



Dr. Michelle Pacansky-Brock

Faculty Mentor, Online Teaching & Learning

Foothill-DeAnza Community College District, CVC-@ONE

Friday, December 10, 2021

5:00 pm to 6:00 pm (PST)



Redefining Rigor in Math: Becoming a Warm Demander Online

Cultural norms influence all of us, regardless of our race. In this presentation, Michelle will explore the ways white dominant culture influences how faculty traditionally approach rigor in higher education. We will also consider warm demander pedagogy, a research-based and culturally responsive alternative that will inspire your students to lean in and challenge themselves.

And, yes! It can be done online!



Dr. Michelle Pacansky-Brock

Faculty Mentor, Online Teaching & Learning

Foothill-DeAnza Community College District, CVC-@ONE



Dr. Michelle Pacansky-Brock is a noted leader in higher education with expertise in online teaching, course design, and faculty development. Michelle's work has helped online instructors across the nation understand how to craft relevant, humanized online learning experiences that support the diverse needs of college students. In her current role as Faculty Mentor for the California Community Colleges CVC-OEI/@ONE, she coordinates professional development in support of quality online teaching and learning and is leading an intersegmental California Learning Lab grant project that is examining the impact of humanized online instruction on diverse students in undergraduate online STEM courses in California.



REDEFINING RIGOR IN MATH

becoming a warm demander online

Michelle Pacansky-Brock, Ed.D.



#CMC3Virtual2021



Hi there.

I am a White, cisgendered, able-bodied woman.

I am a second generation American. Both sets of my grandparents were White European immigrants. My father grew up in poverty and access to free community college granted him upward social mobility.

I grew up in a predominantly White middle-class suburb in San Jose, California.

I reside on and honor with gratitude the traditional land of the Nicenan people past and present.

I am a mom, wife, daughter, sister, auntie, fur mama, and an educator who believes in the potential of online education to *transform lives*.

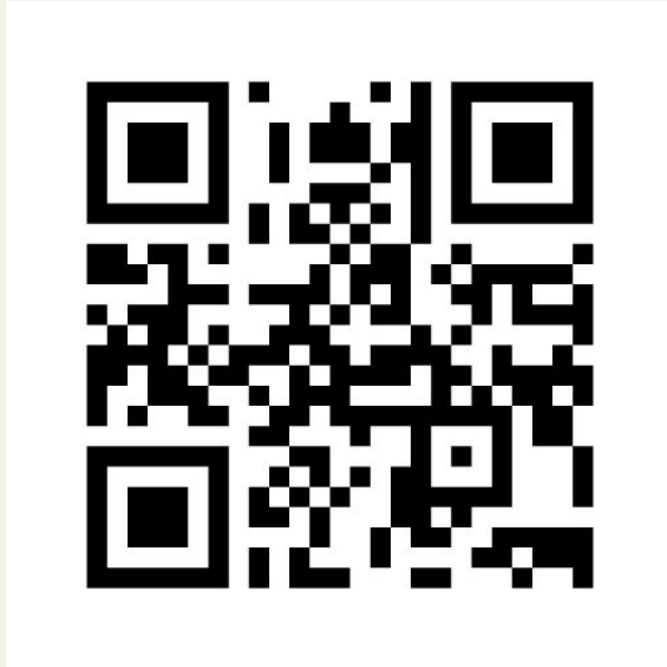
I am a first-generation equity practitioner.

REFLECT ON YOUR LIFE.
IDENTIFY ONE MEMORABLE TEACHER
WHO POSITIVELY INFLUENCED YOU.

ANYWHERE NEARBY, WRITE DOWN
TWO SEPARATE WORDS THAT DESCRIBE
THAT PERSON.

SHARE THOSE TWO WORDS IN OUR [MENTIMETER ACTIVITY.](#)

- Click on the link in the Chat area **OR**
- Scan this QR code with your phone



[View Results](#)



Photo by [Andy Hall](#) on [Unsplash](#)



