

Building STEM Persistence and Identity Through Equity-minded Practices

The University of Arizona STEM Learning Center

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Abstract: The University of Arizona STEM Learning Center promotes and celebrates equity-minded practices leading to persistence in STEM majors and promoting a positive STEM identity for *all* students, including underrepresented minorities.

Key strategies:

- Asset-based mindsets for faculty and project leaders (Gonzalez, 2006)
- Mentoring models (peer, tiered, one-on-one, group)
- Early opportunities for undergraduate research
- Leadership opportunities
- Real-world applications for freshmen and sophomores
- Community engagement

Raytheon Women in Engineering, Science, and Technology and the University:

A tiered mentoring intervention for industry women fellows, early-career women engineers and scientists, and undergraduate women students in STEM areas that continue to have low representation of women.



Technology Education and Literacy in Schools:

Provides community engagement opportunities for undergraduate students to teach computer science classes in schools serving underrepresented populations.

Project NAVIGATE: A 2-course pathway providing peer-mentoring, leadership opportunities, and real-world, naval GIS applications for 1st and 2nd year NROTC midshipmen to Encourage persistence in STEM majors.



Arizona's Science, Engineering, and Math Scholars:

Empowers STEM students to succeed while recognizing their unique backgrounds, offering opportunities for early research experiences, peer mentoring, and academic advising with faculty who strive to practice asset-based mindsets.



Integrated Optics for Undergraduate

Native Americans: A 10-week research experience, along with pertinent activities that build positive academic identity for Native American undergraduate students.

WE: Mentoring and

Making: Offers leadership experiences for undergraduate engineering women to co-design asset-based protocols within the UA Sound Hub Maker Space and Experiential Laboratory.

