sector, national laboratories and community organizations, with the long-term goal of transforming STEM education statewide and increasing the number of STEM-ready graduates.

The STEM Plus Center may collaborate with and provide funding to partners throughout the state to implement STEM programs regionally, based on demographic, infrastructural, and social needs the Center identifies.

The STEM Plus Center is required to seek private funding for its work, establish short- and long-term goals for job creation and private investments, and report annually to the Higher Education Department (HED) and the Legislative Finance Committee (LFC). The Center is required to maintain appropriate staffing levels to evaluate, scale, replicate, and promulgate its programs and achieve long-term goals. The Center will be required to create a database with statewide access, maintain a social media presence, and evaluate the efficacy of STEM programs statewide.

This analysis is limited to the bill's impact on New Mexico's public schools.

FISCAL IMPACT

SB347 appropriates \$5 million from the general fund to the NMSU Board of Regents for expenditure in FY24 through FY26. Any unexpended or unencumbered balance remaining at the end of FY26 shall revert to the general fund.

In a <u>presentation to LESC</u> in October 2022, NMSU noted the one-time startup costs of the STEM Plus Center of Excellence would be approximately \$2 million. If NMSU spends \$2 million of SB347's \$5 million appropriation in FY24, the Center would have \$1.5 million for general operations in FY25 and \$1.5 million for FY26.

If established as a center of excellence, the STEM Plus Center of Excellence will be included in the Research and Public Service Project (RPSP) process, a process by which individual programs at New Mexico institutions of higher education are vetted and funded annually. The STEM Plus Center was not included as an RPSP in the HED request for FY24, nor in the LFC recommendation. By way of comparison, all other "centers of excellence" in the state, including the NMSU center for excellence for sustainable agriculture, were recommended recurring operational funding at \$500 thousand for FY24.

SUBSTANTIVE ISSUES

During the 2022 legislative interim, LESC staff presented on the state of mathematics education in New Mexico. One in three New Mexico students is proficient in grade-level science, and one in four in math. The percent of students proficient in math declines at higher grade levels as math standards become more complex; only 16 percent of 11th grade students are proficient in math. New Mexico performed the lowest in the nation on the 2022 National Assessment of Educational Progress, ranking 51st compared with all other states and Washington, D.C. Math achievement is at its lowest among New Mexico's disadvantaged students, including low-income students, English learners, and students with disabilities. Despite these achievement gaps, LESC staff analysis also highlighted particular New Mexico schools that were "beating the odds;" some schools with high levels of poverty and a large number of English learners were able to perform far above average given their demographics.

Many of the schools "beating the odds" are within the Gadsden Independent School District, a district that has worked closely with NMSU to improve math and science education. Schools in Gadsden have worked closely with NMSU since 2001 through a National Science Foundation Grant. The model supports high-quality curriculum and instruction, and uses what NMSU calls a "sustainable school and community-based model." As a result, schools in Gadsden consistently outperform their "expected" score given their English learner and low-income student populations. Improving the STEM Plus Center's capacity to work with other school districts could facilitate this type of achievement growth in many other school districts, improving New Mexico's math

proficiency and helping the state meet its long term goals in response to the *Martinez* and *Yazzie* consolidated lawsuit.

ADMINISTRATIVE IMPLICATIONS

Incorporating a new center of excellence is a significant undertaking for NMSU. Analysis on SB347 from NMSU explains the funding will be used to hire a team of full-time staff who will be tasked with establishing a networked STEM ecosystem among institutions of higher education, the Public Education Department (PED), public schools, the Workforce Solutions Department, and private industry. NMSU plans to create a STEM Plus advisory council, author an annual implementation plan, develop and provide teacher training, and engage with tribal communities.

Transferring some of the administration of professional development to the NMSU STEM Plus Center could reduce the workload of administrators in PED's Math and Science Bureau.

OTHER SIGNIFICANT ISSUES

Creating the functions of the STEM Plus Center as hard legal requirements may create liability concerns for NMSU. If SB347 is enacted, NMSU "shall" be liable for upholding the functions or meeting the goals required in law. For example, a northern New Mexico school district may have grounds to sue NMSU if the STEM Center fails to align STEM opportunities with the needs of the northern New Mexico workforce. Instead of listing the functions of the STEM Plus Center as hard legal requirements, e.g. "the Center shall," the Legislature may wish amend the bill to reflect other statutory NMSU programs. For example, Section 21-8-38 NMSA 1978, which creates the International Business Facilitation Center at NMSU, states "the purpose of the center shall be to..."

Section 21-1-27.11 NMSA 1978 lists a number of other "centers of excellence" in New Mexico, and provides for general guidelines on creating a center of excellence. Other statutory centers of excellence including the following:

- A cybersecurity center of excellence at New Mexico Tech;
- A sustainable agriculture center of excellence at NMSU;
- A sustainable renewable energy center of excellence at San Juan College, and
- A bioscience center of excellence at the University of New Mexico Health Sciences Center.

SB347 does not add the NMSU STEM Plus Center of Excellence to this list, possibly representing a departure from typical practice.

RELATED BILLS

Related to <u>HB126</u>, School Graduation Requirements, which amends New Mexico's high school graduation requirements.

Related to <u>HB335</u>, School Computer Science Classes, which would embed computer science concepts and standards throughout the elementary, middle, and high school content standards.

SOURCES OF INFORMATION

• LESC Files

TB/jkh/cf/mb