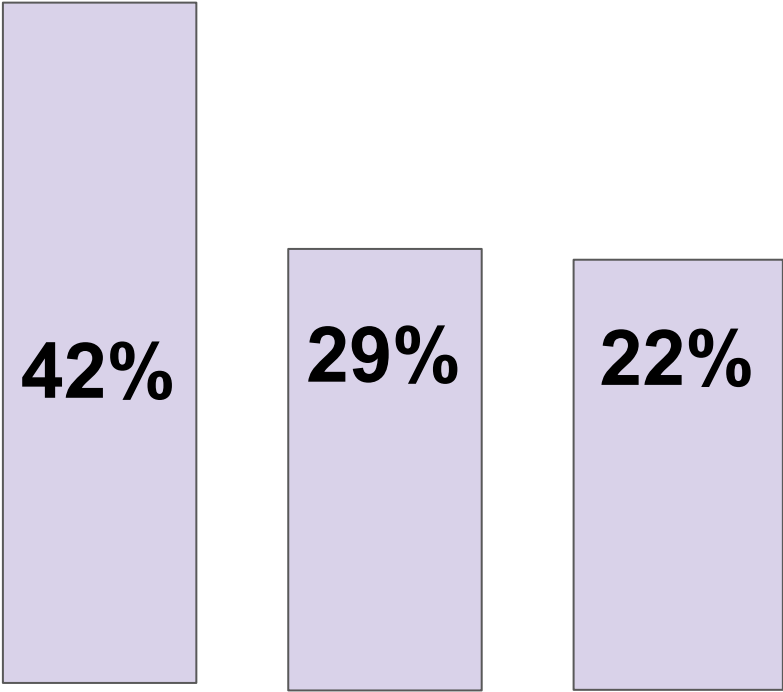
Photo by [Jeffrey F Lin](#) on [Unsplash](#)

rig•or

noun, from Latin, literally 'stiffness', from *rigere* 'be stiff'.

1. the quality of being extremely thorough, exhaustive, or accurate.
"his analysis is lacking in rigor"
 - severity or strictness.
 - demanding, difficult, or extreme conditions
2. a sudden feeling of cold with shivering accompanied by a rise in temperature, often with copious sweating, especially at the onset or height of a fever.
 - short for rigor mortis

Percentage of students (nationally) who enter college with a STEM interest and graduate with a STEM degree within 6 years.



All Students

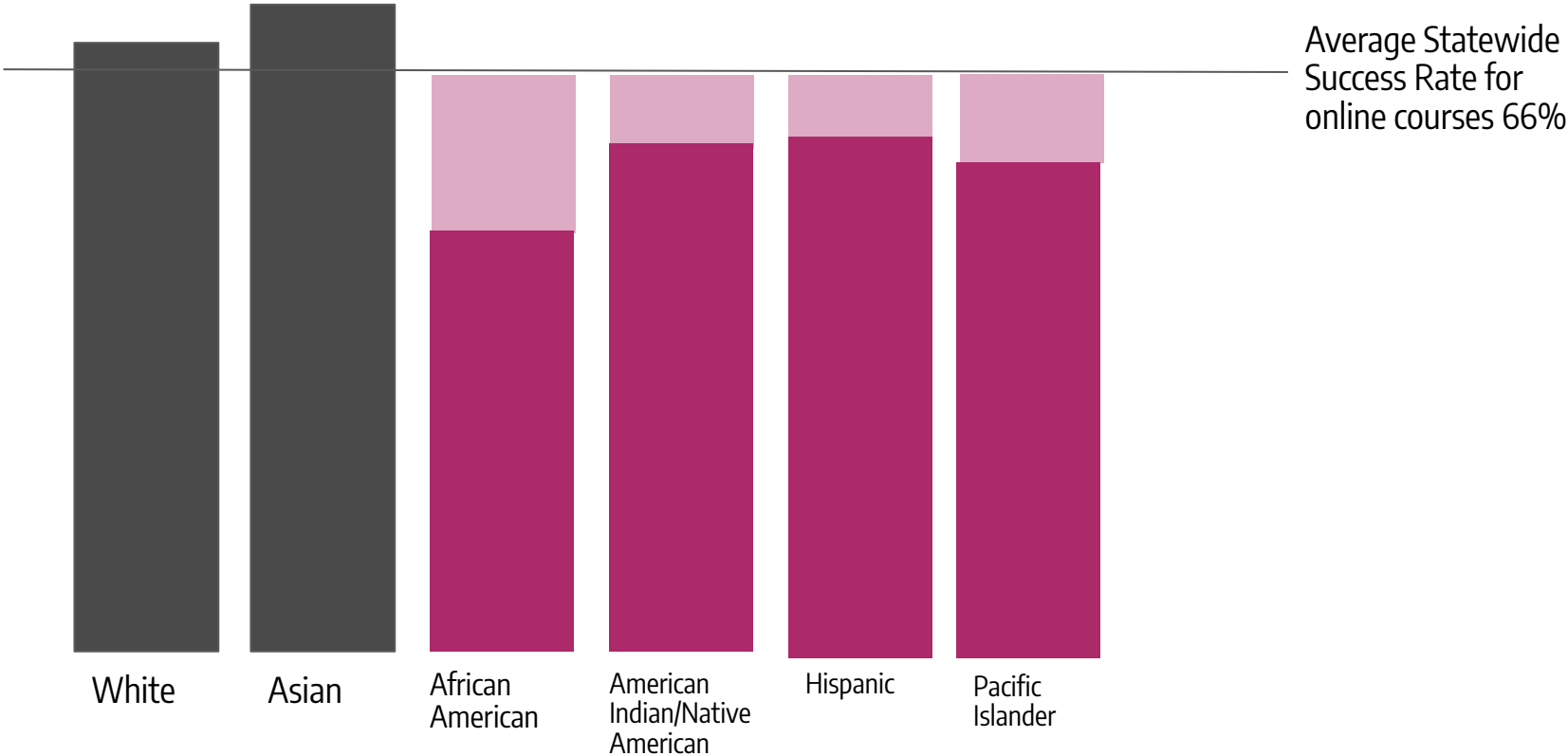
Latino/a/x
Students

Black
Students

(Eagan et al., 2014)

