

Culturally Responsive Instruction in HSIs

April 2, 2020





Arizona State University

Science Foundation Arizona Center for STEM



PHOENIX COLLEGE

A MARICOPA COMMUNITY COLLEGE





Agenda

- Objectives and Introductions Cynthia Pickering
- Culturally Responsive Instruction in HSIs
 Dr. Melissa Salazar, Escala Educational Services, Inc
- Sharing Cultural Journeys to engage Students
 - Dr. Elena Ortiz, Phoenix College
- Getting to know CTE/Welding Students' Cultures
 - Bobby Alvarez, Arizona Western College
- Q&A Cynthia Pickering





What does it mean to teach in a



Culturally Responsive Instruction in HSIs: *Strategies (and Attitudes) that Work*

Dr. Melissa Salazar

Webinar:

- ESCALA's work with over 30 HSIs and 500+ faculty
- What is CRT? Why is it challenging to implement?
- Examples of Culturally Responsive Teaching in HSIs
- A Student Survey Tool





ESCALA's Mission/Vision

Practical professional development designed by HSI professors for HSI professors



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How can we encourage and support culturally responsive shifts in HSI faculty's instructional practices, attitudes and beliefs?





ESCALA's Background Research, 2013-

Interviews with more than 100 HSI faculty (mostly STEM): why is it that you do what you do?

Classroom Observations: what is engaging, what is not, to students?

Longitudinal study of northern NM Latinx students: how did you persevere (or not) through college?

Interviews with Latinx completers of college: what do you wish professors had done for you?





The ESCALA Certificate in College Teaching and Learning in Hispanic Serving Institutions

27-hour blended course for faculty on culturally responsive instruction

Faculty investigate the impact of a culturally responsive instructional shift on student grades and motivation

Peer coaching from another HSI faculty member, either from within or from another institution



ESCALA By the Numbers

2013 - present



500 – Adjunct and tenure-track faculty that have completed *ESCALA Certificate in Teaching & Learning in HSIs*

30 – 2- and 4-year Hispanic-Serving Institutions involved with our programs

55 – HSI faculty serving as peer faculty coaches



ESCALA's Hispanic Serving Institution (HSI) clients

California

- •Notre Dame de Namur University, Belmont
- Imperial Valley College, El Centro
- Mt. San Jacinto College, Menifee
- California Lutheran University, Thousand Oaks
- •Santa Barbara City College, Santa Barbara
- University of California, Santa Cruz
- Humboldt State University, Arcata
- California State University, Monterey Bay
- Hartnell College, Salinas
- •Vanguard University, Costa Mesa
- Butte College, Oroville
- •Southwestern College, Chula Vista
- Mesa College, San Diego

Washington State

- Central Washington University, Ellensburg
- •Yakima Valley College, Yakima
- •Heritage University, Toppenish
- Big Bend Community College, Moses Lake

New Mexico

- New Mexico Highlands University, Las Vegas
- University of New Mexico, Taos
- •Santa Fe Community College, Santa Fe
- •Northern New Mexico College, Española
- Eastern New Mexico University, Roswell
- •New Mexico State University, Carlsbad

Colorado

- Otero Junior College, La Junta
- •Adams State University, Alamosa
- Trinidad State Junior College, Trinidad

Massachusetts

- Springfield Tech Community College, Springfield *Illinois*
- St. Xavier's University, Chicago

Texas

- Alamo Colleges, San Antonio
- Angelo State University, San Angelo





"I'm right there in the room, and no one even acknowledges me."



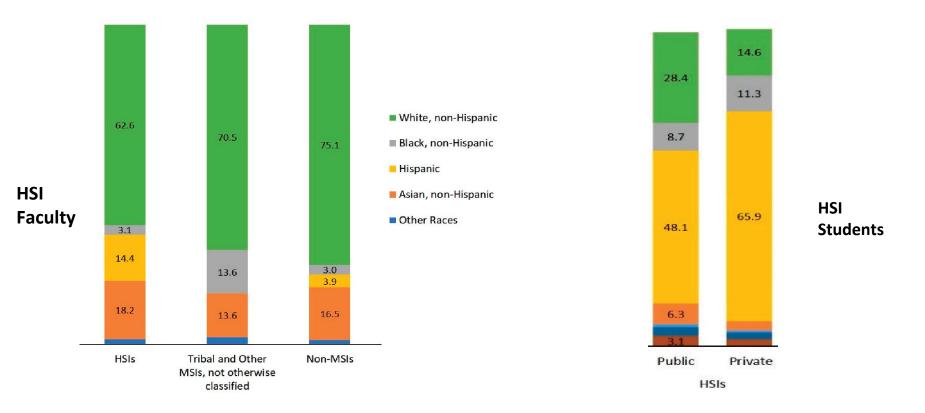
HSI faculty and students often come from very different backgrounds and perspectives on education



