



Increasing Latinx Student Success and Building on Cultural Capital

Karla Rojas and Martin Ramirez



Objectives

This presentation will highlight the STEM Equity Success Initiative (SESI) Professional Learning Community (PLC) which is a critical component of our project and is in line with track 5- professional development.

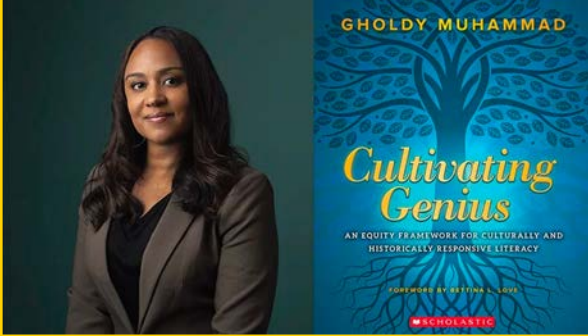
- We will share lessons learned within our HSI community that led to student success. Highlighting the importance of
 - **building community** (conocimiento)
 - **using long introductions,**
 - **healing circles,**
 - **culturally relevant pedagogy.**

Sharing evidence that demonstrates the success of best practices that were adopted by our PLC faculty members and staff.

SESI PLC Background

STEM Equity and Success Initiative is a Title III HSI-STEM Grant Awarded, Fall 2016 and scheduled to end this Fall.

- The SESI PLC addresses equity issues surrounding the participation and success of predominantly Latinx and low-income students in their STEM majors by providing support in their college-level courses.
- We use data, sound professional judgment, and an unwavering commitment to student access and success in STEM to support each other as we explore, implement and evaluate changes in our professional pedagogy.



Community

Quote from Cultivating Genius: An Equity Framework for Culturally and Historically Responsive Literacy by Gholdy Muhammad:

“If one person, ... acquired knowledge it was then [their] responsibility to pass it on to others to create a flamelike effect. To keep the knowledge to one's self was seen as a selfish act, and each person, therefore, was responsible to elevate others through education in the immediate and larger community. **This ideal of collectivism is in direct conflict with schools today, as schools are largely grounded in competition and individualism. This is perhaps one major reason why students of color often do not reach their full potential in schools – because schools are in disharmony with their histories and identities”**

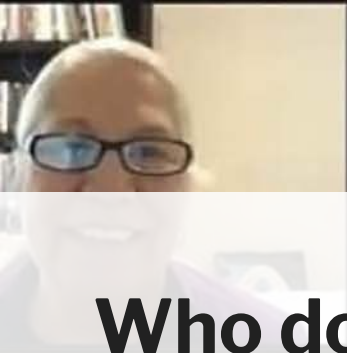
(pg. 26, Muhammad, 2020)

Conocimiento

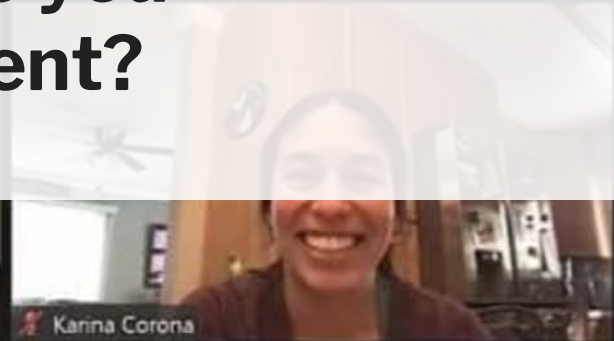
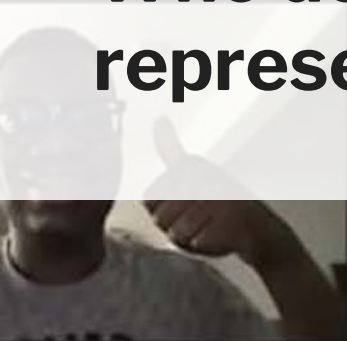
**Acknowledgement
of Intersectionality**

**Creating a Safe
Space**





Who do you represent?



Karina Corona

Makeba Rangel

Michelle Poliseno

Karla Rojas (she/her/hers/ella/ellas)

Halsey Boyd (he/him/his)

Martin Ramirez

Dawna DeMartini

Haynalka Caton

Long Introductions



Long Introductions/ Educational Journeys

- Dr. Tara Brown-Washington DC (2009-10)
- Dr. Louie Rodriguez-PRAXIS Project (Participatory Research Advocating for Excellence in Schools) (2014)
- Dr. Margarita Berta-Avila- Long Introductions (Sacramento State University)
- HSI-STEM Equity and Success Initiative (Fall 2017) “PD”
- SESI Professional Learning Community:
 - Engage
 - Connect
 - Facilitate trust
 - Vulnerability
 - Empower
 - Humanize

https://www.youtube.com/results?search_query=SESI+Project

A few examples of implementation...