DISAGGREGATED 2016-17 ONLINE COURSE SUCCESS RATES

California Community Colleges (CCCs)



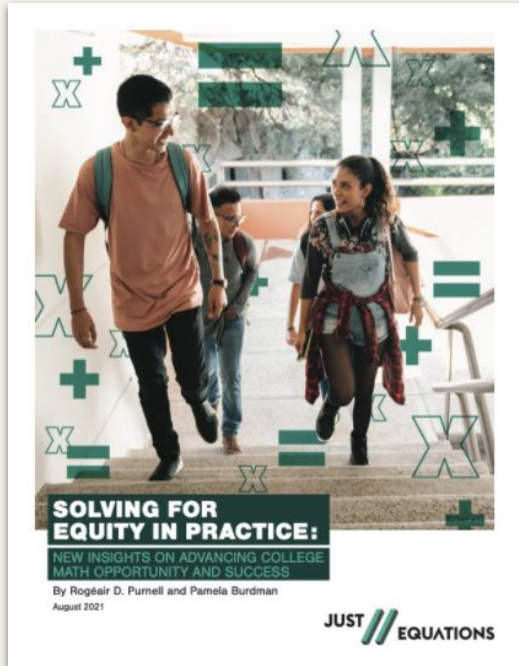
Source: 2017 CCC Distance Education Report, California Community College Chancellor's Office.

When a flower doesn't
bloom, you fix the
environment in which it
grows, not the flower.

-Alexander den Heijer



RECOMMENDATIONS FOR COLLEGES TO ADVANCE EQUITY



- Promote **inclusive learning environments** that foster students' math confidence and math identity by offering professional development to support faculty in employing culturally responsive teaching and recognizing and addressing implicit bias

Purnell, R. D. & Burdman, P. (2021). [Solving for equity in practice: New insights on advancing college math opportunity and success](#), *Just Equations*.



THE HUMANIZING ONLINE STEM ACADEMY

- Funded by a California Education Learning Lab grant
- Intensive 6-week online professional development program
- For STEM faculty and instructional designers
- Designed in Canvas
- Led by engaged, caring facilitators (*who model humanized online teaching*)
- Culturally competent and responsive teaching
- Trust and belonging
- Digital fluency (Google Sites, YouTube, Flipgrid, VoiceThread, Adobe Spark, Screencast-O-Matic)



HIGH OPPORTUNITY ZONE

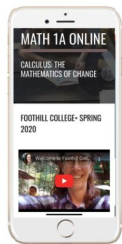
Week 1

Week 2

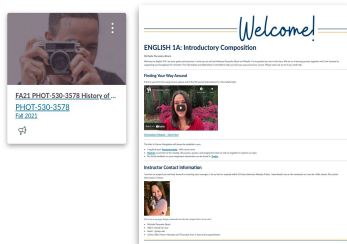
Week 3

Warm Demander Pedagogy

Liquid Syllabus



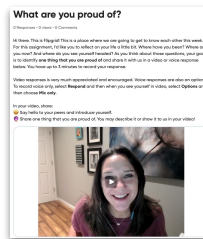
Course Card & Humanized Homepage



Getting to Know You Survey



Self-affirming Ice Breaker



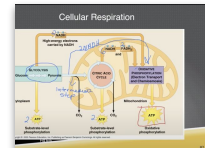
Wisdom Wall



Bumper Videos



Microlectures



PARTICIPANT FEEDBACK

“One of my most valuable takeaways from the Humanizing Academy is the notion of a compassionate demander. The two concepts are not mutually exclusive - in fact, I think they go well together. By accepting late work and allowing second chances and corrections I put the emphasis on the quality of my students’ work. Holding all students to high expectations about the quality of their work keeps the focus on their learning. Holding them to a timeline privileges students who have more time and fewer additional responsibilities.”

