



EXCEL

CSULB

EXCEL LEARNING COMMUNITY

For
Transfer
Students

**ENSURING
SENSE OF
BELONGING
IN FIRST
YEAR STEM
TRANSFER
STUDENTS**

DR. ERIC MARINEZ, PROGRAM DIRECTOR
HELEN BARRIERE, PROGRAM MANAGER
DR. ERIKA KATO, EVALUATOR



HSI-STEM SI PUEDO @ CSULB

Mission

- Hispanic Serving Institution – Science, Technology, Engineering, and Mathematics (CSULB HSI-STEM) *Sí Puedo* grant at California State University, Long Beach will foster Latino and low-income student success by providing culturally relevant enhanced learning opportunities and STEM specific academic support.

Background

- Entitled *Sí Puedo*, Strengthening the Impact by Providing Undergraduate Educational Development Opportunities, is the second Title III, Part F HSI-STEM and Articulation Programs grant awarded to CSULB for the purpose of supporting Latino and low-income students pursuing STEM degrees.

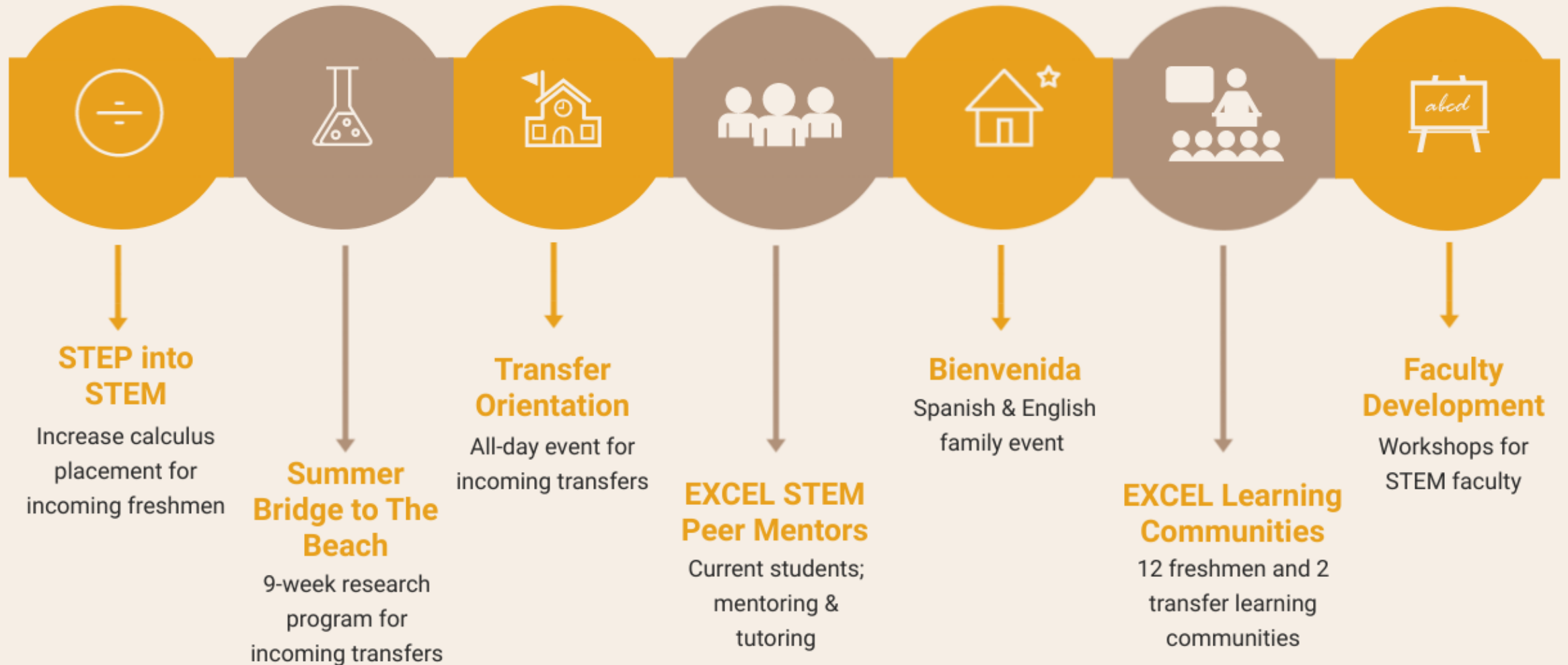
GRANT AIM & GOALS

- **AIM:** To close the achievement gap in STEM baccalaureate degree attainment for Hispanic and other low-income students.
- **GOALS:**
 1. Improve student academic success;
 2. Improve timely degree completion and retention;
 3. Increase degree attainment; and
 4. Develop model transfer programming.

LEARNING OUTCOMES

- Offer
 - Insights into how to best serve STEM transfer students at a 4-yr HSI institution.
- Discuss & Share
 - Designing and implementing a transfer learning community and a first-semester transfer student success course that fosters professional, academic, and career development.
 - Showcase the impact of the program through surveys, focus groups and institutional research data.

