

Brief agenda for 7 Sept 2018; 2-3 pm; NHE 113

HSI STEM Steering Committee

1. Brief intros for new members (~2:00-2:10)
2. Components of HSI STEM grant (PBLs, Transfer Pathways, Dev. Math Reform, Enhanced/Expanded Tutoring) & Task Groups (~2:10-2:25); Attachment #1
 - a. DoE absolute priorities & HHMI purpose (see below)
 - b. What do we mean by belonging? (Angelou, Brown, Rendón)
 - c. **Action item: NEXT LEVEL email**
 - d. Previous task groups (see Attachment #2)
 - e. **Action item: Re-establish task groups (any changes?, new members)**
3. Report out on ESCALA (Amy; 2:25-2:35; see attachment #3)
4. Drill down on GPA 2:35-2:45 (see attachment #4)
 - a. **Action Item: identify useful measure of STEM degree achievement (e.g., pace of STEM course completion/progress, grade sequences, STEM GPA?)**
5. Update – STEM Freshmen survey (purpose and response rate)
6. Update – HSI week...ateneos
7. Budget update (see attachment #5)
8. Next month – Summer Immersion report & discussion

*“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.

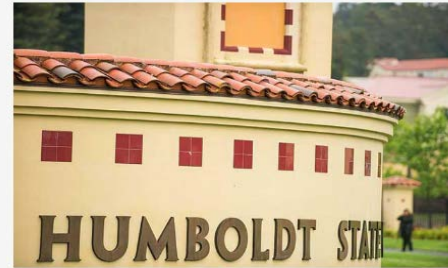
Place-Based Learning Communities



Expanded Tutoring Services



New Pathways for Transfer Students



Reformed Math Instruction

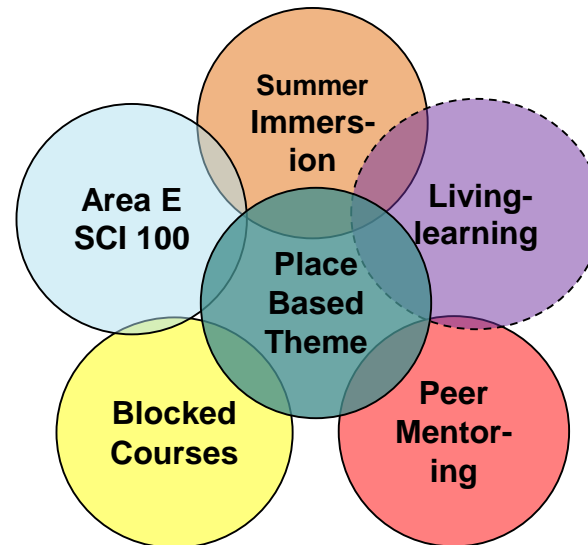


Belonging,
Community, &
Engagement

Skills &
Attitudes

Academic
achievement

Retention &
Graduation



After 3 cohorts of KC...Hispanic students:

- *Stronger sense of belonging (composite MapWorks score of 10 factors of 'belonging & community'; 5.46 vs. 5.07)*
- *More units earned (26.8 vs. 23.5)*
- *Higher 1st year GPAs (2.65 vs. 2.50)...though this is not significant*
- *Higher rates of Gateway course completion; **see attachment #4***
- *Higher 1st year retention at HSU (80% vs. 66%, only 2 cohorts analyzable so far)*
- *Eliminated gap in STEM retention between Hispanic students and their non-Hispanic counterparts in KC (both 76%)*

The Influence of Affirming Kindness and Community on Broadening Participation in STEM Career Pathways

Mica Estrada* Hispanic students
University of California, San Francisco
Fall MapWorks (3 KC cohorts)

Alegra Eroy-Reveles

San Francisco State University

Johanna Quijano

University of California, Berkeley

■ Reference
■ KC

Peer Connections

Social Integration

..Evolutionary and social psychologists find ample evidence that people are more likely to survive and prosper when feeling socially connected...

..There is mounting evidence that HU students' sense of belonging to their academic community is complex and often obstructed...

..The important of STEM learning communities cannot be overstated...

..One more...

“You only are free when you realize you belong no place — you belong every place — no place at all.”



Angelou

It's not the belonging that comes with just joining a group. It's not fitting in or pretending or selling out because it's safer. True belonging only happens when we present our authentic, imperfect selves to the world.



Brown

Rather than imply students should “fit in”, our programs must acknowledge how HU students possess aspirational, linguistic, familial, social, and resistance capital, and affirm those as a source of strength for our universities.



Rendón

How can we go to “the next level”?