Sumaya McCleave, Math, Saddleback College

PARTICIPANT FEEDBACK

“Before I began this course, I carried many traumas and pains from my own undergraduate STEM experience. ... It was not the course material that was challenging for me, it was the feeling of not being cared for and simply being a number on my ID card. I felt that I was a dollar commodity for the department and not a person. ... Now that I have taken this workshop I have a deeper understanding of myself and how I can improve my own courses. ... In many ways, **I have held myself back from my true nature and have tried to work within what I thought were the ‘rigid expectations’ for a professor.** However, I now have a deeper understanding of how important emotions are in learning.”
(emphasis added)

Safa Khan, Chemistry, CSU Channel Islands

Relationships Before Pedagogy

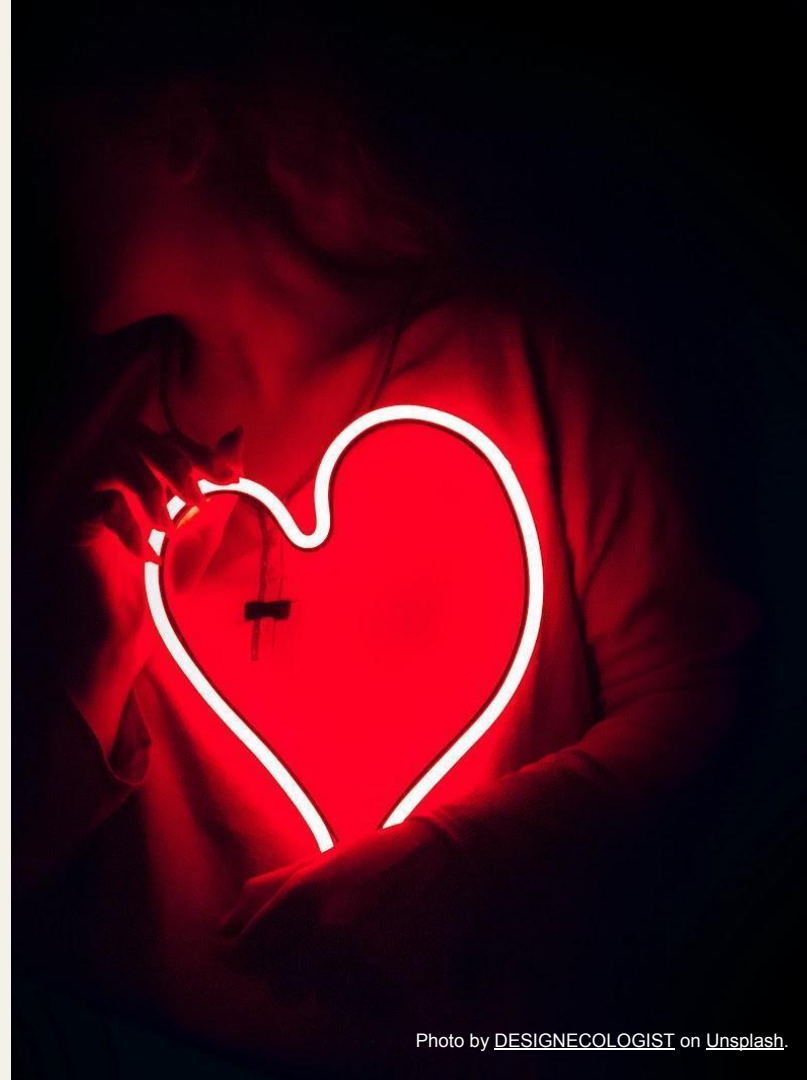
(Palacios & Wood, 2015; Wood & Harris III, 2015; Rendón, 1994)



- Rendón, L. (2009) *Sentipensante (Sensing/Thinking) Pedagogy*, Stylus Publishing.

“... emotions are not just messy toddlers in a china shop, running around breaking and obscuring delicate cognitive glassware. Instead, they are more like the shelves underlying the glassware; without them cognition has less support.”

Mary Helen Immordino-Yang & Antonio Damasio
We Feel, Therefore We Learn: The Relevance of Affective Social
Neuroscience to Education



