

NM STEM Center of Excellence

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The logo for New Mexico State University, featuring the letters "NM" stacked above "STATE" in a white serif font, set against a white square background with a dark red border. The square is positioned over a dark red map of New Mexico.

NM
STATE

BE BOLD. Shape the Future.
New Mexico State University

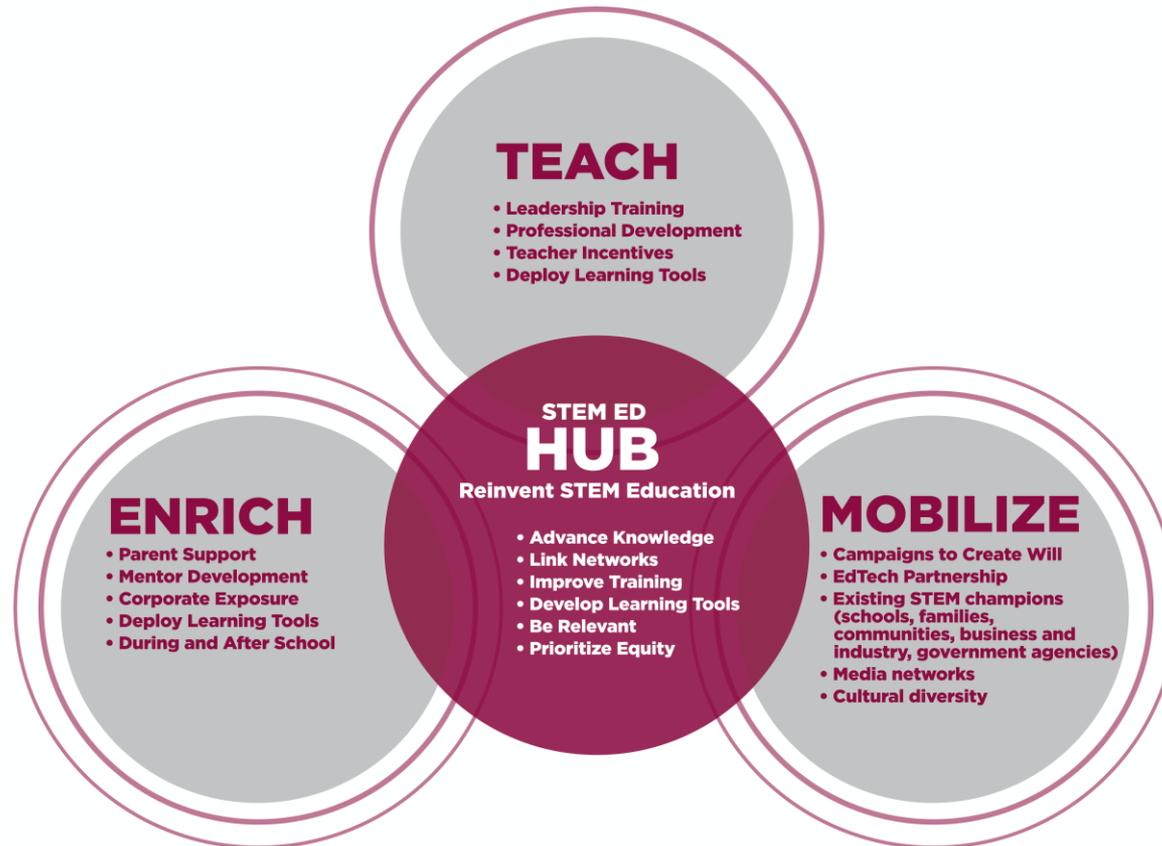
Building Capacity by Design

A THEORY OF CHANGE



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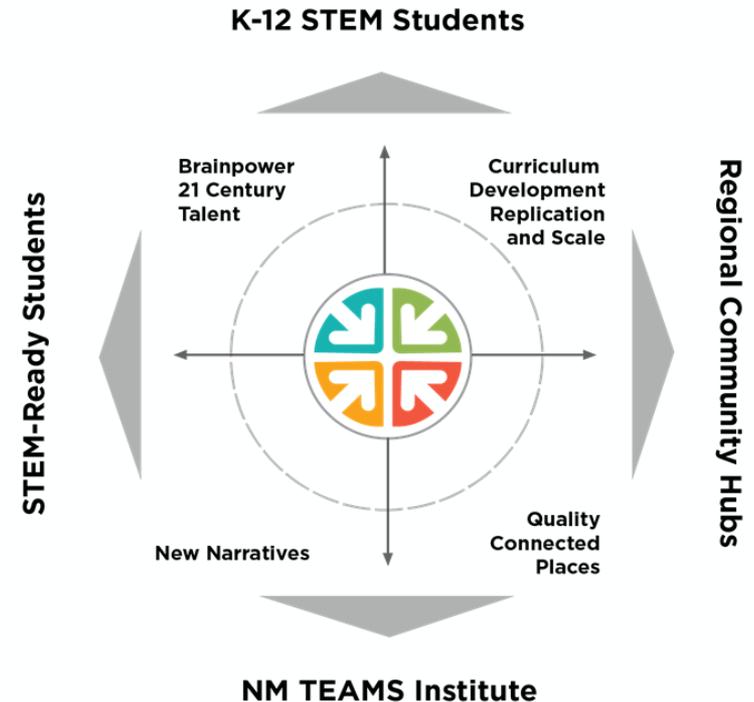
Theory of Change



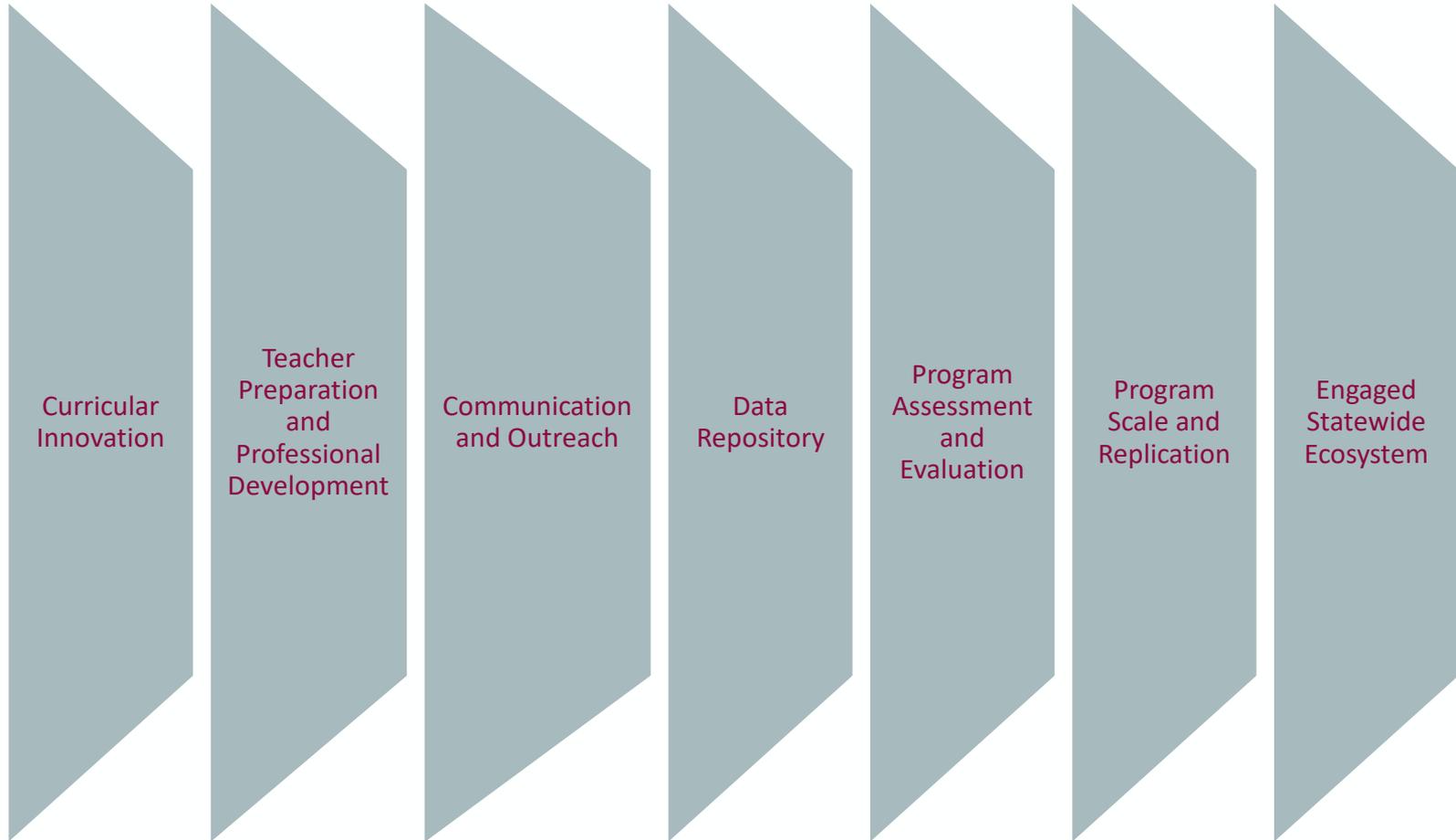
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NM STEM Center of Excellence