CSULB HSI-STEM Sí Puedo Programming



HSI-STEM PROJECT TEAM

- Eric Marinez, Ph.D., Project Director, Associate Professor, Department of Chemistry & Biochemistry
- Tracy Maples, Ph.D., Co-Project Director, Associate Dean, College of Engineering
- Kris Slowinski, Ph.D., Co-Project Director, Associate Dean, College of Natural Sciences & Mathematics
- Helen Barriere, MS, Program Manager
- Lark Crumpler, Student Programs Coordinator
- Nancy McQueen, MA, Administrative Coordinator
- Natalia Gatdula, MPH, Fiscal Manager
- Evaluation: Erika Kato, Ph.D., Project Director, Center for Evaluation and Educational Effectiveness

SOME FACTS REGARDING TRANSFER STUDENTS

- 33% of transfer students in STEM switched to a non-STEM major soon after being admitted into a four-year institution (Chen, 2013; Fematt et al, 2019).
- First-year transfer students tend to be unfamiliar with the resources on campus (e.g., counseling, student centers and/or organizations) (Fematt et al, 2019).
- 7 in 10 Latino students in California start their education at a community college (Gándara et al, 2012).
- Many first semester transfer students experience “Transfer Shock” or an initial dip in GPA (Hills, 1965).
- Fortunately, most students recover from transfer shock (Dennis et al, 2008).

Fall 2019 Admissions At A Glance: Transfer Students



Tip: Hover over charts for additional detail

Select Student Type

Select Students Who

Select Term

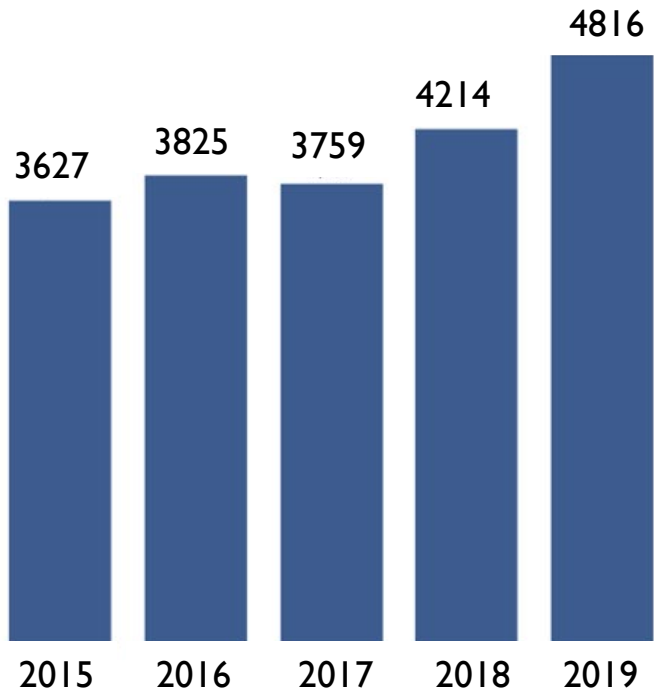
Select College

Transfer Students | Enrolled | Fall 2019 | (All)

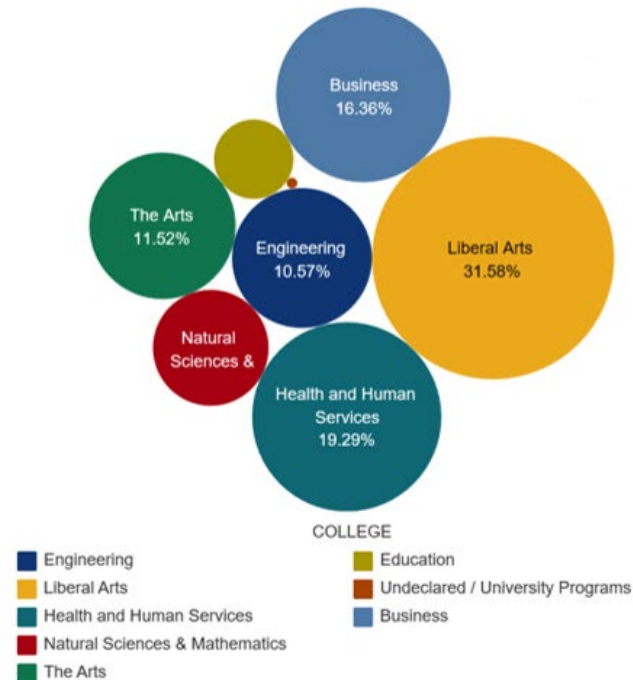
Applied	Admitted	Admit Rate	Enrolled	Enrollment Rate
35,202	13,199	37.50%	4,816	36.49%

Transfer Students @The Beach

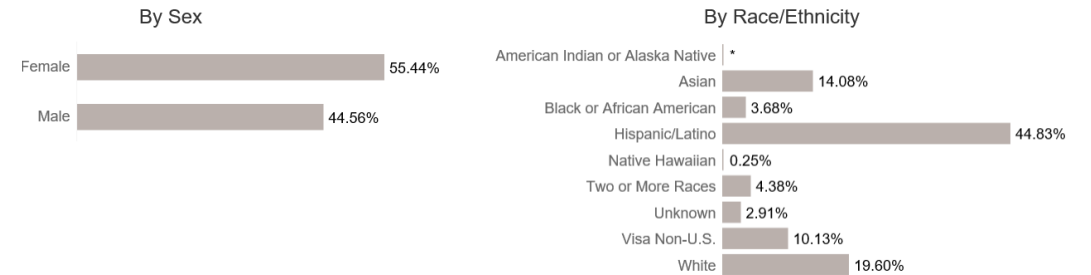
Total Who Enrolled: Transfer Students
College: All



Transfer Students Who Enrolled in Fall 2019



Demographic Breakdown of Transfer Students Who Enrolled in Fall 2019
College: All