- Faculty often make assumptions about students because they come from different socio-economic backgrounds and ethnic/racial cultural frameworks
- Faculty have often had completely different educational experiences than their students



The culture gap between faculty and students in HSIs



Source: National Academies of Sciences, Engineering, and Medicine 2019. *Minority* Serving Institutions: America's Underutilized Resource for Strengthenin http://nap.edu/25257



ESCALA's findings: HSI faculty are motivated to change their practice by seeing changes in their student engagement and success



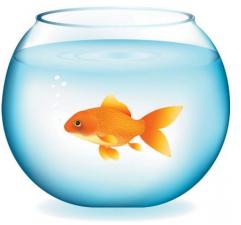
- HSI faculty care about student learning and want to do a good job
- Lack resources and institutional support to learn more about teaching
- It takes vulnerability, effort and time to change your teaching because your practices are linked to your identity



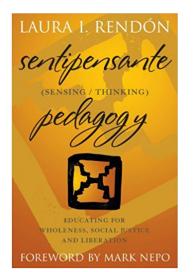
What is the role of "culture" in the way we teach?

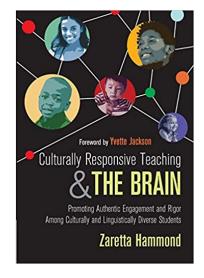


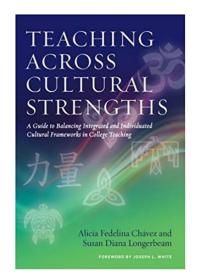












3 Very Helpful Thinkers and Authors in Helping Faculty Understand Culturally Responsive Instruction



What *is* culturally responsive instruction?

...an educator's ability to recognize students' cultural displays of learning and meaning-making and respond positively and constructively with teaching moves that use cultural knowledge as a scaffold to connect what the student knows to new concepts and content in order to promote effective information processing.

All the while, the educator understands the importance of being in relationship and having a social-emotional connection to the student in order to create a safe space for learning.

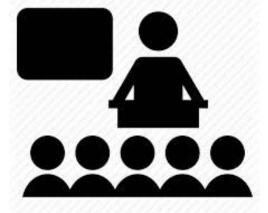
p. 15 *Culturally Responsive Teaching & the Brain* (Hammond 2017)



How Our Experiences Shape Us as Instructors

Personal Experiences as a Learner

I do this because...



What the Discipline Says is Good Teaching Beliefs About Who Is Deserving to Learn

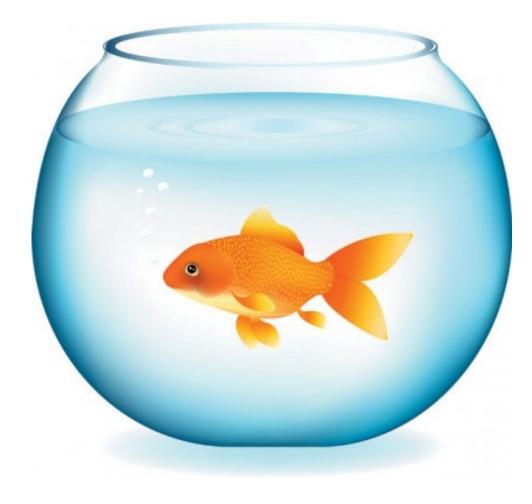




Culture is the training our mind receives as a result of being part of a group, or group(s):

it impacts how we process, communicate information





For those in the dominant culture, culture is invisible:

everything seems 'normal'



Our early cultural training by family, schools, and other social groups result in our attitudes and beliefs about..