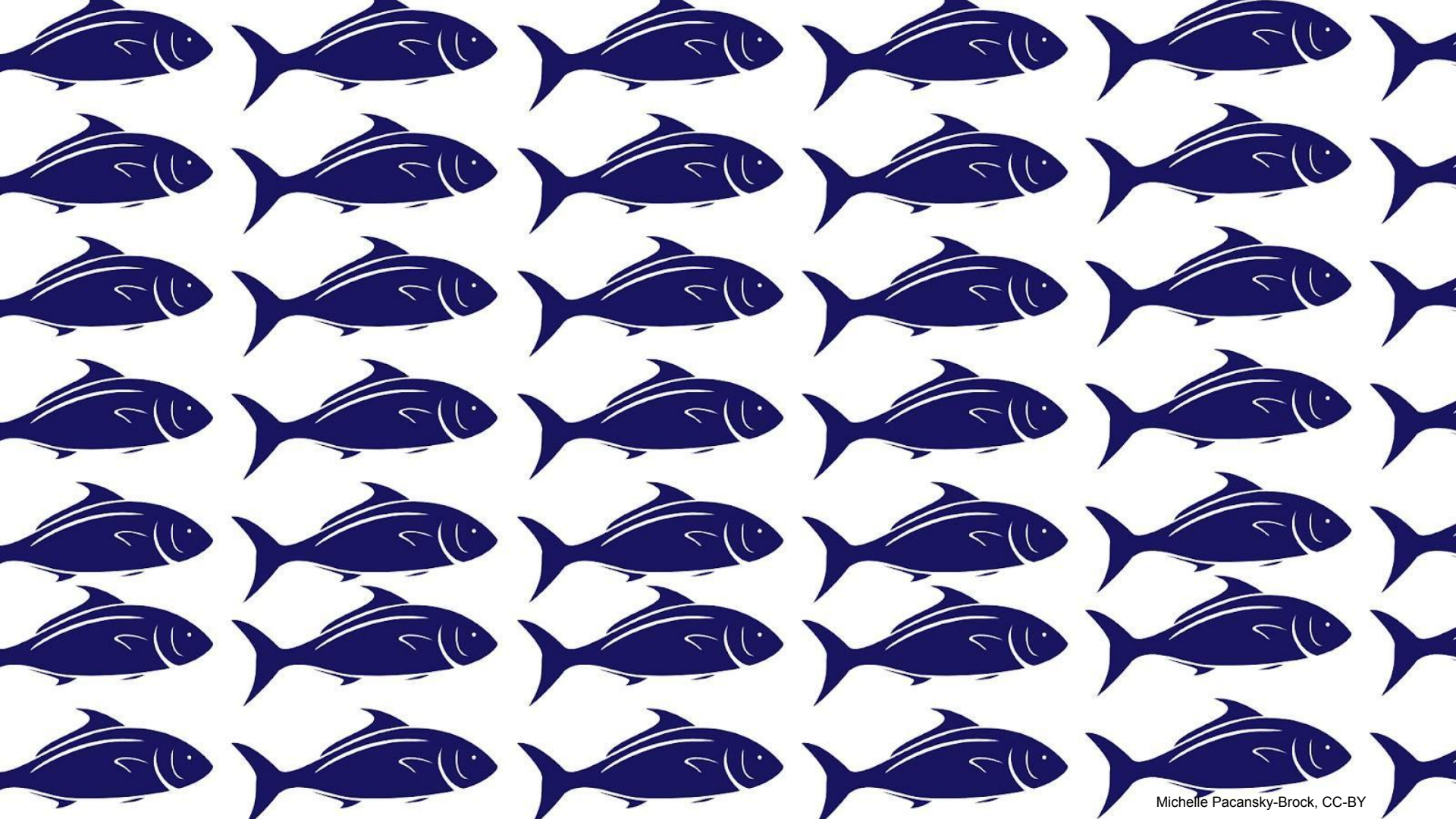


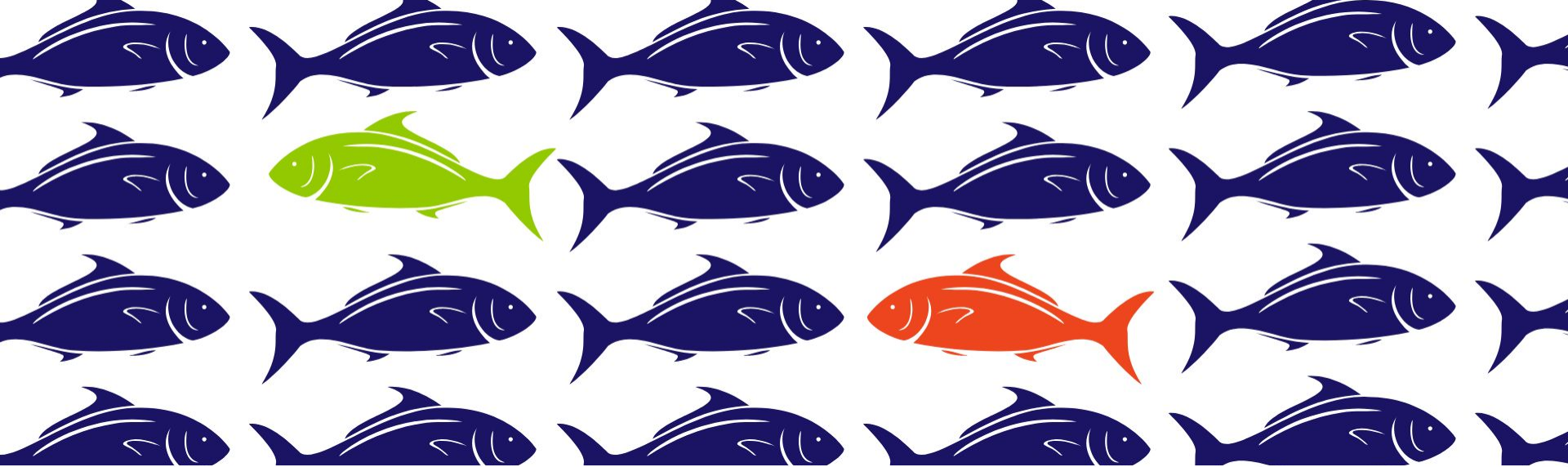
“Belonging is not the same as fitting in.”
-Brene Brown

The longer you are immersed in a culture, the more invisible it becomes.

