Equitable Inquiry-Oriented Teaching

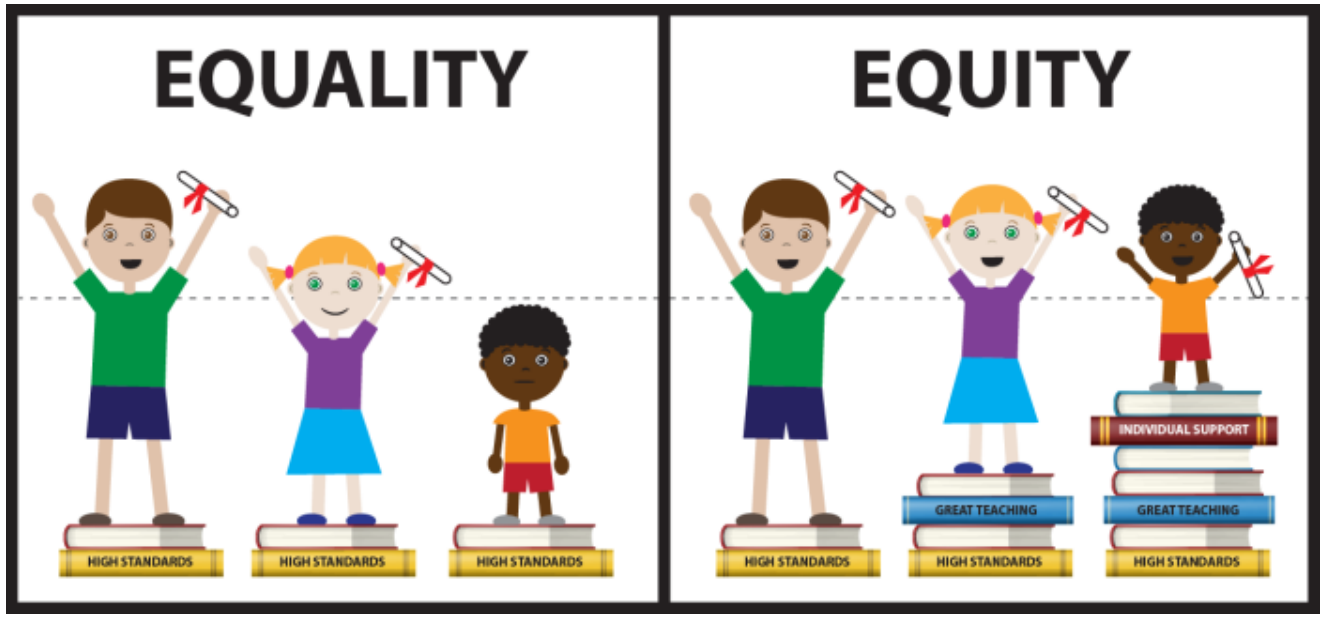
Addressing the elephant in the room

Think-Pair-Share:

If you were to observe a classroom, what evidence would you look for to decide if instruction provided all students **equitable** access to learning opportunities?

What is Equity (in Education)?

- "...a fair distribution of opportunities to learn or opportunities to participate" (Esmonde, 2009, p.1010)
- What is the difference between *Equity* and *Equality*?



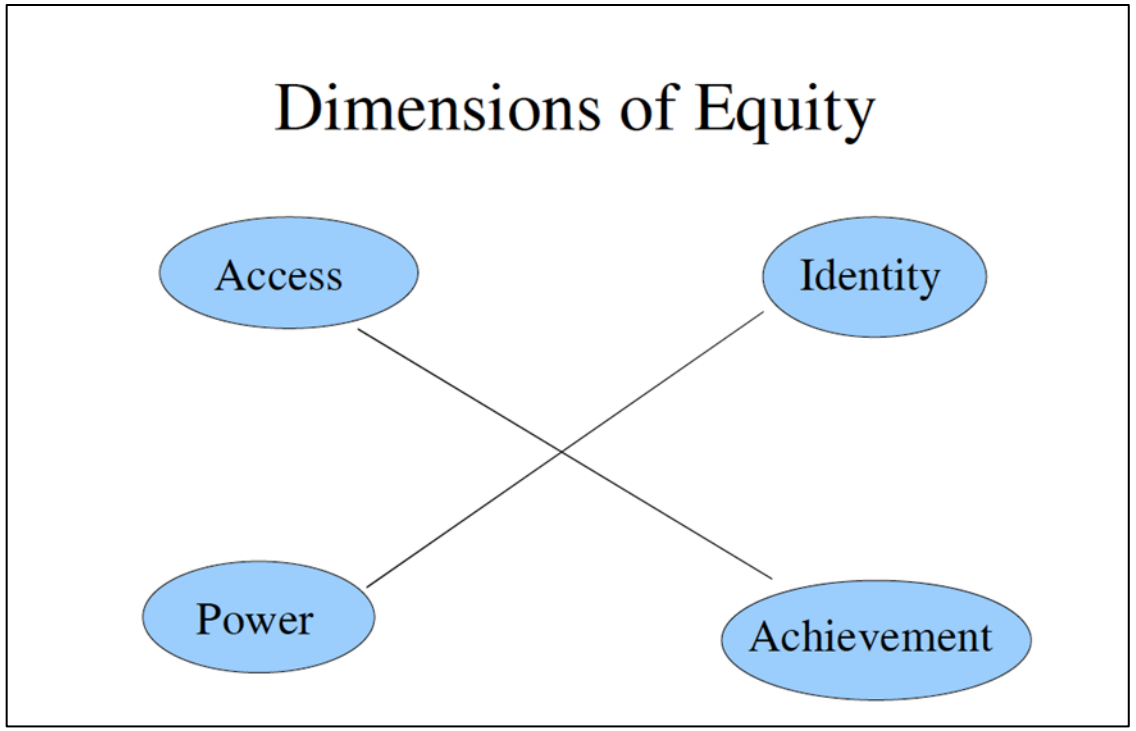
http://culturalorganizing.org/wp-content/uploads/2016/10/originalequityvsequality.jpg