Motivation for learning

ATTES A

Explanations for Our Success or Failure

Preference for competition

Ways We Cognitively Organize Information

How we handle conflict

Indirect or direct communication styles



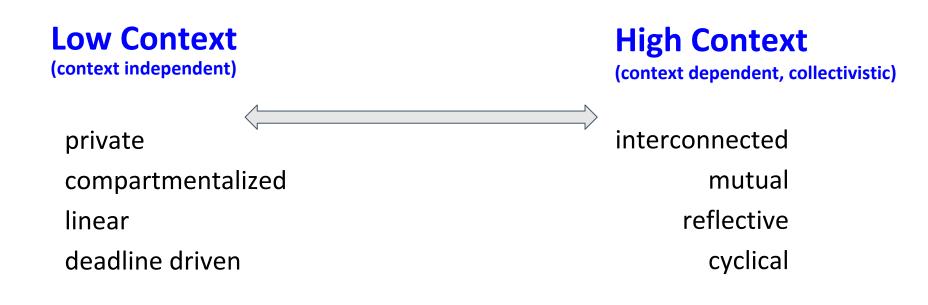


Our Cultural Beliefs Manifest In Teaching!

How we present information; How we expect students to behave; How we interact with students; How we assess their learning; How we assign points; And on....and on...



Our cultural teaching and learning behaviors fall along a continuum







Individualistic Cultural Frameworks

Individual accomplishment is motivator

Listening and speaking

Learning occurs with professor

Peers are competitors rather than sources of information

Textual and linear organization of information

Future time orientation, planning

Collectivistic Cultural Frameworks

Community and relevance are motivators Peer group is more important than communication with professor Time to reflect and process Comfort with ambiguity Solves problems with multiple sources of information Process over product





Just the way things are

If HSI faculty were generally successful in individualistic schooling environments, they are tempted to replicate this environment, and then use deficit language to explain student failures



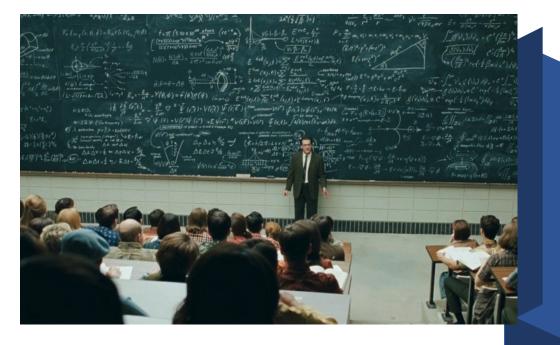




Cultural beliefs and past educational traumas are deep and emotional, not just 'learning styles' or 'preferences'

How do you explain students who don't come to see you, who don't come to class?





Privileging the paradigm of individualistic cultural frameworks, and assuming students will be motivated by this dominant cultural framework, puts Hispanic/Latinx students at a disadvantage



If Hispanic/Latinx cultural frameworks are collectivistic and in opposition to strongly individualistic learning frameworks...

What do you think happens to Hispanic/Latinx students in online educational environments?





Latinx students also differ from faculty in that they have experienced serious educational inequities and traumas

These experiences make these students appear further disengaged or lazy to faculty who experienced academic validation throughout their educational career



How do we at ESCALA encourage and support culturally responsive shifts in HSI faculty's instructional practices, attitudes and beliefs?





Strategies that Work: *Shift Faculty Attitudes and Understandings*

Shift #1: All of our students can succeed in learning. Disaggregating data can show us where WE are not serving students well, not who should be labeled deficient.





Strategies that Work: *Shift Faculty Attitudes and Understandings*

Shift #2: Cultural frameworks of students may be different, but are not lesser than, the frameworks of the instructor.





Strategies that Work: *Shift Faculty Attitudes and Understandings*

Shift #3: Balancing cultural frameworks acknowledges and validates difference, and in addition creates engagement for Latinx/Hispanic students





Drs. Laura Rendón & Tara Yosso's Work Latino/a Cultural Wealth in Higher Education



- Aspirations, ganas
- Experience at overcoming adversity, "resistant capital"
- Bilingualism, ability to use language in multiple contexts
- Deep commitment to collective Latino community and family— I am doing this for others not just myself
- A tolerance for ambiguity and contradictions
- Faith-based, spiritual wealth—gratitude and sense of purpose through faith in God.



