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Relational Strategies Supporting Student Learning

Opening Week 2019 Breakout Session September 18, 2019 10:45-11:45 AM

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Support for this work is provided by the National Science Foundation's Improving Undergraduate STEM Education (IUSE) program under Awards 1625918, 1625387, 1625946,1625891. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.















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• Introduction and activity

Outline

- Relational practices and research
- Relational practices in action in mathematics classrooms studied in the TLC3 grant















Pair-Share

- What courses do you generally teach?
- What motivated you to attend this session? Or what are you hoping to get out of this session?















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Acknowledgements

TLC3 Research Team – Improving the STEM Math Pathway

Dr. Vilma Mesa, Anne Cawley, Saba Gerami, Jonathan Overstreet, Frank Suarez – University of Michigan

Dr. Eboni Zamani-Gallaher, Chauntee Thrill – University of Illinois at Urbana-Champaign

Dr. J. Luke Wood, Reka Barton, Darielle Blevins – San Diego State University



American Mathematical Association of Two-Year Colleges

National Science Foundation

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Dimensions of the STEM Math Pathway



Research question: How do programs, practices, and strategies support students in their MSI designation?

Case studies: Four Minority-Serving Institutions (AANAPISI, HSI, PBI, TC)

San Diego State







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The Classroom Space (n = 299 surveys, 88% response rate)



Mathematical Practices: problems worked, questions asked, who is doing the work

Relational practices:

welcomeness and validation, performance monitoring, culturally relevant teaching

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Wood, Harris III, and White (2015)

TRENDING BOOK PUBLICATIONS

Teaching Men of Color in the Community College: A Guidebook



Sold By: Montezuma Publishing ISBNs: 9780744229523, 9780744237269 Publish Year: 2015 Language: English

Number of Pages: 108



the Community College A Guidebook



This guidebook articulates strategies for teaching men of color in community college. You will learn why implementing these approaches may take additional support from instructional leaders (e.g., department chairs, faculty development professionals, academic deans, vice presidents of instruction) Beyond providing recommendations for their peers, faculty leaders also extended suggestions for college leaders. Specifically, these suggestions focused on steps and strategies

Extensive literature review

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- Student narratives and interviews
- Promising practices from faculty in **Community College**
- Quantitative analysis of student experiences and faculty practices









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Relational/Enhanced Strategies

- Welcomeness
- Appropriate Disclosing
- Validation
- Culturally Relevant Teaching
- Performance Monitoring



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Common practices enacted differently

Distrust

Assumptions of Criminality



BLACKMINDS

Ascribed natural ability in math

Interaction with authority figures/elders

Intergenerational conflict













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Figure 2: Educational Attainment for Asian American Sub-Groups, 2008-2010

Less than high school diploma Bachelor's degree or higher Hmong 14.7% 37.9% Cambodian 37.4% 14.1% Laotian 12.4% 33.8% 29.4% Vietnamese 25.8% 19.3% Chinese 51.5% Thai 16.8% 43.8% **Bangladeshi** 16.6% 49.9% Pakistani 13.4% 53.9% **Asian Indian** 8.8% 71.1% 8.3% Korean 52.7% Filipino 7.9% 48.1% Sri Lankan 7.6% 57.4% Indonesian 7.3% 48.7% 5.3% Japanese 47.7% Taiwanese 4.8% 74.1%

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Strategies

- Welcomeness
- Validation
- Performance Monitoring
- Appropriate Disclosing
- Culturally Relevant Teaching

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Welcomeness to engage

Create an environment where student engagement is desired and proactively invited

5 minute pair-share

What would/could you do to create an environment of welcomeness?















Welcomeness to Engage (Wood, Harris III, & White, 2015)

- Open nonverbal and inviting verbal communication
- Critique privately, praise publicly
- Increase motivational messaging

Validation

Resilience

Positive Futures

Underserved students must hear "you belong," "you can do the work," "you can succeed," "you have the ability," "you are very intelligent"

 Avoid Unintentional Micromessaging, Microaggression, Microinsults, Microinvalidations

"Wow, you are very articulate"; "huh, you are really good at math" Negating students of color experiences with racism

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Welcomeness to Engage – TLC3 math classes

21 (81%) agreed; 2 neutral, 3 disagreed

Three themes:

- 1. Basics of welcomeness
- 2. Physical aspects of welcomeness
- 3. Welcomeness to engage in mathematics















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Welcomeness to Engage: The Basics

- Being on time or early
- Interacting with students as they enter the class
- Asking "How are you?"
- Using students' names
- Smiling
- Relaxed atmosphere
- Helping students with registration and wait list
- "Take care" "Have a great day" at the end of class













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Welcomeness to Engage: Physical Aspects

- Looking at students when they are asking a question
- Pointing and saying "yes" to physically acknowledge students when they respond
- Open posture with arms; not turning back to students
- Tone of voice indicating welcomeness
- Walking around and openly engaging students while they work on problems
- Leaning in when working with students















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Welcomeness to Engage in the Mathematics

- Acknowledging the material may be complicated but they would get it
- Reframing a mistake to keep the student engaged, "It's not you; it's hard you can do this" "Your graph can be funky and you can still find the answer
- Encouraging students to "take a shot" at a problem
- "Let's get some more people in here" using the roll; mitigates any tendency for a few students who may dominate
- Validating an approach a student has taken (so that they continue to engage) – "Factoring, I like it!" "Cute what you did there." "Touchdown" when a student did well

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Questions/Comments?













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Performance monitoring

How would/could you do it?

5 minute pair-share













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Performance Monitoring (Wood, Harris III, & White, 2015)

- Be proactive in asking students if they need assistance
- Encourage students who are "on the margins"
- Know when to "step in"
- Early Alert Monitor key predictors of student course success: Attendance
 - Low scores on an exam or major assignments
 - Arriving to class late
 - Leaving class early
 - Submission of incomplete work
 - Disengagement in class discourse

















Performance Monitoring – TLC3 Classes

24 (92%) agreed; 1 neutral, 1 disagree

Three themes:

- 1. Reminding
- 2. Asking questions
- 3. Circulating and checking students' work

















Performance Monitoring: Reminding

Course logistics – due dates, where to find things (this is in a handout, or this is on Canvas), where to find current grade

Resources – tutoring center, office hours

Performance expectations – show work, reminding them about key steps, "this technique is important," "you will need to know this," "this is the hardest thing that will be on the test"

Comments:

What you remind versus how you remind – verbal, on board, email Some students can be hesitant to seek help















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Performance Monitoring: Asking Questions

Complex question: Asking about the meaning of a statement, whether it would be acceptable to do a particular next step in a problem or "How do you see that?"

Check-in type questions: "Got that?" "Everything OK?" "Does this look OK?"

Comments:

Check-in questions have a place: They seek to affirm that students are following and keeping up with the presentation

These questions alone are not enough to truly monitor performance for all students















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Performance Monitoring: Walking around and checking student work

Instructor offering guidance and assistance: "OK, wait you've gone too far, don't simplify," "You need to do this."

Instructor taking on the responsibility for the confusion: "I'm feeling a roadblock; let's do another one." "I think we need to a little more."

Instructor effectively handling student mistakes or misunderstandings, "I heard a like and unlike. I want to hear a justification on both."

Comment: Students can monitor each other's performance as they help each other













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Conceptual Framework from CCEAL (Community College Equity and Assessment Lab) at SDSU

	Don't Know Strategies	Know Strategies
Willing to use Strategies	THE ALLIES	THE CHOIR
Unwilling to use Strategies	THE RESISTORS	THE DEFIANT















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Thank you! Have a wonderful fall quarter!

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