Brief agenda for 1 Oct 2018; 9-10 am; NHE 113 HSI STEM Steering Committee

Part A: Follow up from last month's meeting:

- 1. Subtask groups. (9-9:10) Action Item: Leads take responsibility for assembling task group before next Steering Committee meeting See attachment #1
- 2. Review & discussion of input from "next steps" homework (9:10-9:20). See attachment #2
- 3. New metrics: pace of STEM degree completion (9:20-9:30). Discuss progress. Action item: assemble short term team to examine what we can extract from canvas
- 4. Brief report on ateneos (Amber, Fernando) (9:30-9:35)

Part B: New work

- 1. Review of 1st year retention data (just in! 9:35-9:40) See attachment #3. Deeper diver next meeting.
- 2. A focus on Summer Immersion (9:45-10:00)
 - a. Purpose & intent. See attachment #4
 - b. Feedback & analysis of 2018 Summer Immersion
 - a. Survey results See attachment #4
 - b. Commendation & Recommendations See attachment #5
 - c. Sustainability
- 3. Budget update See attachment #6
- 4. Next month deeper dive into retention, longer-term results, and progress/resilience measures. Possible scaffolding for 2nd yr support

"Therefore, our proposal addresses **Absolute Priority 1** by involving student centered services designed to improve academic success, retain students in STEM fields, and move them efficiently through degree completion. The components also address **Absolute Priority 2**, by increasing the number of Hispanic and low-income students attaining STEM degrees, and developing model transfer and articulation agreements between two-year HSIs and HSU in STEM fields. Two of the core components also align with **Competitive Preference Priority 2**. Specifically, we show that our plans for (a) place based learning communities and (b) tutoring with retrieval practices are rooted soundly in studies meeting conditions set out in the definition of "evidence of effectiveness" (Sommo et al. 2012, Karpicke and Blunt 2011)."

The HHMI Inclusive Excellence Grant complements HSI STEM by funding activities designed to build institutional capacity to effectively engage all students in the sciences throughout their undergraduate years, especially those who come to college via nontraditional pathways. Through this initiative, HHMI supports colleges and universities in implementing activities that will lead to deep and sustained change in the institution's capacity for inclusion. The expectation is that through the iterative and challenging work of: (1) being simultaneously conscious and critical of current ideologies, systems, and practices that disproportionately marginalize some; and (2) acquiring and implementing new knowledge, perspectives, and competencies that lend themselves to the kind of inclusive mindsets and leadership stances that inextricably link the domains of inclusion and excellence, we will achieve transformative institutional change that improves and transforms institutional policies, infrastructure, and culture.

Attachment #1

Task Groups for HSI STEM Steering Committee

There is too much ground to cover to receive steering input on all aspects of the grant once per month. These groups will meet an additional ~2 times per semester with other key partners not on the steering committee (suggestion in parentheses). The purpose of these meetings is to (a) provide updates, (b) gather feedback, and (c) collaboratively gather steering input to bring back to project leaders and the larger HSI STEM Steering Committee. Here are groups we used last year, seeking input on adding or deleting groups, and volunteers

PBLCs

Kat Goldenberg
Matt Johnson
Amy Sprowles
Rock Braithwaite
Alex Enyedi
Monty Mola
Dan Saveliff
Raven Palomera

Math reform
Bori Mazzag
Steven Margell
Dale Oliver
Amy Sprowles
(Sonja Manor)

Expand & enhance
tutoring
Matt Johnson
Rick Zechman
(Su Karl)
Steven Margell
(Cyril Oberlander)

	INICO
	Matt
Streamline transfer	Facu
pathways	Amy
Sarah Bacio	Chei
Margaret Lang	Laur
Matt Johnson	Neiv
(Steve Ladwig)	(Enc

Student groups, CAEs, etc.
Lauren Enriquez
Amber Rivas
Fernando Flores
Amanda Ramos
Fernando Paz
Nicole Ryks
Matt Johnson

Faculty training
Amy Sprowles
Cheryl Johnson
Lauren Enriquez
Neivita Watts
(Enoch Hale)

"Next Level" ideas...