It is like the water in which a fish swims.

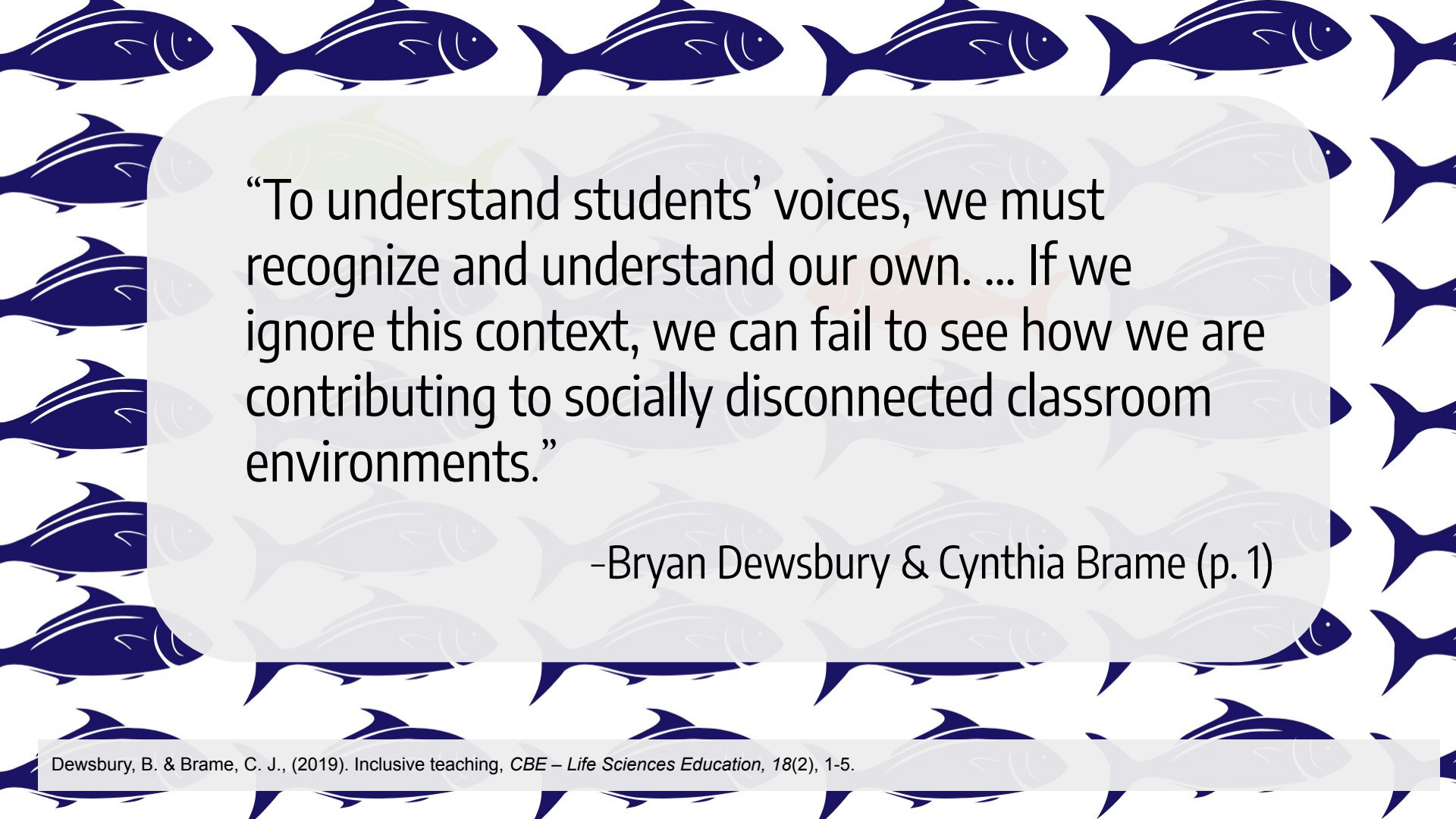






“When people are expected to assimilate, it says to those who are different, ‘Your identity doesn’t matter.’”

Claude Steele



“To understand students’ voices, we must recognize and understand our own. ... If we ignore this context, we can fail to see how we are contributing to socially disconnected classroom environments.”

-Bryan Dewsbury & Cynthia Brame (p. 1)

Values of White Dominant Culture:

How do these values influence your teaching/work?