Email matt.Johnson@Humboldt.edu subject: “NEXT LEVEL”

PBLCs

- Matt Johnson
- Amy Sprowles
- Kat Goldenberg
- Rock Braithwaite

Expand & enhance tutoring

- Matt Johnson
- Rick Z.
(Su Karl, Cyril Oberlander)

Student groups, CAEs, etc.

- Fernando Paz
- Lauren Enriquez
- Nicole Ryks
- Amber Rivas
- Fernando Flores
- Amanda Agosto Ramos

Math remediation reform

- Bori Mazaag
- Steven Margell
- Dale Oliver

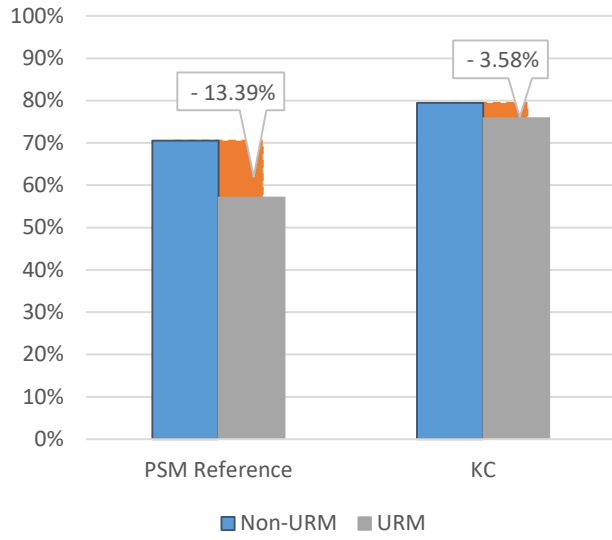
Streamline transfer pathways

- Sarah Bacio
- Matt Johnson
- Margaret Lang
(Steve Ladwig)

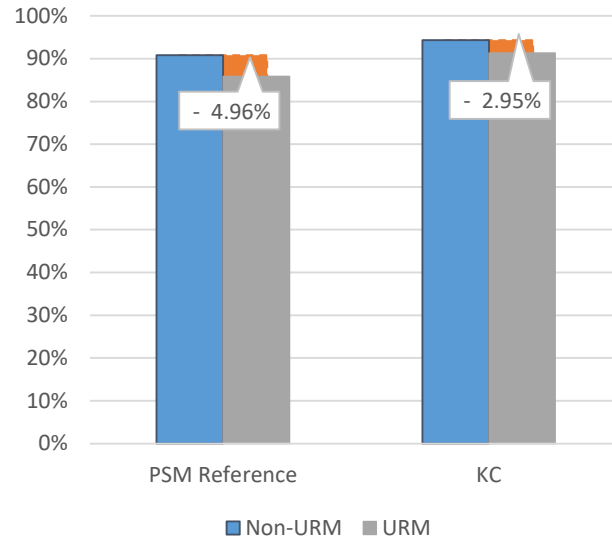
Faculty training and HHMI

- Amy Sprowles
- Cheryl Johnson
- Rock Braithwaite

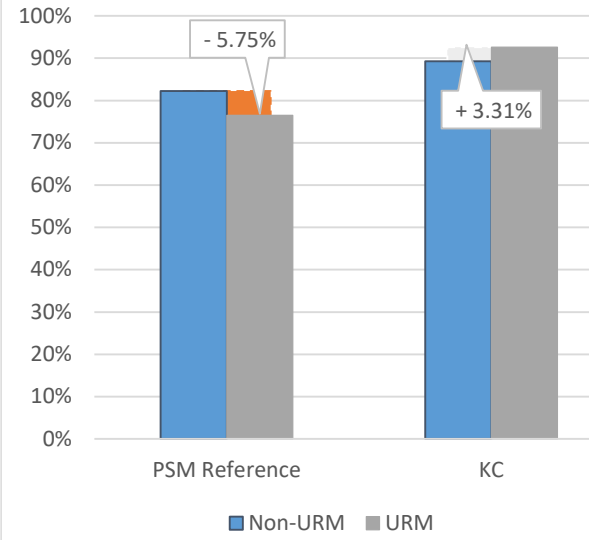
Pass Rates for URM & Non-URM in Bot 105
Among Propensity Matched Students



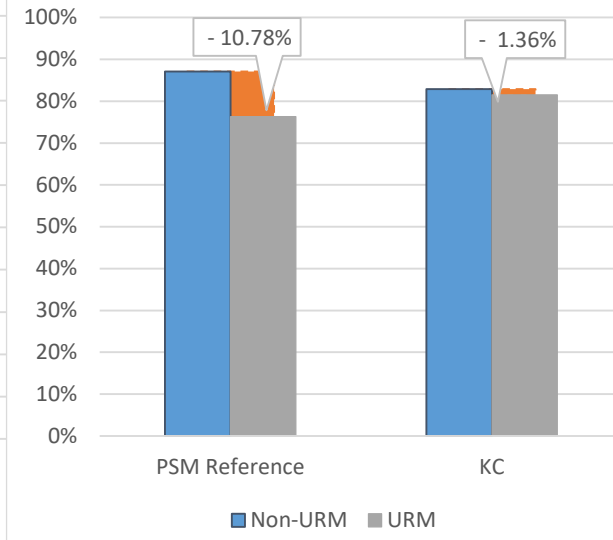
Pass Rates for URM & Non-URM in Comm 100
Among Propensity Matched Students



