



HSI STEM Grants

STEM Conexiones Program Outcomes (2016-2021)
New STEM Grant, Planning Ahead (2021-2026)

Presentation to MSSC, 17 Feb 2021
http://bit.ly/MesaTitleIII_STEMGrants

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STEM Conexiones

U.S. Department of Education HSI Title III STEM Conexiones (2016-2021):

- **increase** student retention, success, and completion among Hispanic and low-income students in STEM majors;
- **create** “faculty connections,” “student connections,” “community connections” that close equity gaps in STEM courses and reduce barriers for students to complete their STEM degrees in a timely manner.



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STEM Conexiones

STEM Peer Mentoring

In 2019/20...

446

Participants

35-37%

Latinx

62%

Math
Course Success
of Latinx-
Peer Mentoring
Participants



▲ **8** percentage
points higher than
their Latinx non-
participant
counterparts

Most valuable aspect of Peer Mentoring:

"Being able to connect with someone that has gone through exactly what I was experiencing with school made it feel less intimidating. I felt more prepared and confident with tackling my most challenging classes."

-Fall 2019 Peer Mentoring Participant

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STEM Conexiones

STEM Center Tutoring

In 2019/20...

1,801

Participants
*Unduplicated

41%

Latinx

67%



▲12 percentage
points higher than
their Latinx non-
participant
counterparts

Math
Course Success
of Latinx-
STEM Center

Tutoring Participants

STEM services recipient's sense of belonging:

" I wasn't very confident I belonged when I first started school at Mesa but through getting involved on campus and with the tutoring program I know now I belong and can be successful!"

-Fall 2020 STEM Center Tutoring Participant

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STEM Conexiones

- **Program Successes (2016-2021)**
 - Data Dashboards: [STEM Peer Mentoring](#), [STEM Tutoring](#), [HSI & Equity](#);
 - Student Connections: [STEM Center Innovation Research Lab](#), [STEM Core](#);
 - Faculty Connections: Course & Lab Redesign ESUs; Prof. Learning
 - Community Connections: Partners-- BioCom, UCSD Create, Treobytes, N.Gruman, UCSD, SDSU



New HSI STEM Grant

- \$5M over 5 years (Fall 2021 - 2026)
- Goal: Increase success and completion of Hispanic and low income students in STEM majors (as defined by DOE).
- Anticipating RFP will be issued in the next few weeks
- Timeline:
 - Grant writer hired: Dec 2020
 - Steering Committee and STEM Grants Workgroup developed ideas Nov 2020 - Jan 2021
 - Meeting with Counseling and other STEM Departments: Feb 2021
 - Grant writing: begins as soon as RFP issued
 - Anticipated Submission Date: March 2021

Theme for 2021 HSI STEM Grant: *Community*

Working Ideas:

- **Increasing Equity and Excellence in Teaching:**
 - “Studio Spaces” - Flexible, Flipped Classrooms
https://www.youtube.com/watch?v=0tMc0JY0978&feature=emb_logo
 - STEM Faculty Development
 - Increase Interdisciplinary Communication
 - Equipment needs
 - Pathways and Curriculum Development:
 - Identification and Analysis of Bottlenecks and Ideal course sequencing
 - Development and Adjustment of Curriculum to Ease Bottlenecks, Increase Success and Improve Timely Completion.
 - Outreach:
 - Identification of students in key trailhead courses for STEM majors
 - Encouragement and assistance with declaration of major

Theme for 2021 HSI STEM Grant: *Community*

Working Ideas:

- **Increasing Equity and Excellence in Learning and the Student Experience:**
 - Development of in-house online homework system (OER)
 - Expansion of the Peer Mentoring Program
 - Equipment and Supplies for STEM Center
 - Student STEM Pathway Cohorts
 - Pathways: Improvement of Onboarding and STEM Career Awareness
 - STEM Orientation in collaboration with Summer Cruise
 - STEM Open House
 - STEM Career Exploration Workshops