Fall 2019 Admissions At A Glance: Transfer Students

Tip: Hover over charts for additional detail

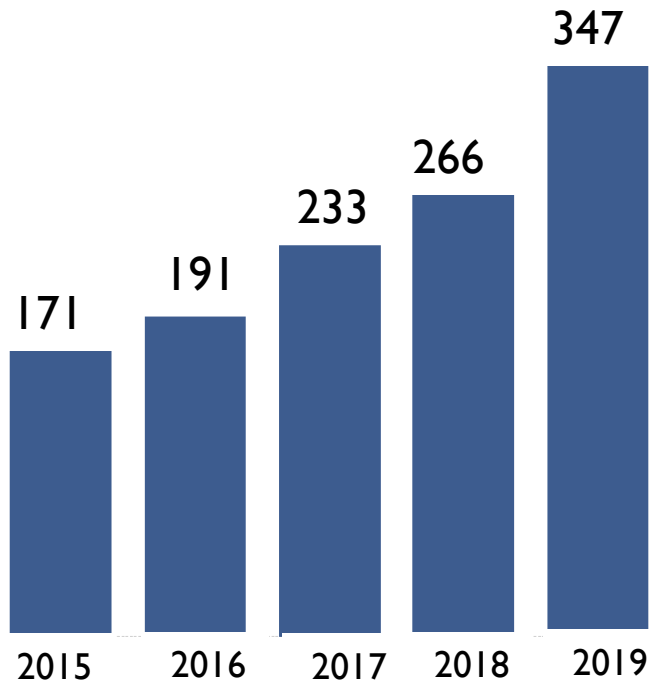


College of Natural Sciences & Mathematics

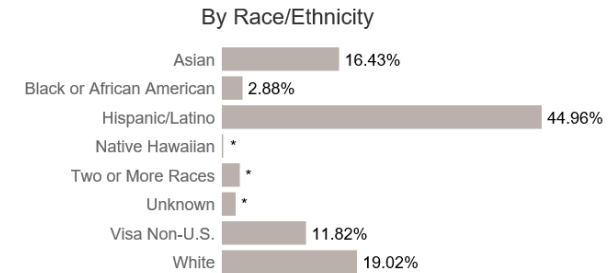
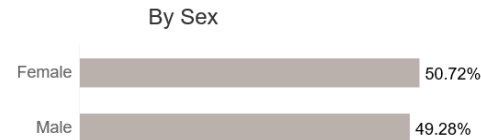
Select Student Type: Transfer Students | Select Students Who: Enrolled | Select Term: Fall 2019 | Select College: Natural Sciences & Mathematics

Applied	Admitted	Admit Rate	Enrolled	Enrollment Rate
2,179	1,231	56.49%	347	28.19%

Total Who Enrolled: Transfer Students
College: Natural Sciences & Mathematics



Demographic Breakdown of Transfer Students Who Enrolled in Fall 2019
College: Natural Sciences & Mathematics



Fall 2019 Admissions At A Glance: Transfer Students

Tip: Hover over charts for additional detail

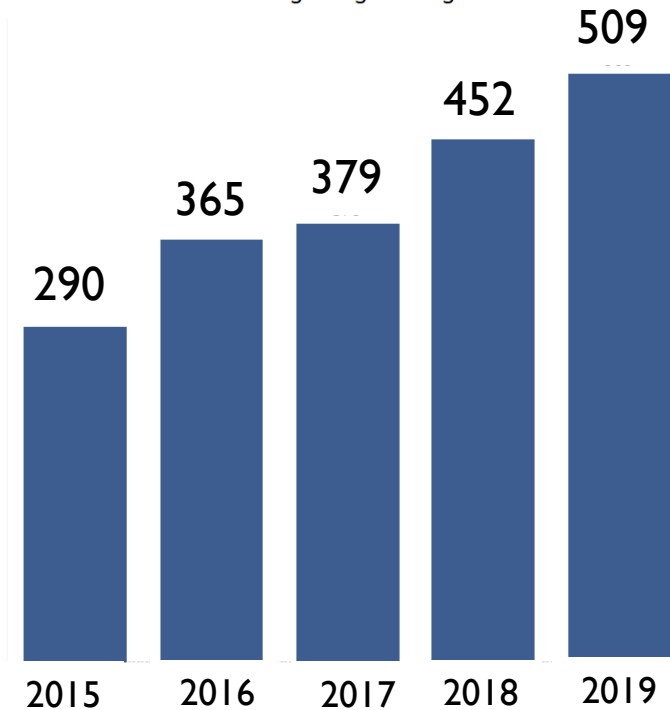


Select Student Type: Transfer Students | Select Students Who: Enrolled | Select Term: Fall 2019 | Select College: Engineering

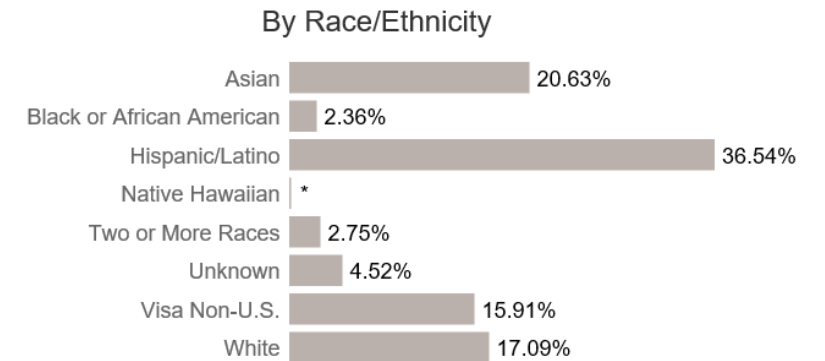
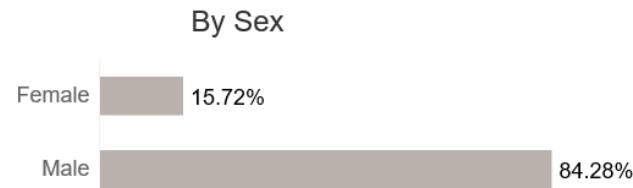
College of Engineering