What do WE mean by equity?

Equitable instruction aims to…

- "…understand and mitigate systemic differences in ways that people experience and are afforded educational opportunities, particularly differences that privilege one group over another (Gutiérrez 2002, 2013)." (Adiredja & Andrews-Larson, 2017)

Dominant and Critical Conceptions of Equity



- Narratives about access and achievement tend to dominate discourse about equity
- One might think of access and achievement as symptoms of inequity
- Power and identity offer insight into underlying mechanisms of inequity (Gutiérrez, 2009, p. 6)

Narrowing in on equity issues in your classroom

Considering the students YOU are likely to have in your classroom, what **barriers** to equitable learning opportunities might exist with regard to:

- Whole class discussion?
- Small group work?
- Homework and/or course policies?

What strategies might help remove those **barriers**?

And now some video! What do you notice?

We're going to watch video of four clips that represent common instructional scenarios:

- Task set-up (before students work on task in small groups): 0:00-3:45
- Small group work (without instructor talking with group): 18:30-21:30
- Small group work (while instructor talks with group): 28:45-31:08
- Whole class discussion (to touch base partway through SGW) 37:50-45:45

Disclaimer: This video was not selected because it was perfect (there is no such thing), but rather because it is a good representation of an instructor using the materials for the first time while also making informed efforts to make her teaching as equitable as possible.

Setting the Environment

- Carefully choose tasks that show students they are "smart and necessary to the group" (Esmonde, 2009)
- Explicitly providing roles to students can shift positioning of mathematical authority during group discussions
  - Especially for racial minorities, women, working-class students (or any combination of the three)
- Assessments should support group collaboration

Considerations for forming small groups

POSSIBLE BARRIERS

- Who is contributing
  - Are group discussions dominated by the pre-dominant subgroup of the class?
- Passive participants
  - "participants all believe that some group members are more capable than others" (Esmonde, 2009, p. 1022)

POSSIBLE SOLUTIONS

- Create heterogenous groups
  - But attempt to avoid isolating members of non-dominant groups
    - "…students who are positioned as the more competent learners guide the group's work while others wait to be told what to do" (Esmonde, 2009, p. 1024)
- Active Structuring
  - Instructors need to "structur[e] group composition so that students interact with one another productively" (Esmonde, 2009, p. 1024)

Strategies: Broadening Participation in WCD

Strategies for "cold-calling"

- BRAINSTORM (pre-task): Explicitly ask **everyone** to have either an idea of what they might do to start or a clarification question about the task
- LISTEN TO PEERS (mid- or post-task): Explicitly warn students you will randomly select a student to re-explain the idea shared by a presenter OR ask them a question

Times I would NOT "cold-call"

- PRESENTATION (mid- or post-task): Use small group work time to hear ideas students have and identify productive ideas worth sharing in whole group.
  - You can use this opportunity to try to identify times when quieter students have good ideas and ask them to share those with the whole class.
  - "That's a really nice idea. Would you mind if I have you share that idea with the whole class in a few minutes?"

Other strategies

- Normalizing struggle
- Explicitly emphasizing the value and importance of partiallly formed and/or partially correct ideas
- Strategies for forming groups / assigning roles?
- Equitable assessment strategies (e.g. homework/exams/quizzes/etc)?

π

UNUSED

Tools of Support

- Cooperative (group) learning
  - Advantages:
    - "...it fosters learning academic content and social skills..." (Esmonde, 2009, p.1009)
    - "...supports democratic and social justice goals..." (Esmonde, 2009, p.1009)
    - "...leads to greater intergroup harmony.." (Esmonde, 2009, p.1009)
  - Disadvantages:
    - When not monitored properly, "[s]tudents may learn incorrect mathematical strategies and undesirable social interactional styles" (Esmonde, 2009, p.1009)