The Impact of STEM Instructors on Systemic Equity: Strengthening a Democratic Society

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Pronouns are she/her/hers

Tell your neighbor your name and pronoun preferences,
and why you are here.

In Summary….

What does this have to do with _____?

In your own area of influence at work, at home and in the community can you think of a situation or a conversation for which you could provide some context?

The Claim:

- We may or may not achieve equity in our lifetimes, but the community college classroom, especially the math classroom marks a true front line of engagement in the fight for equity.
  - Ben Aschenbrenner (workshop facilitator for ColLABorate, and Culturally Responsive Classrooms *Also first place winner of Faculty Math League)

- A vital, economically robust society depends on a scientifically literate citizenry who understands how science works, the nature of evidence and argumentation and the application of scientific contexts to ill-defined, real-world problems. Higher education must therefore ensure that all students have access to STEM courses taught via evidence-based, student-centered practices.
  - Achieving Systemic Change, *The Coalition for Reform of Undergraduate STEM Education*

The Journey… perhaps a common one

- Inclusion is annoying, because obviously, I do not discriminate on the basis of _____ (race, class, creed, gender, sexuality, ability etc)

  #partoftheproblem

- Inclusion is obviously the right thing to do.

  #compliance

- Inclusion, obviously because each and every human is a valuable member of the community

  #agentofchange

Faculty Solutions:
Management of the Learning Space

Encourage collaboration

Power Sharing

Discourse and Discourse Directionality

Facilitator mobility/position in the learning space

Acknowledgement

Faculty Solutions: Instructional Practices

Diversify Assessments

Choose/create assignments that enhance cultural and global awareness

Multi-level assignments

Use Open Source Content

Faculty Solutions: Personal Inventory

Adopt a growth mindset

Examine Achievement Gap data

Connect with intention. Listen. Read.

Office door sign

Personal habits: incorporate the Disney Way

When you see something, say something

Reading List

- Achieving Systemic Change, (2014)
  - https://www.aacu.org/sites/default/files/files/publications/E-PKALSourcebook.pdf

- Mathematical Mindsets, (2016), Jo Boaler, Wiley

- Outliers, The Story of Success, (2011), Malcolm Gladwell

- Confronting the Racism of Low Expectations, November 2004, Educational Leadership
  - http://www.ascd.org/publications/educational-leadership/nov04/vol62/num03/Confronting-the-Racism-of-Low-Expectations.aspx

- Eight Actions to Reduce Racism in College Classrooms,(2016) Shaun Harper, Charles H.F. Davis III
  - https://www.aaup.org/article/eight-actions-reduce-racism-college-classrooms#.WXPOH7a1vlU

Reading List Continued

- A Framework for Understanding Poverty 5th Edition, Ruby Payne,(2013) aha Process

- For White Folks Who Teach in the Hood..and the Rest of Y'all Too: Reality Pedagogy and Urban Education, Christopher Emdin, (2016), Beacon Press

- Savage Inequalities, (1992), John Kozol

- New Directions for Equity in Mathematics Education, (1995), Cambridge; Editors: Walter G. Secada, Elizabeth Fennema, Lisa Byrd Adajian