Applied	Admitted	Admit Rate	Enrolled	Enrollment Rate
3,721	1,612	43.32%	509	31.58%

Total Who Enrolled: Transfer Students
College: Engineering



Demographic Breakdown of Transfer Students Who Enrolled in Fall 2019
College: Engineering



STEM STUDENTS @ THE BEACH

- Assessing a Need for Transfer Support Programs:
 - Growing STEM Transfer population @ CSULB
 - **COE:** 28.3 % to 34.4% of Incoming Fall population
 - **CNSM:** 25% to 35% of Incoming Fall population
 - Limited programs available to transfer students
 - More likely to complete degree attainment but are they connected to the campus and their major?

EXCELLENCE THROUGH A COMMUNITY OF ENGAGED LEARNERS (EXCEL) TRANSFER LEARNING COMMUNITY

GOAL: First-year experience aimed to increase campus connectedness, social belonging and academic preparedness, confidence, and persistence.

- 2 sections offered (50 students, 25 per section)
- One semester (Fall & Spring)
- Composition of LC:
 - Transfer introductory course (NSCI 390)
 - Community Building opportunities
 - One-on-one meetings with peer mentor (4 per semester)
 - Access to student success workshops

NSCI 390

- 1 Unit STEM Transfer Success Course.
- Open to first-semester STEM Transfer students.
- Taught by STEM Faculty Professor
- Focuses on academic, professional and career development
- Students are matched to a STEM Transfer Peer Mentor.
 - One-on-one meetings with peer mentor (4 per semester)
 - Student success workshops
 - Student success hour

NSCI 390 CLASS THEME REVIEW

Cultivate Community

Metacognition

Student Success in STEM

Professional Development

Exploration of STEM; Majors & Career

NSCI 390 COURSE/PASSPORT

NSCI 390 - Experience Success Program for STEM Transfer Students
SUCCESS STRATEGIES, CAMPUS RESOURCES AND CAREER AWARENESS
FOR CNSM/COE TRANSFER STUDENTS

Fall 2017

TUESDAY: 5:00-5:50 PM (HSICI 103)

Instructor Information	Office	Phone	Office Hours
Dr. Eric Martinez eric.martinez@csulb.edu	MLSC 336	562-985-7773	M: 12:00 - 1:00 pm, Tu: 11:30 am - 12:30 pm, Or by appointment

COURSE OBJECTIVES

This course was developed to acclimate CNSM/COE transfer students to CSULB and to foster academic, career, and professional development as a strategic effort to your success both at CSULB and post-graduation. The course activities are designed to familiarize students with the Institution, the College of Natural Sciences and Mathematics, and the College of Engineering by building a support system for student success. The course activities are also intentionally designed to connect you to the vast opportunities for engagement to affect your development as the newest member of the Beach. The course will prepare and build your academic, professional, and career development so that you can ultimately measure success with a valued degree that permits both current and potentially new opportunities. The course also aims to facilitate the opportunity to build a STEM network of peers, staff, and faculty who can support you as you begin your academic journey at CSULB. You should gain knowledge of career choices that you may aspire to pursue and the pathways that will get you there.

This class is a component of the "STEM EXCEL Transfer Learning Community" funded by the U.S. Department of Education HSI-STEM grant that works concertedly with the College of Engineering and the College of Natural Sciences and Mathematics. The transfer learning community also provides peer mentoring that will help you succeed as a STEM student. As a member of this one-semester, cohort-based learning community you are required to meet with your matched EXCEL peer mentor 5 times throughout the semester (about once a month), and you are strongly encouraged to take full advantage of all resources that are integrated within the course activities and Student Success Hour.

I congratulate you on officially being a member of the Excellence through a Community of Engaged Learners (EXCEL) Transfer Learning Community!

EXCEL Peer Mentors:

Name	Major	Email	Office Hours/Location
	Biology		Th 5:00 - 5:50 p.m. SSPA.006
	Biochemistry		Th 5:00 - 5:50 p.m. SSPA.006
	Biomedical Engineering		Th 5:00 - 5:50 p.m. SSPA.006



Name _____ NSCI390 Passport to Success!

Over the course of the semester you must complete 6 of the tasks on the list below. The first two activities are mandatory and worth 75 pts each. Select 4 additional activities from the list that are each worth 25 pts. Please get them signed-off and return the completed passport to your instructor by the end of the semester.

