Globalizing the Liberal Arts Soka University June 3 – 5, 2018

Toward inclusive learning cultures in STEM: Integrating embodied understanding of diversity and identity through self-authored narratives and theatre

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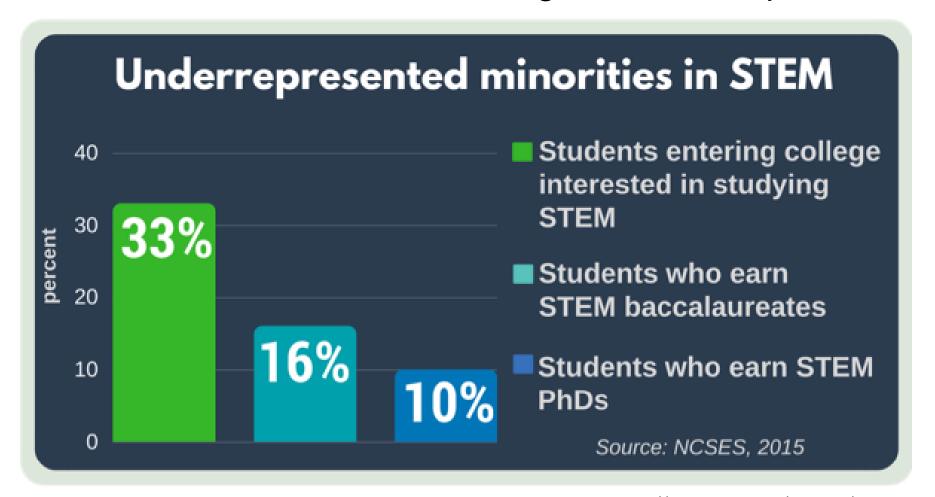
excellence through diversity

inclusivity

Globalization in STEM learning:

- intersectionality and identity

US data: Persistence of undergrad STEM aspirants



from HHMI: A New Strategy to Build Capacity for Creativity, D. Asai. Available: https://www.hhmi.org/content/new-strategy-build-capacity-creativity-science-education

A. Finley & T. McNair (2013) Assessing underserved students' engagement in high-impact practices. Washington, DC: American Association of Colleges and Universities

How do students articulate the effects and meaning of their learning?

The learning experiences that most stood out to students:

- Connections between how their learning environment facilitated a sense of self-worth and empowerment.
- Importance of individual identity as central to their meaning-making
- Students' personal development
- Intentionally making the diversity of students' experiences part of the discourse and applicable to course material.

Patti McGill Peterson's keynote:

Knowledge

- Skills
- Attitudes [Dispositions]

Other themes from yesterday:

- enduring questions of humanity; social context (Penprase)
- integration of ethical understandings into engineering education (Helfand)
- rooted globalism (Pickus) being knowledgeable about each other's histories...
- defamiliarization (Dwyer) seeing your own world through the vision of someone else
- scaffolded connections between "self" and humanity as a whole – the concentric circles of experience (Gonzalez)

generosity

risk-taking

celebrating failure

being present







Faculty

Who are you? What inspires you?

What assumptions might others have about you?

What have your own experiences been during your educational/scientific training?

Inclusivity; Microaggressions

Students

Who are the students in your classroom? What assumptions do you/have you had about them? Or, what assumptions do they/might they have about you?

What does it mean to "belong" (and not belong) in STEM?

Stereotype threat

Theatre + STEM inclusive pedagogy: an integrated framework

How do we create a welcoming space:

- physical presence, gestures, generosity, reciprocity – "Yes, and..."

Be present, intentional in the language that we use.

Theatre + STEM inclusive pedagogy: an integrated framework

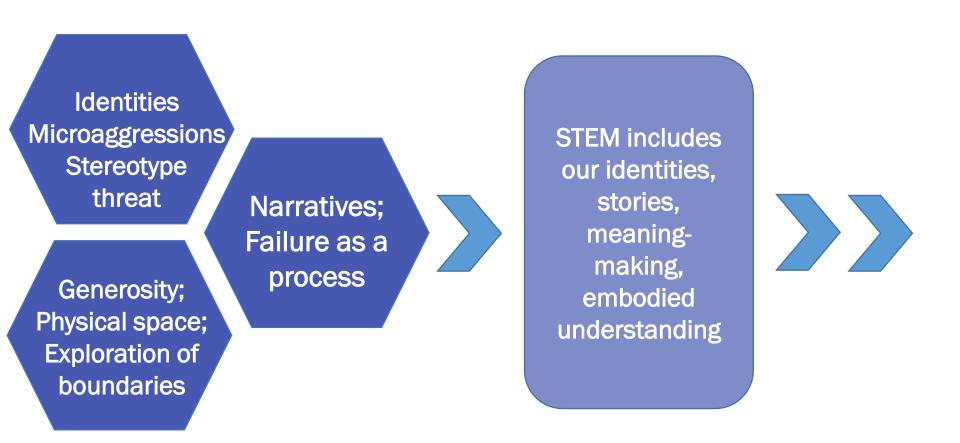
Celebrating failure – creating a space for the narrative of failure.

Narratives and pathways: telling our stories of STEM – the importance of failure in this narrative.

Try again. Fail again. Fail better.

Ever tried. Ever failed. No matter.

- Samuel Beckett, Worstward Ho



Inclusive STEM pedagogy for global mindset



STEM as a space for students to contribute their identities; to belong; to connect across the disciplines and beyond the curriculum; to author their narratives as global citizens

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