I am from...

Snowball



**Video with
discussion board**

FlipGrid

I am from...



The objectives are to facilitate students' exploration of the identities present in the classroom including

- appreciation of the diversity of experiences among students.
- respect for the diverse experiences, feelings, and aspirations of the class members.
- recognition and acceptance of the many cultures of the individuals in the classroom.
- facilitation of interaction among students through understandings of cultural similarities and differences.





**We are
from...**





Our turn

Activity #1

- I am from activity....

Activity #2

- We are from activity...

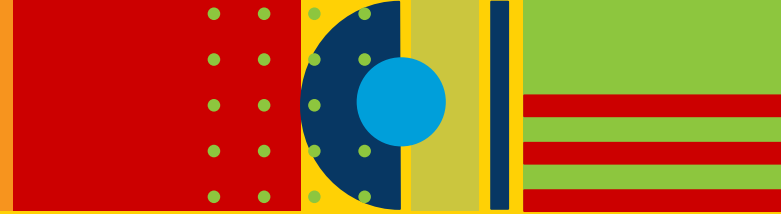




Culturally Relevant Pedagogy



English - Dawna DeMartini



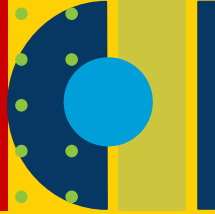
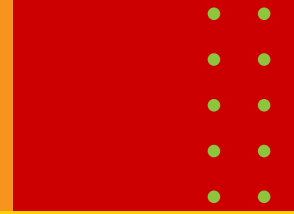
How it Started...

- I graded students' language according to its approximation to Standard American English ("White English").
- I graded students on their ability to approximate academic rhetorical and stylistic conventions.
- I acknowledged the differences between an academic voice and "other voices" students might have and use.

How it's Going...

- I give feedback to students according to their own goals for their writing and the linguistic and rhetorical decisions they make to achieve those goals.
- I demystify and contextualize academic writing conventions within the U.S. sociolinguistic hierarchy and encourage students to subvert that hierarchy in creative and empowering ways.
- I honor every voice as one that is, in the words of Dr. Vershawn Ashanti Young, already "valid, rich, nuanced, and whole."

English - Dawna DeMartini



How it Started...


- I privileged disembodied, detached argumentation and research practices and products
- I paid lip service to social and linguistic justice, but taught and graded my students as if I were constantly being monitored by “the racist down the hall.”

How it's Going...

- I understand my own liberation to be interdependent with that of the human beings in my classroom.
- I teach to eradicate, not accommodate, all forms of oppression. I fail at this every day. I wake up every day and keep trying.



From Our Students



“One thing I’m really looking forward to exploring and improving in this course is my voice. I feel like as a queer, latinx, bilingual, first-gen student, there’s so much linguistic power I have yet to tap into. The code-switching that I once used as a survival mechanism can now be used as literary art, and the Spanglish that my school system tried to suppress can now be used as literary depth: code-meshing. My “positionality” deserves a space in academic writing, and I’m excited to create it.”



“ One of the reasons I chose your class section, after doing some light research, was that you knew and were inspired by Professor Tanya Rodriguez. I was lucky enough to have a class with her, once, and I definitely agree with what you said: she thought critically about education, administration, and engagement with students and she acted with a personal engagement that compelled the same engagement in others. I’m so grateful that you are continuing Professor Rodriguez’s legacy in your classes. I can tell that you prioritize students’ engagement with material, and I think it’s something that the students can feel as well.”

Chemistry - Dr. Devoun Stewart

General Chemistry explores the Flint Water Crisis using a Case Study Approach





Chemistry

“On the first day, when Dr. Stewart introduced that we will be learning about the Flint water crisis and how it’s going to tie into chemistry, immediately, I was fully invested,”

“I’ve taken chemistry one time before, and to me, it was just numbers on a board,” Speights said. “Read chapters 1-16, memorize those vocabulary words and definitions, and when I left that class I honestly didn’t know anything about chemistry. But with this class, I feel like I get to take things with me. It makes me want to come to class. I really love the tie-in of social-economic issues with chemistry because it helps me gain a better understanding of why I am doing these equations, why thermal chemistry makes sense, what the true meaning of molarity is, so I just have a better understanding of chemistry overall.”