STEM Activity	Date	Printed Name	Verification Signature
Mandatory			
*Attend a Student Success Hour Session (required: 75 pts)			
*Attend ALL 5 mentor meetings with your assigned mentor (required 75 pts)			
Applicable to ALL STEM Fields			
Attend HSI-STEM Bienvenida Saturday, September 23 from 8:30 a.m. — 2:00 p.m. at CSULB The Pointe (https://web.csulb.edu/programs/hsi-stem/bienvenida/)			
Attend an HSI-STEM Sponsored Workshop (Emerging Leaders in STEM or Ego Is Everything)			
Attend the CNSM Student Research Symposium Friday, September 15th from 10:00 a.m. — 1:00 p.m. in the University Student Union (USU) Ballrooms A & B			
Attend the HACU STEM Summit, Wednesday, September 27, 8:00 am — 4:00 pm at University Pyramid; Please register by Friday, September 22 at www.hacu.net/STEMSummit			
Attend a CNSM/COE Club Meeting or College Council Meeting			
Meet with a professor to find out about their research			
Most Applicable to Natural Sciences and Mathematics Students			
Go to a CNSM SAS Center workshop (Pre-Health Pathways, Public Speaking Using Improve to Improve, Research Symposium)			
Attend a CNSM/COE Department Seminar/Colloquium			
Most Applicable to Engineering Students			
Attend the Engineering job fair Wednesday, September 20, 12:00-4:00pm. University Student Union http://www.careers.csulb.edu/students/workshops_and_events.htm			
Attend a workshop for the Office of Professional Development and Internships (College of Engineering) ECS-601 and ECS-603			

*Required activity

- Tailored to STEM Transfer Student Needs
- Grading focused on active participation in class and on campus
- Emphasis on accountability
- Student assignments geared towards active engagement and connecting with campus resources

FACULTY MENTORSHIP

- Office hours + one on one appointments
- Professional development oriented class & assignments
- Pulls from both faculty and PM Experiences
- Interview a faculty in their major assignment

EXCEL PEER MENTORS

GOAL: Offer near peer role models to incoming transfer STEM students in their first semester in an effort to provide academic and social support.

Who are They

- Upper Division STEM students
- Previous Transfer Students
- 2.8 major, 3.0 cumulative GPA
- Ability to tutor
- Desire to mentor
- Integrated into campus and STEM culture
- Resilient – have overcome academic challenges

Peer Mentor Role

- Attend NSCI 390
- Facilitate one-on-one mentorship meetings
- Facilitate community building events
- Tutor for the College of Engineering or College of Natural Sciences and Mathematics
- Assist with program and college academic and social events



ONE-ON-ONE MENTORSHIP MEETINGS

Structure

- Structured meetings
 - Students must meet by specific deadlines
 - Tailored to meet each individual mentee need
 - Each meeting builds off the last meeting
- Consistent support
 - Meet at a time, date, and location that works for both mentee and mentor; always on campus
 - 4 times in the semester
- Mentor submits meeting reflections after each meeting

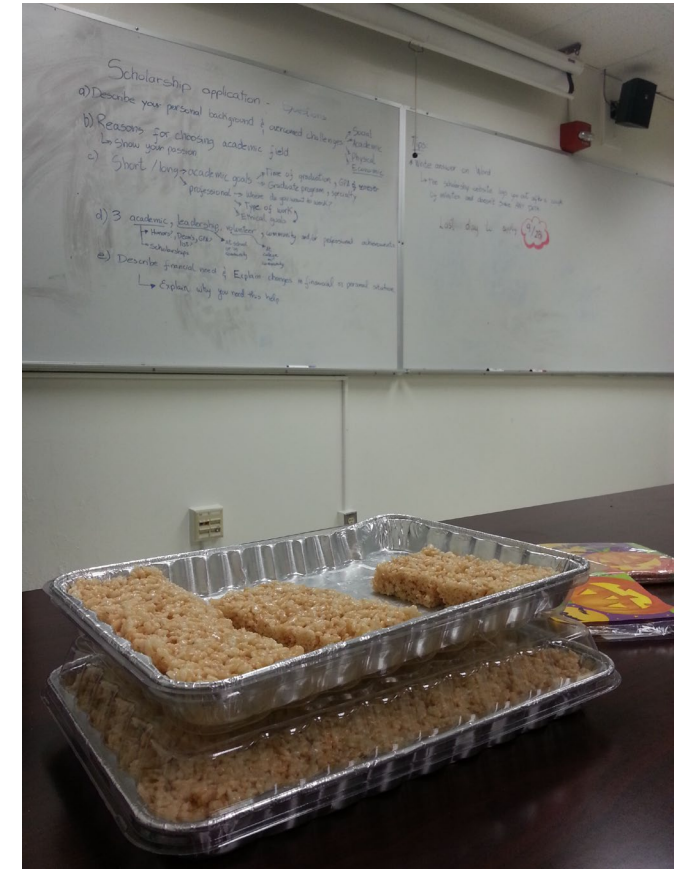
Meeting topics

- Academics – course load
- Study habits/skills
- Student involvement
- Referrals to student services
- Goal setting

COMMUNITY BUILDING

Social Hours

- Time is set apart outside of class to encourage students to meet in social settings as a group.
- PMs take the lead in coordination of activities.
- HSI-STEM Team supports
- Attendance has remained steady



STUDENT SUCCESS WORKSHOPS- PROGRAM SPECIFIC CULTURALLY RELEVANT WORKSHOPS

HSI-STEM PRESENTS: STEM WORKSHOP SERIES



These FREE workshops will cover a series of STEM related topics that can help you achieve your personal and academic goals each semester.

DATES & TOPICS

I-E-O Emerging STEM Leaders*
Monday, October 16, 2017
5:00 p.m. - 6:00 p.m. SSPA 006
Friday, October 20, 2017
12:00 p.m. - 1:00 p.m. VEC 217

Dear Self: Thriving in Year One
Thursday, October 26, 2017
12:00 p.m. - 1:00 p.m. USU 305
Friday, October 27, 2017
12:00 p.m. - 1:00 p.m. VEC 217

Strengths & Values*
Monday, November 6, 2017
1:00 p.m. to 2:00 p.m. USU 303
Friday, December 1, 2017
12:00 p.m. - 1:00 p.m. VEC 217

Stressing Less for STEM Students*
Monday, November 13, 2017
1:00 p.m. - 2:00 p.m. USU 304
Friday, November 17, 2017
12:00 p.m. - 1:00 p.m. VEC 217

Must RSVP: Open to all EXCEL/FSLC Students
Questions: hsi-stem@csulb.edu
*Can count towards Leadership Academy Credit



HSI- STEM Culturally Relevant Workshops

- ❖ Digging into My Strengths
- ❖ Stressing Less as a STEM Student
- ❖ Emerging STEM Leaders

INTERVIEW A STEM PROFESSOR

Assignment completed in NSCI 390; an opportunity for STEM students to connect with faculty.