Main & most common ideas

- Challenge idea of what it means to "STEM major"; embrace other interests (art, music, hobbies unrelated to STEM/major, etc.)
- More deliberately connect students to interest groups/communities NOT affiliated with major or discipline or STEM.



- More collaboration with CCAEs, especially for example with students from CCAEs in the summer immersion.
- Intentional faculty development (inclusive teaching strategies trainings, racial equity training, dialogues, and tips)
- Intentional student development (socio-emotional trainings like resiliency, emotional intelligence, and racial equity. Multiculturalism in a global society, STEM and race, etc)
- Thoughtful staffing (faculty) choices; more faculty training to increase pool of appropriate faculty.
- Whole person advising
- Critical mass of faculty in each department who understand equity-minded teaching. Teaching observation rubrics that reinforce this expectation/direction.
- More support for first-gen in particular (SCI 100)
- More support in 2nd year and beyond...more targeted (e.g., student with developmental math, English, URM, etc.)







HSU Retention - AY '15, '16, '17 among Propensity Matched Students



■URM ■Non-URM

HSU Retention (different way of looking at same data)



Deeper dive next meeting...

URM STEM Students











Summer Immersion Recommendations & Commendations

Recommendations

- Existing preparation training for staff and faculty should be expanded to more purposefully prepare/train student staff and faculty on cultural humility and respect prior to Summer Immersion; should be led by campus resources and staff that are experienced in these topics and trainings
- Better prepare participating students for visits to cultural sites
- More training for newly-arriving students in general would help; perhaps flip order of Summer Immersion and Freshmen Orientation
- Build working relationships between student staff and Faculty Directors in advance of immersion
- Prepare Faculty to understand the purpose of each distinct staff and student-staff role
- Revise lab activities to be more equity-minded (esp. in KC): better accommodate students with little to no lab experience; select and train faculty leads accordingly
- Student composition of some PBLCs not as diverse as they could be; go to opt-out
- Better communication with Athletics about conflicting schedules
- Separate PBLC welcome from Check-in for Housing Move In (too cluttered, students don't retain information, disrupts room "flow")
- Explore novel ways to make sure students absorb the information sent to them about Immersion and mandatory activities prior to their arrival
- Determine action students for not attending Immersion; "catch up" for students with excusable absence
- Determine how to handle major switches during Immersion (especially switching between programs)
- Find deliberate ways to "give back" to the tribes that are devoting time to engage with our students
- Prepare deliberate talking points and guidelines for guest speakers and faculty; ask them to touch on professional background
- Establish final deadline for itinerary changes to aid smoother communication to student staff, faculty, and other collaborators

Commendations

- STEM Welcome Survey results show significant increases in students' self reported sense of belonging, connection, welcome & community, and engagement. Benefits extended similarly to all URM, Low-Income, and their counterparts.
- Feedback from SCI 100 instructors (from student journals & their own experience) indicate students loved the Summer Immersion, created a sense of community; very talkative and engaged students.
- Parent Orientation structure allowed Forever Humboldt more engagement with families. Admissions has interest in emulating this model.
- Nice to have large welcome from Wiyot (Ted Hernandez) and CNRS Dean, despite space issues
- Student feedback indicates that participants valued field trips, hands on experience, and making connections with peers and faculty members
- Informal feedback from parents centered on appreciation for quick replies to phone messages and emails, helpfulness
 of staff and availability of a "one stop shop" for answers, and the organization of move-in/welcome day
- Brookings bus drivers commented that the students were "the most friendly and wonderful group that they have ever driven around," and look forward to collaborating again next year
- Enlisting RAMP mentors as group leaders enables logical organization (by major), reliable and responsible staff, and gives mentors the opportunity to bond with their mentees making it more likely they continue this relationship throughout the year.
- Close EOP collaboration allowed shared students to meet STEM advisor prior to start of immersion
- Having a "floating" staff person available on campus allowed unexpected hiccups to be addressed quickly and in person