- Forge partnerships between K-12, postsecondary institutions, and employers.
- Create articulated STEM pathways from education to career that are aligned and supportive of current and emerging labor market demands;
- Build strong partnerships with business, industry and government entities;
- Develop a sustainable funding plan to foster articulated STEM pathways that can be replicated and scaled; and
- Address critical gaps in the STEM workforce.



NM STEM Center of Excellence



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The Role of Regional Community Hubs

Student Engagement

- STEM Outreach Programs and Competitions
- Mentoring
- Internships, apprenticeships
- Career Awareness

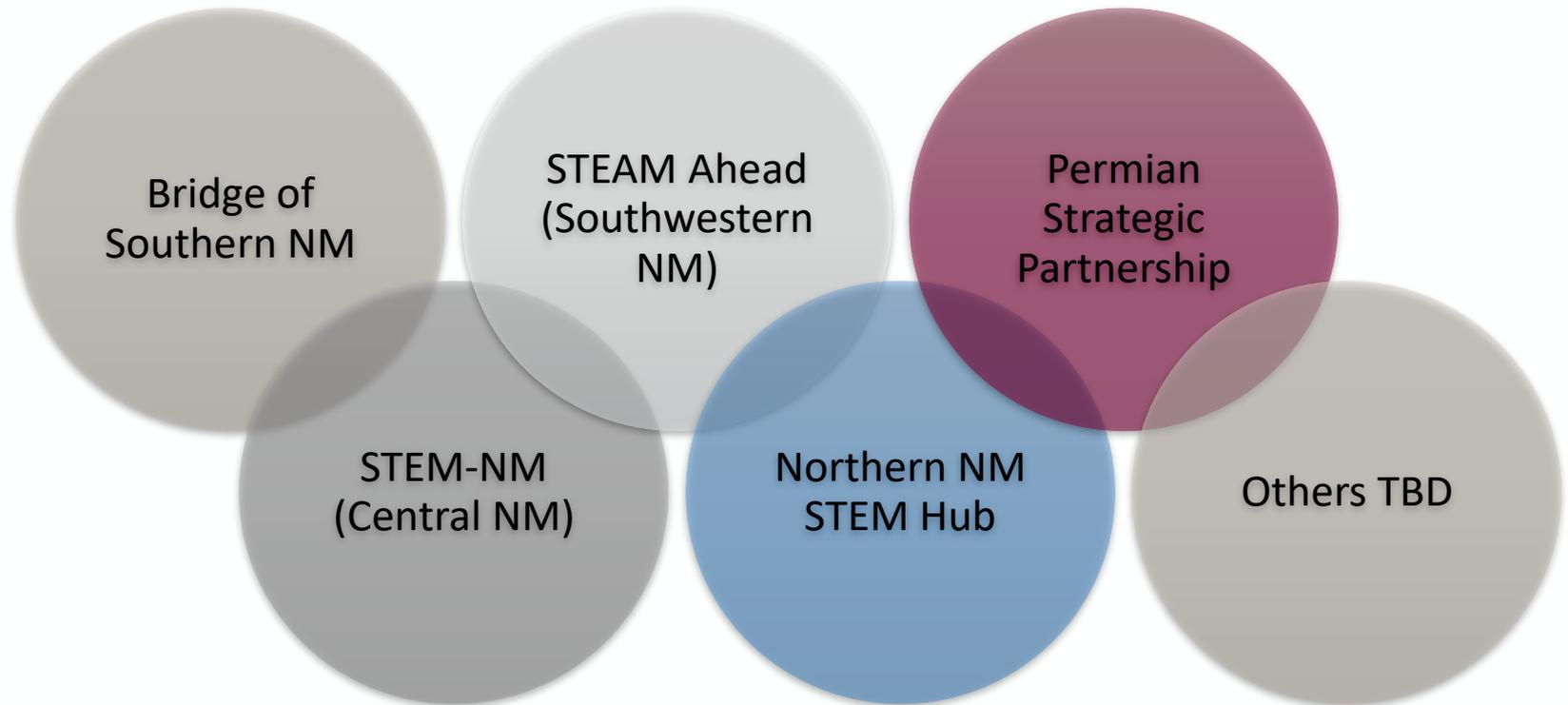
Curricular Innovation

- NM STEM Center of Excellence
- Anchored by Higher Education Institutions within Region
- CTE Alignment
- Teacher Professional Development

Family and Community Engagement

- Career Technical Student Organizations (CTSOs)
- Industry Partners
- Local Government Agencies
- NGO Community

Potential Regional Community Hubs



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Measuring Success

Secondary Education

- Integrate project-based learning in curriculum
- Enhance computer and technology literacy
- Create STEM experiential learning opportunities
- Increase student engagement in STEM outreach and competitions
- Increase STEM Career exploration and awareness

Post-secondary Education

- Build STEM capacity
- STEM Teacher Pre-service professional development
- Articulated pathways for high school and transfer students
- Professional Development for Guidance Counselors on STEM Career advising, with emphasis on diversity and inclusion
- Innovative curricula that fosters computer and technology literacy in the classroom

Employer(s)

Cross-cutting engagement with STEM Center of Excellence

- Mentorship
- Event and Competition Judges
- Career Awareness
- Apprenticeships, internships, co-ops

Increase employer knowledge of STEM education in NM

- Alignment of education and training initiatives
- Increase awareness of micro-credentials to upskill, reskill and new skill employees



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Metrics



Students

By 2025, 40% of participating students will be engaged in a minimum of 1 out-of-school or co-curricular STEM program or work-based experience

By 2025, 40% of participating students will receive STEM career advising



Secondary

By 2023, STEM COE will have developed and deployed a minimum of 5 new curricular modules

By 2025, 30% of guidance counselors will have participated in STEM career advising with emphasis on diversity and inclusion

By 2025, 50% of STEM Teachers will have participated in project-based professional development



Post-Secondary

By 2024, 30% of NM higher education institutions will have articulated STEM pathways

By 2025, demand for postsecondary remediation in STEM courses will decrease by 20%



Employer(s)

Active cross-cutting engagement in STEM COE

Employers understand the value and benefit of work-based learning experiences

Employers report that they have a readily available and highly qualified STEM pipeline



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Building Capacity through Collaboration



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