**perfectionism/
fear of mistakes**

sense of urgency

**quantity over
quality**

**worship of the
written word**

only one right way

Individualism

either/or thinking
(things are always
good/bad, hard/easy)

**fear of open
conflict**

objectivity
(emotions are invalidating)

power hoarding
(fear of chaos if power is shared)

defensiveness

Learn More:

From the article by Tema Okun, [White Supremacy Culture](#). Also see [DismantlingRacism.org/white-supremacy-culture.html](#)



“Culturally relevant teachers envision their students as being filled with possibilities. They imagine that somewhere in the classroom is the next Nobel laureate (a Toni Morrison), the next neurosurgeon (a Benjamin Carson), or the next pioneer for social justice (a Fannie Lou Hamer). The perspective moves the teachers from a position of sympathy (“you poor dear”) to one of informed empathy. This **informed empathy requires the teacher to feel with the students rather than feel for them**. Feeling with the students builds a sense of solidarity between the teacher and the students but **does not excuse students from working hard in pursuit of excellence.**” (emphasis added)

Gloria Ladson-Billings from *White Teachers/Diverse Classrooms*, p. 31.

“Classroom studies document the fact that underserved English learners, poor students, and students of color routinely receive less instruction in higher order skills development than other students (Allington and McGill-Franzen, 1989; Darling-Hammond, 2001; Oakes, 2005). [This] denies students the opportunity to engage in what neuroscientists call *productive struggle* that actually grows our brain power (Means & Knapp, 1991; Ritchhart, 2002). As a result, a disproportionate number of culturally and linguistically diverse students are *dependent learners*.” (emphasis added)

Zaretta Hammond, Culturally Responsive Teaching and the Brain, pp. 12-13.

**Education is
not neutral.**

Dependent Learner

- Unsure about how to tackle a new task
- Needs scaffolds to complete tasks
- Will sit passively and wait if stuck until the teacher intervenes

Independent Learner

- Possesses cognitive strategies for getting unstuck
- Attempts new tasks without scaffolds
- Has learned how to retrieve information from long-term memory

Hammond, Z. L. (2014). *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students*. Corwin Publishers.

WARM DEMANDER PEDAGOGY



Dependent
Learner

Independent
Learner

WARM DEMANDER PEDAGOGY

A culturally responsive teaching pedagogy that develops intellectual abilities in dependent learners through cognitive struggle. Based on research about effective teaching approaches for Indigenous students.

Expresses personal warmth
vs. impersonal
professionalism

Shows personal regard for
students

Prioritizes building
rapport and trust



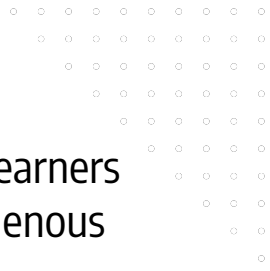
Earns the right to
demand engagement
and effort

Clearly communicates high
standards and scaffolds
learning

Encourages and celebrates
productive struggle

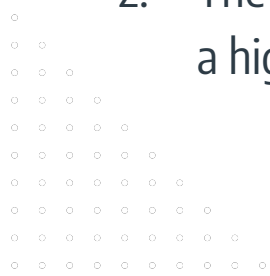
- Kleinfeld, J. (1972). Effective Teachers of Indian and Eskimo High School Students. Institute of Social, Economic and Government Research, University of Alaska
- Kleinfeld, J. (1975). Effective teachers of Eskimo and Indian students. *School Review*, 83, 301–344.

Warm Demander Competencies



A culturally responsive teaching pedagogy that develops intellectual abilities in dependent learners through cognitive struggle. Based on research about effective teaching approaches for Indigenous students.

1. The ability to create a climate of emotional warmth that dissipates students' fears and fulfills their expectations of highly personalized relationships.
2. The ability to express concern for students, not by passive sympathy, but by demanding a high quality of academic work.



Hold All Students to High Standards



Positive Instructor-Student Relationship



TRUST

“Trust is taking something important to you and making it vulnerable to another person.”

Charles Feltman



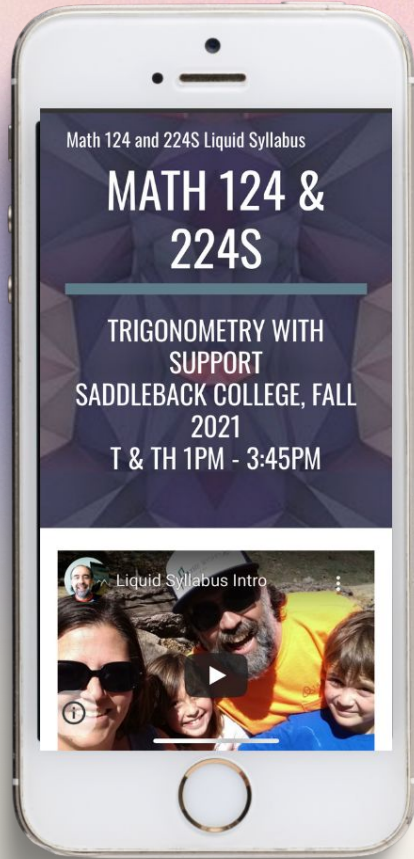


- Microaffirmations are small kindness cues of social inclusion.
- Like marbles in a jar, they accumulate over time to build psychological safety and trust.

