Inclusive Excellence in Mathematics

Ann Sitomer Senior Researcher Coordinator, InclusiveExcellence@OSU STEM Education Research Center Oregon State University

Nikki Gavin

Interim Division Dean Mathematics and Engineering Lane Community College

InclusiveExcellence@OSU

Lincoln City is located within the traditional homelands of the Siletz people.

Inclusion

"The active, intentional, and ongoing engagement with diversity—in the *curriculum*, in the co-curriculum, and in *communities* (intellectual, social, cultural, geographical) with which individuals might connect—in ways that increase awareness, content knowledge, cognitive sophistication, and *empathic* understanding of the complex ways individuals interact within systems and institutions" (Association of American Colleges & Universities, Making Excellence Inclusive).

Instruction: Data from the CC-IDI



Wood, L. (2019) *Mathematics as Whiteness*. Symposium presented at the Council for the Study of Community Colleges. San Diego, CA.

Instruction: Data from the CC-IDI





Wood, L. (2019) *Mathematics as Whiteness*. Symposium presented at the Council for the Study of Community Colleges. San Diego, CA.

Trauma

"The major challenge to educators working with highly stressed or traumatized adults is to furnish the structure, predictability, and sense of safety that can help them begin to feel safe enough to learn" (Perry, 2006) Trauma-Informed Educational Practice (TIEP), when operationalized for classroom practice, becomes Trauma-Informed Teaching and Learning (TITL) and has the following goals:



- to understand the ways in which violence, victimization, and other forms of trauma can impact all members of the campus community,
- to use that understanding to inform policy, practices, and curricula for two main purposes: 1) minimize the possibilities of (re)traumatization and/or (re)victimization, and 2) maximize the possibilities of educational success

Principles of Trauma-Informed Teaching & Learning

- 1. Physical, Emotional, Social, and Academic Safety
- 2. Trustworthiness and Transparency
- 3. Support and Connection
- 4. Inclusiveness and Shared Purpose
- 5. Collaboration and Mutuality
- 6. Empowerment, Voice, and Choice
- 7. Cultural, Historical, and Gender Issues
- 8. Growth and Change

Adapted from Cole, Eisner, Gregory, & Ristuccia, 2013; SAMHSA, 2014; St. Andrews, 2013)

Objectives of Trauma-Informed Teaching & Learning

1. Recognize the impact of violence and victimization on development, learning, and coping strategies

2. Minimize possibilities of retraumatization and maximize possibilities of successful educational outcomes

- 3. Identify successful educational outcomes as the primary goal
- 4. Employ an empowerment model
- 5. Strive to maximize choices and control

Objectives of Trauma-Informed Teaching & Learning

6. Mitigate power imbalances through relational collaboration

7. Create an atmosphere that is respectful of the need for safety, respect, and acceptance

8. Emphasize strengths, highlighting competencies over deficiencies and resilience over pathology

9. Strive to be culturally competent and to understand people in the context of their life experiences and cultural background

10. Solicit input from all class members and involve them in evaluation processes

White privilege

"Mathematics operationalizes white privilege."

Eboni Zamani-Gallaher, Director of the Office of Community College Research and Principal Investigator on the NSF-funded project, *Transitioning Learners to Calculus at Community Colleges*.



Videos 8- 11 from the *National Academies Workshop on Developmental Mathematics*:

https://sites.nationalacademies.org/DBASSE/BOSE/Developmental_Math/index.htm

MAA Instructional Practice Guide, pp. 122-128, *Equity in Practice* (available free to members at the MAA website.)

Mathematics for Equity, Nasir et al. (2014)