

STEM Learning Center University of Arizona Strategic Plan and Communication Plan

Overview

In 2017, the STEM Learning Center (SLC) became a university-wide center under the UA Office of Research, Discovery, and Innovation (RDI) as a centralized hub connecting resources, people, and best practices to inspire and sustain interest in STEM and STEM pathways. The SLC was born out of the need to connect people and resources for the focused purpose of creating a cohesive and effective STEM network for southern Arizona in order to broaden participation in STEM. Through our partnerships, research, and support for effective practices and projects, we seek to investigate and eliminate barriers that limit access to STEM and STEM pathways for diverse populations. We have brought together faculty, programs, evaluators, and industry partners to move this work forward and generate new insights. Our strategies and activities emerged as responses to issues identified by our constituents.

Community Needs

Our local communities in southern Arizona—public, private, and charter schools; homeschool, non-profit, and youth development organizations; businesses and industries; and the greater university community—play a significant role in building broad and robust STEM pathways. Their individual and collective voices made clear that, in order to provide inclusive and relevant STEM experiences, they would need easier ways to collaborate and streamline access to resources, showcase best practices and successful efforts, and better understand our strengths and problems. Further, each was in pursuit to answer similar questions regarding STEM. What were the greatest opportunity gaps to broaden participation in STEM? Who was having the greatest impact in generating and maintaining interest in STEM for diverse populations? Who were potential partners interested in collaborating? What did the data show about enrollment, persistence, and graduation in STEM by demographic group? What tools are available to evaluate the effectiveness of programs using common measures? What practices could STEM programs implement to ensure they are being inclusive and attracting diverse students?

In response, the STEM Learning Center is focused on facilitating cross-disciplinary, inter-institutional, collaborative teams in order to address the most pressing issues related to broadening participation in STEM; identifying programmatic partners who engage a broad and diverse population of STEM learners with research-based, inclusive practices; collecting data that allows our community to better understand the current STEM landscape; and offering consultations and trainings on incorporating inclusive practices into projects' design.

Mission

The mission of the STEM Learning Center is to facilitate institutional partnerships, support effective initiatives, and advance scholarship that promote equitable access to high-quality, STEM experiences, resources, tools, and expertise.

Vision

Our vision is that every person has equitable access to STEM experiences that are inclusive and relevant.

Goal 1: To retain students in STEM pathways and increase the diversity of student populations in STEM and the STEM workforce

- Strategy 1: Collect and compile STEM data to support retention practices.
- Strategy 2: Facilitate and support cross-disciplinary and cross-institutional collaborations (ex: collaborations among Hispanic-Serving Institutions)
- Strategy 3: Incubate and support innovative and promising initiatives (ex: Growing undergraduate research experiences; ASEMS; TEALS, Imagine Your STEM Future)

Goal 2: To promote and disseminate best practices that increase the diversity of preK-20 students engaging in STEM and the STEM workforce

- Strategy 1: Provide broader-impacts consultations and design assistance to researchers during the proposal-writing process on education, outreach, and evaluation plans, including facilitating productive collaborations

Goal 3: To stimulate and cultivate an inclusive STEM learning environment

- Strategy 1: Provide professional development on inclusive mentoring and teaching practices
- Strategy 2: Offer training for industry and community partners on inclusive practices when working with underrepresented and underserved students

Communication Plan:

Strategies to market the UA STEM Learning Center:

1. Launch re-branded SLC website
 - a. Phase 1: Launch website with basic information about the SLC, including our strategic plan, our staff, an event calendar, news, and how to request a consultation.
 - b. Send out a university-wide announcement about the new website with highlights from our annual report and plans for the upcoming year.
 - c. Phase 2: Launch additional features on the website highlighting educational researchers, evaluators, and links to information on best practices to broaden participation in STEM.



2. Write an annual report with details on our new strategic plan, the contributions and the services we have provided to the community, our accomplishments, our partnerships, and our programs.
3. Meet with deans of academic colleges to share highlights from the annual report and our new strategic plan.
4. Send a condensed version of our annual report to the SLC Advisory Board.
5. Work with our unit's marketing team to plan a marketing strategy for events we will host during the upcoming year and accomplishments, such as program growth or grant awards.
6. Host a quarterly in-service training for the university and local community on effective strategies to broaden participation in STEM.
7. Host a fall symposium targeted to local business leaders and entrepreneurs on effective partnerships between STEM educators and industry.
8. Host a spring symposium targeted to faculty and instructors at nearby community colleges on educational research regarding best practices to broaden participation in STEM.
9. Host a State of STEM Annual Tea open to the university and southern Arizona community to share data on gaps and opportunities to retain diverse populations of students in STEM pathways.

Strategies to market the impact of the SLC programs:

1. Partner with the university's Office of Institutional Research to gather comparison group enrollment, retention, graduation, and persistence in STEM data and create a report with comparison data about students in our programs. Share the report with SLC partners and institutional leaders.
2. Hire a research specialist to gather information from grant reports on our current programs and other successful STEM education programs in our community to compile a report on the impact of our community's STEM programming.

Website: <https://stem.arizona.edu>