Objective:

To increase sense of belonging at CSULB among NSCI 390 Students by connecting faculty to STEM student.

Description:

Students are tasked with interviewing a STEM professor at CSULB following a script of questions that address how did they decide to pursue a Ph.D. and career, current research interests and how to get involved in research, and general advice for an undergrad, career guidance and how the profession is changing

Purpose:

To help students develop their STEM identity (as a STEM major and a STEM professional), recognize that faculty may not be too different from them, and develop relationships with STEM faculty members for letters of recommendation, relationship building.

DEAR SELF ASSIGNMENT

Assignment completed in NSCI 390; a sense of belonging intervention incorporated into the curriculum.

Objective:

To increase sense of belonging at CSULB among NSCI 390 Students.

Description:

The Peer Mentors had been given the exercise in their summer training and were familiar with the process. Staff read through the letters, selected themes, and PM's were invited to meet with program staff to discuss the proposed intervention with the transfer NSCI 390 class.

Purpose:

Further increase students' sense of belonging through a reflective activity with peer mentor support. This closes out the semester with their peer mentors, NSCI 390 faculty, and their class peers.



EVALUATION & FINDINGS

ERIKA KATO, PH.D.

CENTER FOR EVALUATION AND EDUCATIONAL EFFECTIVENESS



EXCEL EVALUATION

Online pre-survey

- Administered first week of semester

Online post-survey

- Administered last week of semester

Focus groups

- Held at end of semester

IR data

- At entry and term-to-term data

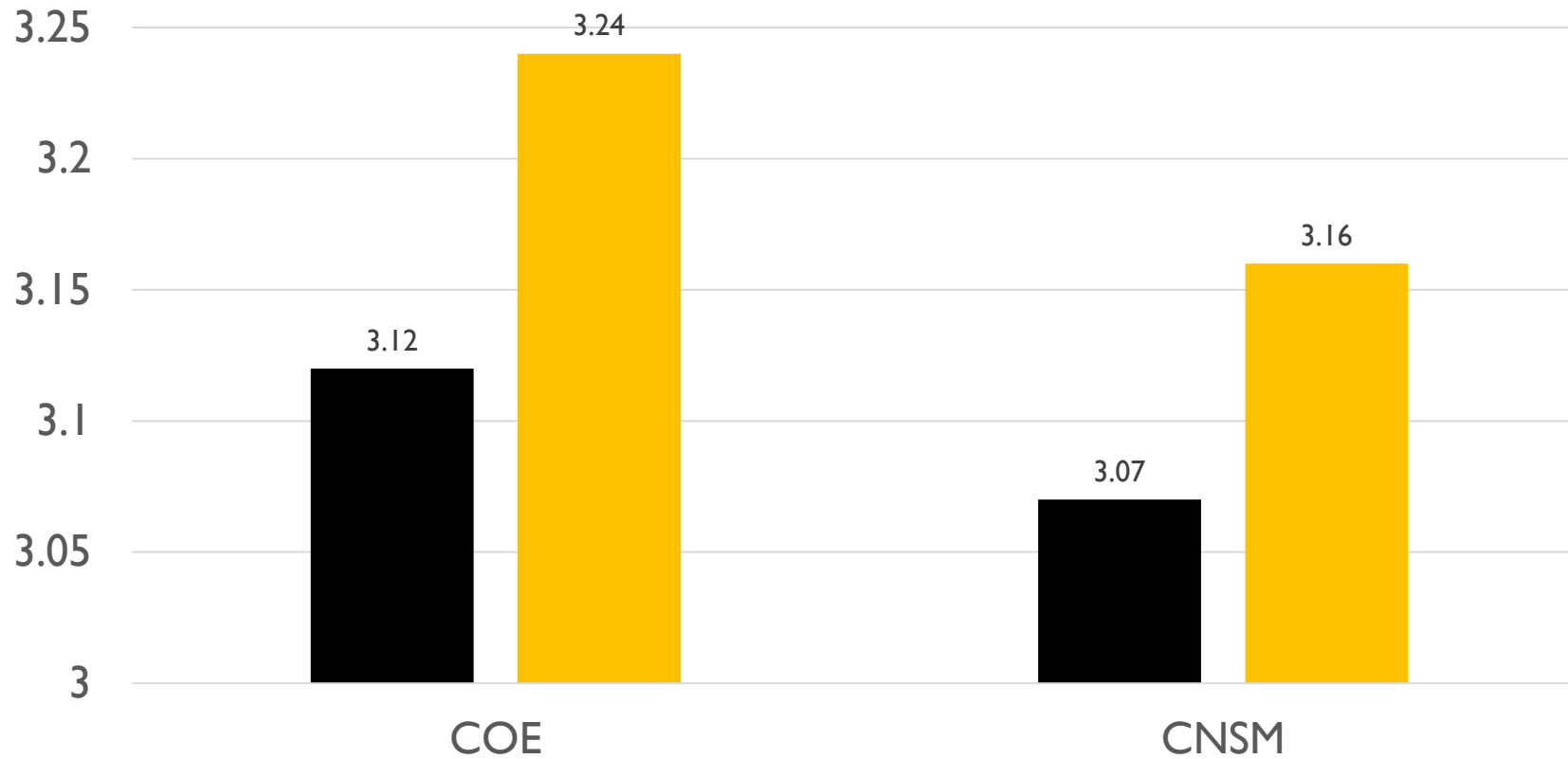
EXCEL TRANSFER LEARNING COMMUNITY STUDENTS