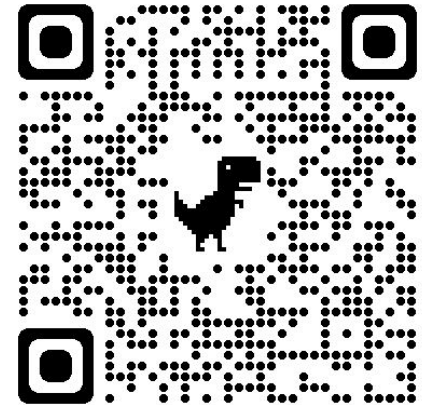
Estrada, M., Eroy-Reveles, A., & Matsui, J. (2018). The influence of affirming kindness and community on broadening participation in STEM career pathways. *Social issues and policy review*, 12(1), 258–297.

LIQUID SYLLABUS

Emailed to students the week before the class starts.



- A public webpage (Google Sites)
- Phone-friendly
- Accessible (alt-text, color contrast, headings/subheadings, lists)
- Components:
 - Written with welcoming, hopeful language
 - Welcome note with brief, imperfect video (with accurate captions)
 - Week 1 Success Kit
 - Pact
 - Teaching Philosophy
 - Inclusive images (with alt-text)
 - “Support for you”



Embed it in your
Liquid Syllabus!

WISDOM WALL



This example was created with VoiceThread and a screencasting tool was used to record a brief video clip of the comments.

SELF-AFFIRMING ICE BREAKER



**Reflect on your personal values.
Share one object that is important to
you and share why.**

Contributed by [Denise Maduli-Williams](#)

- Manke, K. J., Brady, S. T., Baker, M. D., & Cohen, G. L. (2021). Affirmation on the go: A proof-of-concept for text message delivery of values affirmation in education, *Journal of Social Issues*, 77, 888-910.
- Miyake, et al., (2010). Reducing the gender achievement gap in college science: A classroom study of values affirmation. *Science*, 330(6008), 1234-1237.
- Tibbetts, et al., (2016). Affirming independence: Exploring mechanisms underlying a values affirmation intervention for first-generation students. *Journal of Personality and Social Psychology*, 110(5), 635-659.

GETTING TO KNOW YOU SURVEY

SUGGESTED QUESTIONS:

- What would you like me to call you?
- What are your pronouns?
- I will leave you feedback in video format. Does that work for you?
 - Yes, sounds great.
 - No, thanks. I prefer written feedback.
- In one word, describe how you are feeling about this class.
- Please share one thing that may interfere with your success in this class.

Sample survey available in the Canvas Commons. Search for #HumanizingSTEM



ADAPT YOUR TEACHING TO SUPPORT YOUR HIGH OPPORTUNITY STUDENTS

- Take notes
 - [In Canvas, enable the Notes field](#) in the Grades area
- Jot down key things you learn about your students
 - Example: “Overwhelmed. Working extra hours to support parents.”
- Track log-in dates and assignment submissions
- Reach out *before it's too late*. Be intrusive.
 - Use a subject line that signals care. Ex: Carla, are things ok on your end?

WISE FEEDBACK

Wise feedback is a research-based practice for delivering critical feedback in a way that fosters trust, increases student engagement, and reduces performance gaps between White and Black students (Cohen, Steele, & Ross, 1999; Yeager, et al. 2014).

High Standards

“This is a challenging skill for many students ...”

“This part of the course is particularly difficult and mastering it is important for your future growth in _____...”

Ability

“I am confident you can do this. Look back at how much you’ve learned already.”

“You have been improving your scores over the past few modules, you’ve got this!”

Actionable

“To move forward, I want you to focus on _____ ...”

“To complete this assignment successfully, take a look at the resource in module two ...”

Make it warm, wise feedback with video!

COMING SPRING 2022

- Humanizing Online STEM Toolkit
 - Adoptable curriculum shared with an open license (CC-BY-NC) via Canvas Commons
 - Video playlists, infographics
 - Participants' Humanizing Showcases
 - Preliminary research findings
 - Free online summit scheduled for May 4, 2022

Follow: #HumanizingSTEM on Twitter and brocansky.com
(a website is in the works)



The hardest part is taking off the emotional armor we've been taught to wear.

In that vulnerable place is where we find authentic connection, joy, and fulfillment.