Strategies that Work in HSI Classrooms



CRT by Creating an Atmosphere of Academic Validation

THE INTERVENTIONS

- Created a Welcome Video that expressed professor's belief that all students could learn (Business, Vanguard University)
- Used pair-share with random protocol to provide more equity in voices heard in class (Counseling, Hartnell College)
- Made students complete crucial components of assignments in class rather than at home (Counseling, San Jose City College)

THE RESULTS

- Students reported greater sense of belonging and engagement in class due to professor welcome video
- Students reported speaking more often in other classes because of being 'invited' to speak in Counseling class
- Students reported large gains in understanding of how to navigate college transfer process



CRT by Improving Practice and Transparency in Learning Content

THE INTERVENTIONS

- Gave students group practice quizzes before assessing individually on same content (Math for Technicians Course, New Mexico State-Carlsbad)
- Created exam reflections that asked students to evaluate what study strategies worked, what didn't (Psychology, Hartnell College)
- Created a graphic writing assignment to display understanding using visuals and text, rather than just written reflection on reading assignments (Composition, Southwestern College)

THE RESULTS

- Higher pass rates for individual quizzes for all students, compared to those who just did individual quizzes with no group pre-test
- Closed the equity gap between Latinx and all students for A grade
- No students dropped or withdrew from class, and overall course GPA increased.



What professors say when they shift towards CRT

- When I watched my video, I thought more sharing of my stories was helpful, but I realized it was just more of me talking and less of the students talking!
- If it was something important to their learning, I realized I <u>had</u> to do it in class.
- I realized that if I made one of the more difficult assignments come earlier in the semester, then I could encourage them to complete the class by saying, 'Don't give up now, you did the hardest part already."
- I felt like there was clearly more engagement from my students who chose to do the graphic assignments. I was shocked by their creativity and how much time they spent on showing their writing ideas graphically.



Survey Your Students!

You Can't Be Culturally Responsive to Students You Don't Know

Where Can You Start?



Part A. About Me

- 1. How do you identify your gender?
 - □ Male
 - Prefer not to state
 - □ Female
- 2. How many children live with you? _____
- 3. How far do you live from campus?
- 4. I live (circle one that fits best)
 - at home with parents on my own with roommates with my children
- 5. I have reliable transportation to class Yes No
- **6.** This semester, what time is <u>most likely</u> when you will be able to do your homework for this course? (pick 1-2 as the most likely times)
 - □ In the mornings
 - □ In the afternoons
 - □ In the evenings
 - In the late evenings
 - On the weekends
- 7. How many credits (units) are you taking this semester? ______.
- 8. How long have you been attending this college (enter the number of semesters or quarters)?

9. How many math classes have you already taken at this college? _

ESCALA's Sample Student Survey



How Can I Support Faculty in my HSI? Key Takeaways for Administrators and Grant Directors



•Provide Disaggregated Course Grade Data to Faculty. Reflecting and analyzing disaggregated data should be done both privately and then with supportive peers;

•Provide Asset-Based Training About Students' Cultural Wealth. Latinx admin, faculty and staff should take the leadership role in helping all faculty get to know the assets and challenges of Latinx students.

•Faculty need to feel supported by their administrators as they experiment with changes to their practices. The focus must be on <u>reflecting</u>: on what's working, and for whom-- without feeling publicly evaluated or scolded.



Dr. Melissa Salazar CEO, Escala Educational Services Inc.

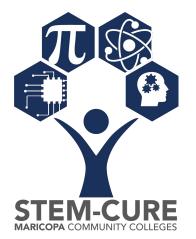


Questions about our faculty and staff programs in 2020-2021: inquiry@escalaeducation.com

> Join us on Facebook, Twitter or Instagram: @EscalaEd







Sharing Cultural Journeys to engage students and release their Cultural Strengths