	Fall 2017 (N = 42)	Spring 2018 (N = 7)	Fall 2018 (N = 47)	Spring 2019 (N = 17)	Fall 2019 (N = 47)
Female	47.6%	28.6%	40.4%	52.9%	44.7%
Pell Eligible	78.1%	71.3%	70.2%	70.6%	Data pending
Hispanic/Latino	66.7%	57.1%	53.2%	58.8%	72.3%
Age (Mean & Range)	24.8 [20 to 49]	23.7 [21 to 27]	25.9 [20 to 45]	27.5 [20 to 37]	23.8 [19 to 32]
First Generation to Attend	59.5%	Unknown	63.8%	41.2%	68.1%
Participated in Summer Bridge to The Beach	20 (47.6%)	N/A	22 (46.8%)	N/A	27 (57.4%)

EXCEL TRANSFER LEARNING COMMUNITY STUDENTS

	Fall 2017 (N = 42)	Spring 2018 (N = 7)	Fall 2018 (N = 47)	Spring 2019 (N = 17)	Fall 2019 (N = 47)
Engineering	8	2	17	3	21
Computer Science	2	2	3	0	3
Sciences	22	2	23	12	19
Mathematics	0	1	4	2	4

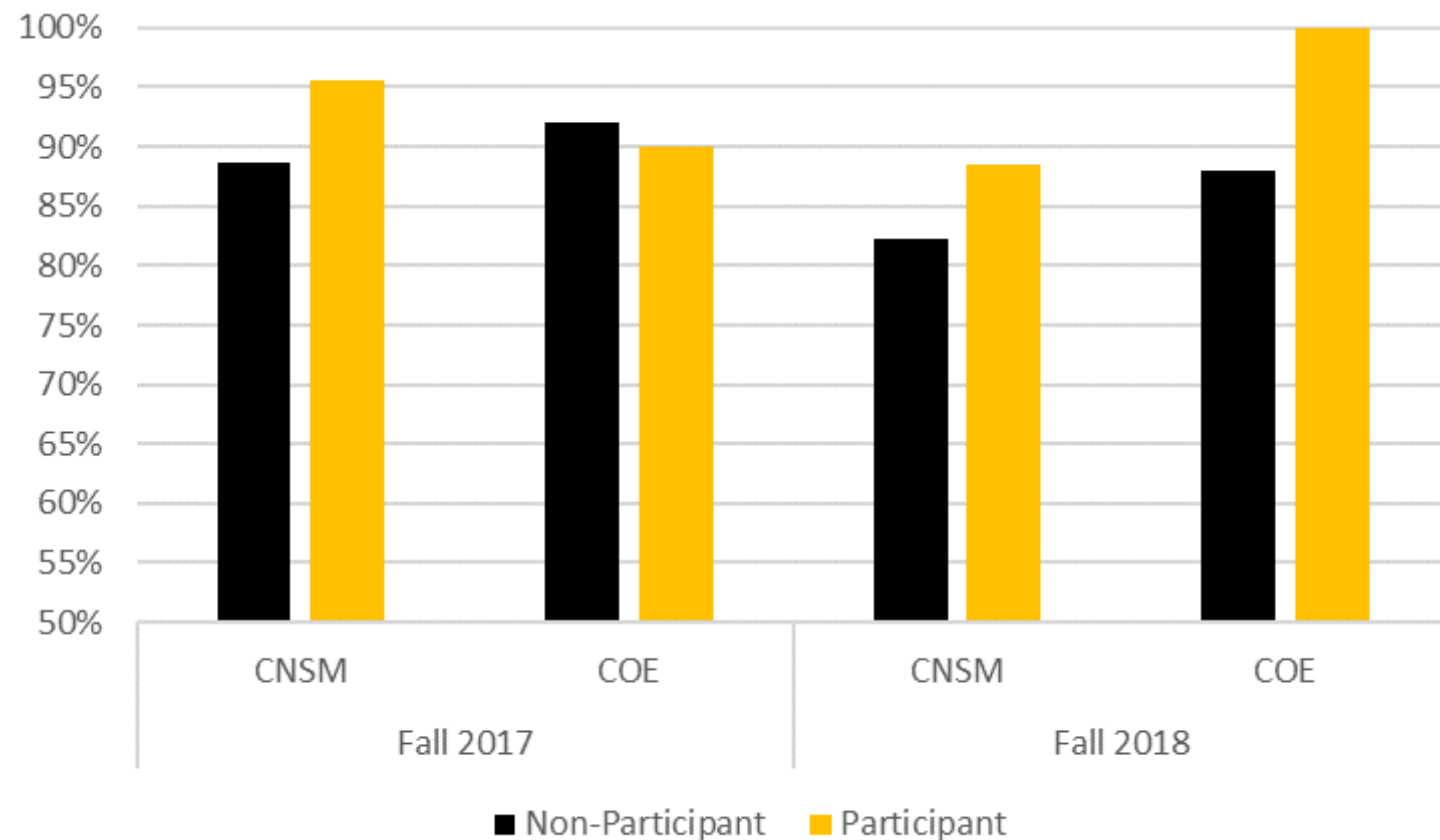
TRANSFER: AVERAGE FIRST-YEAR GPA



Cohort: Fall 2017

■ Non-Participant ■ Participant

TRANSFER: FIRST-TERM % GOOD ACADEMIC STANDING



Cohort: Fall 2017 & Fall 2018

EXCEL TRANSFER LEARNING COMMUNITIES

Fall 2018 Report

47

Incoming transfer students participated in the survey.