“Watching Flint reminded me that people of poverty matter,” Speights said. “Having it in chemistry showed me that, wow, he’s not ignoring something that’s going on in the real world. ... It feels good to come to class and know that things in our society are not being ignored.”



Statistics Examples

Teach Me/ Us Videos

What is the 5 Number Summary?

- ★ 5 Number Summary- is a set of descriptive statistics that give you information about a data set. This can help us sort through a data set!
- ★ 5 number summaries can help us build a box plot, which we will talk about later.

5 Number Summary:
Min: Minimum Value (0 Percentile)
Q1: Quartile 1 (25th Percentile)
Med (Q2): Median (50th Percentile)
Q3: Quartile 3 (75th Percentile)
Max: Maximum or Q4 (100th Percentile)

Min Med Max
|-----|-----|-----|-----|
Q1 Q2 Q3 Q4


Peer Reviews

“I would not be able to update these statistics if it wasn't for the teach me videos and I really enjoy working in groups because it helps so much. Seriously, I love this class and i thought i was going to hate it. My husband laughs at me because I always tell him I like it and I used to be terrified.”

“When I was doing my teach me video I didn't understand what the interval of typical values was and I looked back into our modules to try and figure it out and I tried to the best of my ability to explain what it was but after watching Scheriesha's video she really helped me understand how to obtain the value which was super helpful to me.”



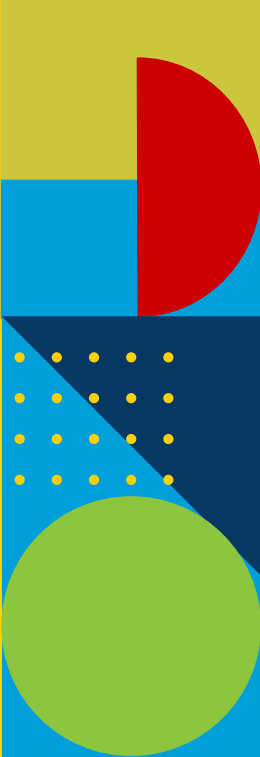
Statistics Examples



“ Using real life examples to develop a student's understanding of a topic is a great way to enhance what they already know and teach them new things. Completing real-world applications was one of the best aspects of this class because all the other STEM classes I can recall focused heavily on just sticking to the curriculum and teaching the necessities. This is why I was shocked at how much I learned from adding in a real-world application to statistics. I did in fact have to go over many of the topics, but I noticed that while I was reviewing it strengthened my understanding of the topic even more than before. ”

Compared to other SCC instructors, this instructor was...

- Nearly 100% agreed or strongly agreed that their instructor is **approachable**.
- Nearly 100% agreed or strongly agreed that their instructor **establishes a positive classroom climate**.
- Over 95% perceive the instructor **to care about student success**.
- Almost 97% agreed or strongly agreed that **they are motivated to learn and do well in class**.
- Over 96% **are encouraged to keep up with the workload**.
- Over 95% strongly agree or agree that they feel **a sense of belonging** in the classroom.
- Almost 100% **feel respected** in their classes.



El Circulo

It could not have been any other way, It could not have been anything else.
It had to be the circle to heal hell. We all came to it illing, ailing-unwashed.
And the survivors, in twenty years, were rewarded.

And we witnessed four generations Receive the medicine—emanating, radiating
From that focus—up down and the four Directions—powerful!

Group one, the elders, aging, nursing blown
Prostates and liver damage, slipping and sliding—but Clean.

Group two, clean, but ravages of past abuse, Taking toll yet remain stellar role models for Group three, the
gang-bangers facing one more Strike now saved, clean and agile, metamorphosing Jaguars, fire tenders
and willow cutters and singers Of lodge songs—saving generation four—now Coming to the circle straight
from middle school, Grandfather.

We couldn't all be saved but group three Impressed us all!

Earth water wind and fire came together for 'em, For us—for all.

Ho Ometeotle

Jose Montoya c 2005



The power of Healing Circles



Thank you/Gracias



Karla Rojas

Mathematics and Statistics Professor
Sacramento City College
Karla.Rojas@losrios.edu



Martin Ramirez

SESI Project Director
Sacramento City College
ramirem2@scc.losrios.edu