Elena Ortiz, PhD Faculty, Biosciences Dept. Phoenix College

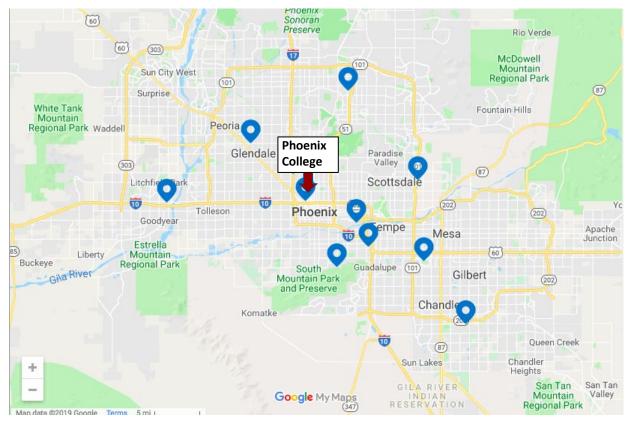


Introduction

Phoenix College serves our diverse community with student-centered teaching and learning experiences that inspire the lifelong pursuit of educational, professional, and personal goals.

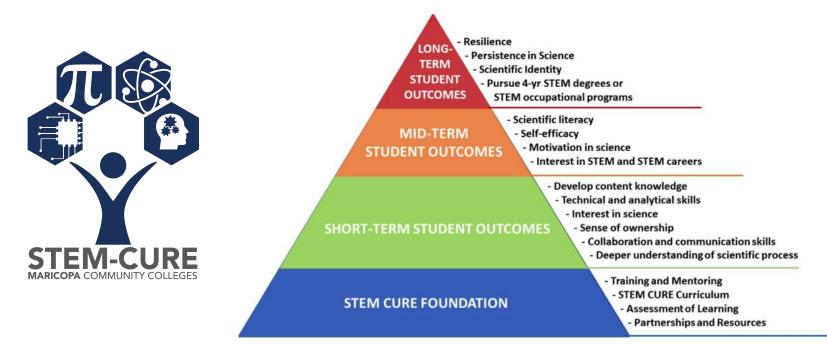
Phoenix College

- 17,000 students
- 5,840 FTE students
- 54.3% Hispanic enrollment
- Maricopa CC District
- 10 2-year colleges in the district, > 200K students
- 5 HSIs





Integrating Research, Mentoring, and Industry Collaborations to Improve STEM Recruitment and Retention - NSF #1832543 Jan 1, 2019 - Dec 31, 2023





Dr. Robin Cotter, Life Sciences, Biology Faculty & PI, Phoenix College

- Dr. Elena Ortiz, Life Sciences, Biology Faculty & co-PI, Phoenix College
- Dr. Anna Marti-Subirana, Life Sciences, Biology Faculty & co-PI, Phoenix College



Biology 108 Class in STEM-CURE Project

- 1. How can we re-interpret others' cultural context and norms as strengths?
- 1. How can we redesign our teaching to engage the cultural strengths our students bring?

Piloted in Spring 2019, the activity occurred in 2 additional adjunct led sections of BIO 108 at PC Fall 2019

My (Instructor's) Storyboard that I shared with my Students



Cultural Journey Homework: Students

Prepare a collage and 1 minute "Introduction" about you and your culture. Some things you could include:

- One challenge you've had to overcome
- What you had going for you
- Source of your motivation
- Role your family or mentor played
- Why " Community College"?

In our next lab class, you will share your journey with others, and how you felt at the time, what you faced, who helped you, and how you grew.

