Building Community to Support Under-Represented Students

San Jacinto College – Pasadena TX

Sharon Sledge - Bryan Melton
October 30, 2021 - 2:15 pm- 3:05 pm
Goal -
- Increase number of underserved underrepresented STEM student transfers
  - Targets Hispanic, African American, Native American and Pacific Islander

Overview -
- Alliance between San Jacinto College and Houston Community College
- 3 year 1.5-million-dollar NSF Grant
- Impact over 500 community college students
Students come with Insufficient “Social Capital”

- **Negotiate the transition to college**
  Separate from one world to enter a new one

- **Become involved in campus academic and social life**
  Need someone to reach out to them to become involved

- **Develop positive attitudes about their learning ability**
  Validate students – help them believe they are valued

**Laura Rendon, University of Texas, SA**
At each table everyone will introduce themselves. State your name, courses you teach, college and location. You have 3 minutes..GO!
“Collectively, LSAMP Scholars cited networking, research opportunities, and support received from faculty and staff at San Jacinto College, as the most advantageous aspects of the program.”

(Amanda Hackler, External Evaluator)

Community of Scholars: A home away from home

Community of Experience: STEM outreach activities

Community of Research: STEM research projects and internships
Community of Scholars: A Home Away From Home

Pre-Pandemic
- A Place to Hangout
- Tutoring/Mentoring
  - Student to Student
  - Faculty to Student
- Formal and Informal STEM Culture
- STEM Speaker Series
- Social Activities
Community of Scholars: A Home Away At Home

Pandemic
Keeping Konnected
Virtual STEM Activity
Study Tool
Online Tutoring/Mentoring
24/7 online platform
Prep4Calc
Virtual Meet-ups/Workshops
Virtual Reception
“The cultivation of a campus community unquestionably made LSAMP Scholars feel strongly connected to their institution and committed to their individual success. Access to communal spaces enables LSAMP Scholars to remain focused and dedicated, and to receive mentoring critical to their continued academic success. In addition, faculty and staff that directly support LSAMP at both San Jacinto College and Houston Community College are revered by Scholars, and serve as essential role models, particularly amongst first generation college students.”

(Amanda Hackler, External Evaluator)
Good Stress

Remember that not all stress is bad for you. Sometimes it’s a very good thing. Stress can push you to succeed in areas that you believed were off-limits to you. It can propel you to do things that turn out to be great adventures. It can spur you to study harder, work longer hours, focus more on the things that matter, and take your good health into your own hands.
Your Turn...

With the other people at the table share “community-type” activities you have used to help students succeed in your course. Put your ideas on a notecard.
Community of Experience: STEM Outreach Activities

Volunteer for STEM Activities and Partnerships

- MindTrekkers
- US FIRST Robotics
- STEM Expos
- Workshops
“... volunteerism in FIRST robotics programming and Mind Trekkers activities contributed to feelings of fulfillment amongst San Jacinto College LSAMP Scholars.”

“Mentoring received by LSAMP Scholars is unquestionably one of the most pertinent components of this program. LSAMP Scholars entirely new to the landscape of higher education sought academic support from San Jacinto College faculty and staff. As a result of the mentoring received, LSAMP Scholars were more likely to persist at San Jacinto College, and within their selected academic major.”

(Amanda Hackler, External Evaluator)
CoE Student Voices

Ju-Juan Morin

Dalyn Velazquez
With the other people at the table share “community-type” activities you have used to help students succeed in your course. Put your ideas on a notecard.
Community of Research: STEM Research Projects and Internships

Student participation STEM research projects/internships

Sum ’19 – 6 presentations, 15REUs
Spr ’20 – 9 research projects
Sum ’20 – 4 virtual REUs
Fall ’20 – 3 virtual presentations
Spr ’21 – 15 presentation, 5REUs
Sum ’21 – 9REUs
Community of Research: STEM Research projects and internships

Summer Internships
- International
- National
- Local
- Home

San Jacinto College

Carnegie Mellon University
NASA
University of Houston
Rice University

An Equal Opportunity Institution
"LSAMP Scholars spoke with great confidence about their selected research projects, and strategies for overcoming perceived obstacles. Undoubtedly, these research projects instilled confidence in each LSAMP Scholar, and will contribute to their success as they transition into four-year institutions."

"Repeatedly, LSAMP Scholars described the meaningfulness of research opportunities that allowed each to acquire invaluable insight. Research opportunities offered via LSAMP not only immersed students in advanced fields of academic study, but also contributed to increased Scholar self-efficacy. On numerous occasions, Scholars descriptively articulated a scenario that required their intellectual capability to overcome, and the feelings of self-confidence they experienced thereafter. These experiences have not only bolstered the research aptitude of LSAMP Scholars, but also solidified self-efficacy, that will likely lead to greater retention within STEM academic degree fields."

(Amanda Hackler, External Evaluator)
CoR Student Voices

LSAMP Intern
Robot Build
With the other people at the table share “community-type” activities you have used to help students succeed in your course. Put your ideas on a notecard.
Classroom Community Ideas

Study groups/discovery lessons
Service Projects, robots
STEM outreach – Lomax
Tutoring
Group created learning activity
Kahoot, Video etc.
More Community Ideas

- Create event nights for area elementary/middle/high schools
- Contact US FIRST in your community to volunteer
- Host speaker series
- Connect CC with university to host open house or tour
- Form a book club
- Create social events
- Offer workshops at interesting spaces
- Faculty Mentors
- Peer Tutoring
More Community Ideas

It’s your turn
FOCUSED San Jacinto College on STEM students

• Changing Environments = Changing Students

• Examined patterns of enrollment and transfer

• Became willing to reconfigure –
  What we did
  How we did it
  For whom we did it
Q & A

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This is why we do it!
Building Community to Support Under-Represented Students

AMATYC 2021

Sharon Sledge and Bryan Melton, San Jacinto College
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The presentation provided details on how creating a Community of Scholars engaged underrepresented STEM community college students socially and academically - inside and outside the classroom - to increase the number who transfer to four-year institutions for baccalaureate degrees.

The Community of Scholars helps create an atmosphere that feels like home away from home and provides a sense of belonging that impacts the student's attitude, engagement and persistence.

Research is helping to shape the Community of Scholars within the HCCCA NSF LSAMP B2B, Award #1911317. This grant is studying the impact of community networks on STEM majors’ success. In addition, the HCCCA study is looking at ways to improve the STEM transfer success rate. Below is a sampling of studies on the use of communities to help students succeed.