PURPOSE

The purpose of this learning community is to offer a semester-long one-unit course to incoming transfer students. The program is used to create a community among new STEM transfer students, increase their sense of belonging to the campus, increase their STEM identity and academic confidence, and provide them with the resources and supports they need to be successful in their first term at CSULB.

KEY FINDINGS

50%

STEM DIVERSITY

- At least 50% of participating students are Latino and/or low-income.

Post-Survey response

96%

SENSE OF BELONGING

- 96% of students agreed with the statement "I made friends at CSULB."

Post-Survey response

91%

ACADEMIC CONFIDENCE

- 91% of students agreed with the statement "I feel more prepared to take STEM classes at CSULB."

Post-Survey response

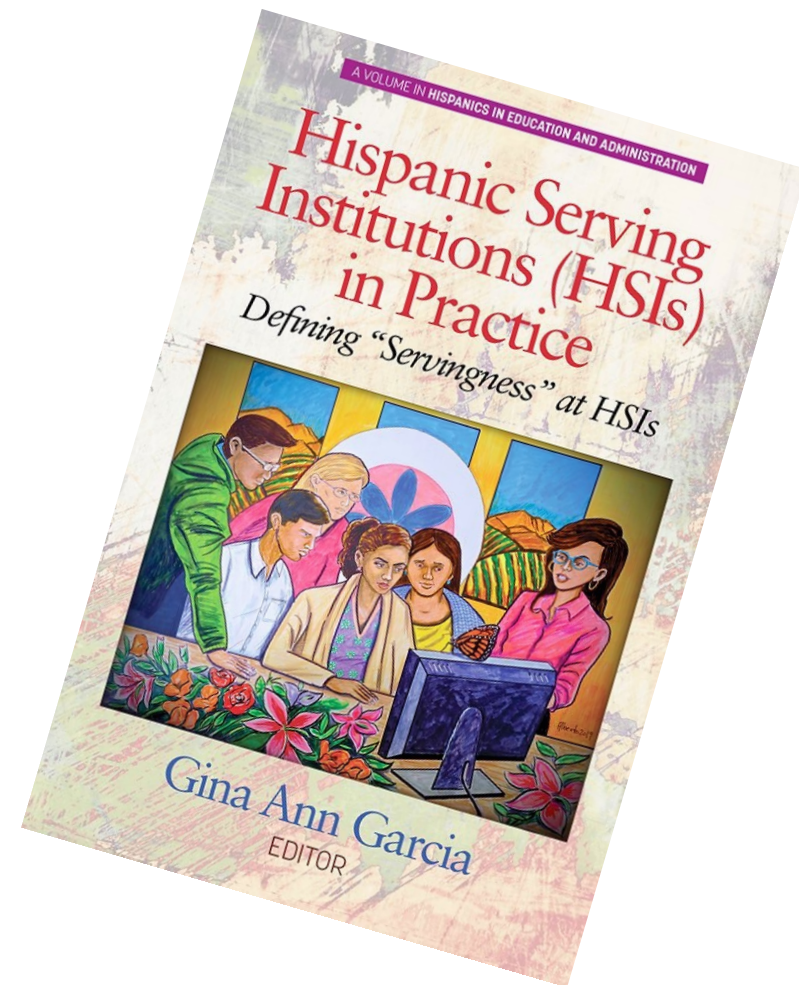
TRANSFER: SENSE OF BELONGING

“Just being part of this class, because we all went together to all of these buildings and events and things, it made you feel like you **belong to a group**. The College of Engineering is huge, the College of Science is huge, so just having this small group, **you felt like you belong somewhere** in these giant buildings.”

– CNSM Transfer, Spring 2019, Hispanic/Latino, Female

BOOK CHAPTER ON SENSE OF BELONGING

- Kato, E. E. B., & Marinez, E. (2019). Serving students in summer programs and learning communities: Sense of belonging for STEM transfer students. In G. Garcia (Ed.), *HSIs in practice: Defining “servingness” in HSIs*. Charlotte, NC: Information Age Publishing Inc.



TRANSFER: STEM CONFIDENCE

“I have gained confidence in **believing I am in the correct major**. As well as knowledge for a lot of school resources.”

– CNSM Transfer, Spring 2019, Hispanic/Latino, Female

“The community here gave me **study partners** to help me keep up and **talking with professors more confidently** helped me ask when I needed something.”

- CNSM Transfer, Fall 2018, Hispanic/Latino, Female

EXCEL STEM PEER MENTORING

“[My mentor] was super motivated. He was like a superstar...Being friends with him and having him as **my peer mentor inspired me to go further and to be more involved in school.** Every time I'd link up with him **I would want to have things done, to impress him, to go the next level. He inspired me.**”

- COE Transfer, Fall 2019, Hispanic/Latino, Male

DISCUSSION

- What type of Transfer Programming support does your campus have?
 - What are the student populations being served?
- How does your campus measure Transfer student success?
- What are the findings? Successes? Challenges?



QUESTIONS?



THANK YOU!