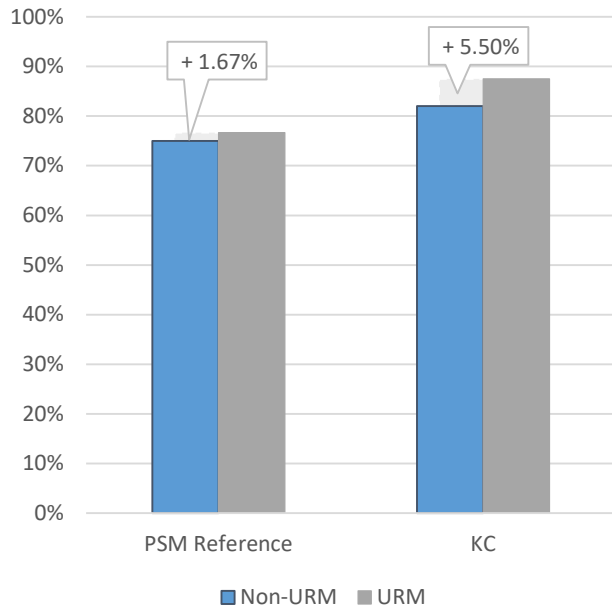
Pass Rates for URM & Non-URM in Chem 107
Among Propensity Matched Students



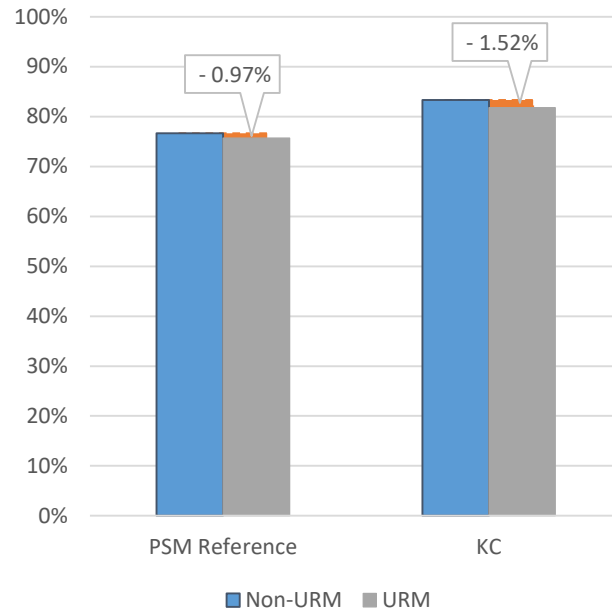
Pass Rates for URM & Non-URM in Chem 109
Among Propensity Matched Students



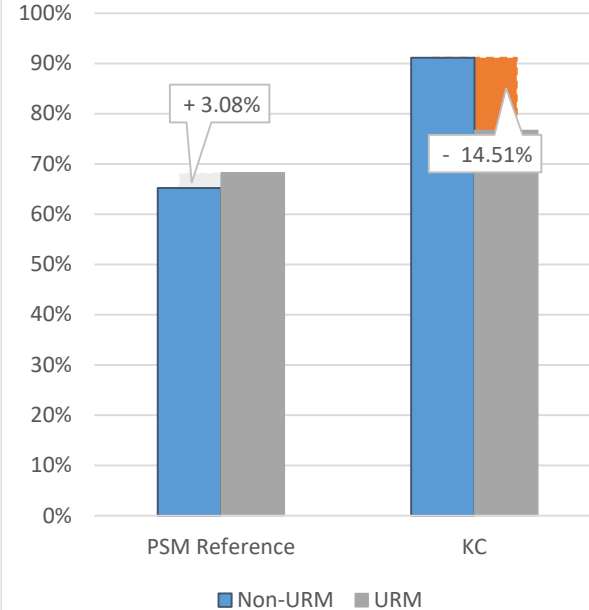
Pass Rates for URM & Non-URM in Math 113
Among Propensity Matched Students



Pass Rates for URM & Non-URM in Math 115
Among Propensity Matched Students



Pass Rates for URM & Non-URM in Math 105
Among Propensity Matched Students



Pass Rates for URM & Non-URM in Biol 105
Among Propensity Matched Students