Example Student Collage

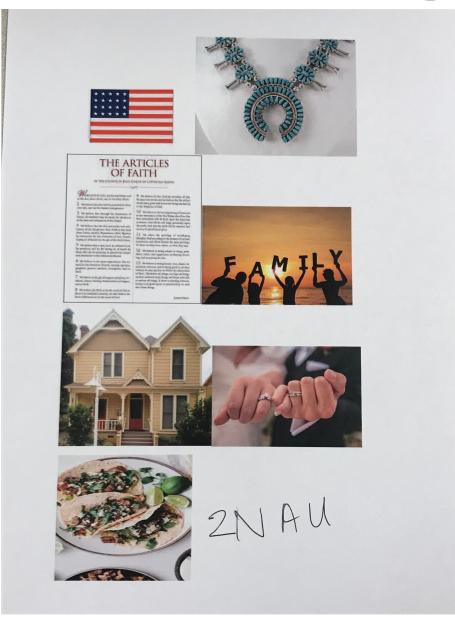




Example Student Collage



PHOENIX COLLEGE

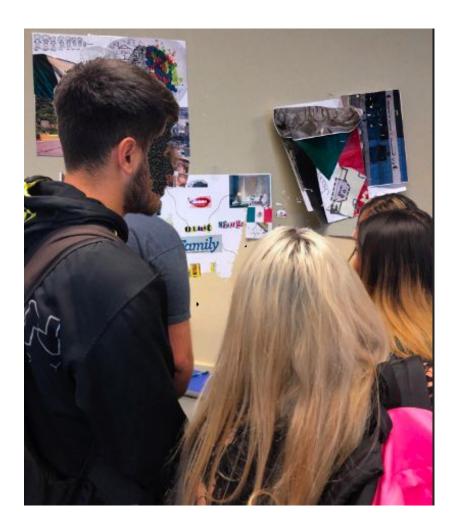




Sharing Collages and Discussing Experiences

My Observations:

- Seemed surprised
 by shared
 experiences
- Lively atmosphere
- Lots of nodding and "me too!"





Experiences and observations in classes where cultural backgrounds were shared

Students were

- More comfortable sharing their culture
- More comfortable approaching the teacher
- More respectful of ESL students, valued their input more

Improved collaboration on class projects and labs



Plans

This exercise and the faculty training has been added to training materials for:

- 1. Adjunct faculty in the Biology 108 course
- 2. Other STEM-CURE faculty teaching other courses

Training will occur in May 2020 for ~50 STEM Faculty in the Maricopa College District



ARIZONA WESTERN COLLEGE (AWC)



Bobby Alvarado, Professor of Welding Career and Technical Education

ABOUT AWC

- Located in Yuma, Arizona, a rural agricultural area known as one of the biggest vegetable capitals in the world
- About 25% of Yuma's population either works in a produce cooler, the fields, or travels back and forth to California for the season



STUDENT DEMOGRAPHICS

- Of the 11,400 students enrolled at AWC, 80% are minority, 77% are low-income, and 66% are first-generation college attendees.
- •71% of AWC's students are Hispanic/Latino
- Most Hispanic students' parents are employed in the agriculture industry

STEM AND WELDING PROGRAMS



MULTIPLE CULTURES IN STEM and WELDING

- Majority of the students are Hispanic
- Some international students
- Language differences are sometimes challenging
- Most students between ages 18 to 25
- Some younger and very few older students
- Different career goals and family ties

Sharing our Cultures and Experiences and Working Together

- Initial introductions in a new class of students:
 - Student Ice Breakers
 - Show interest in what students shared
 - I also share my story
- For students to get comfortable with one another and learn to collaborate:
 - Random partners for lab assignments
 - Teams for group presentations



My Instructional Approach

- Active Learning:
 - 75% hands-on and in the lab
 - 25% lecture
- Strong Support for Student Success:
 - Opportunities to earn extra credit
 - Access to equipment, tools, and workshops
 - Office hours convenient to students' schedules
 - More one-on-one time as needed





HOW THIS HELPS STUDENTS





Moderator Questions



ATE supports Technician Training in advanced manufacturing, cybersecurity, automotive, the biotech industry, and other areas.

Do you think it is important for faculty at HSIs who are training technicians to develop acumen and skills for culturally responsive instruction, and if so why?

What are the key takeaways for these faculty? E.g., strategies for faculty to enhance recruiting, retention, and helping Hispanic students succeed in STEM?

What advice do you have for industry partners (employers and employees) for engaging with Hispanic students and helping them succeed in pursuing STEM careers?

Audience Questions

Please type your questions into the Chat:



Helpful Resources

- HSI ATE Hub Website
 - <u>https://atecentral.net/msites/hsiatehub</u>
- HSI ATE Hub Resource Library
 - https://atecentral.net/msites/hsiatehub/resources
- HSI ATE Hub User Guide
 - https://drive.google.com/file/d/1BPNY2g8vJrhV3akXUFY-IyGFI69PVUsH/view
- HSI ATE Hub publication
 - https://peer.asee.org/33389

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https://ate.community/hsiatehub



Please complete the quick survey that will pop up in your browser shortly.

Or use this link to access the survey: https://www.questionpro.com/t/AMft0Zgrzd