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# Fostering Inclusive Learning in Groups

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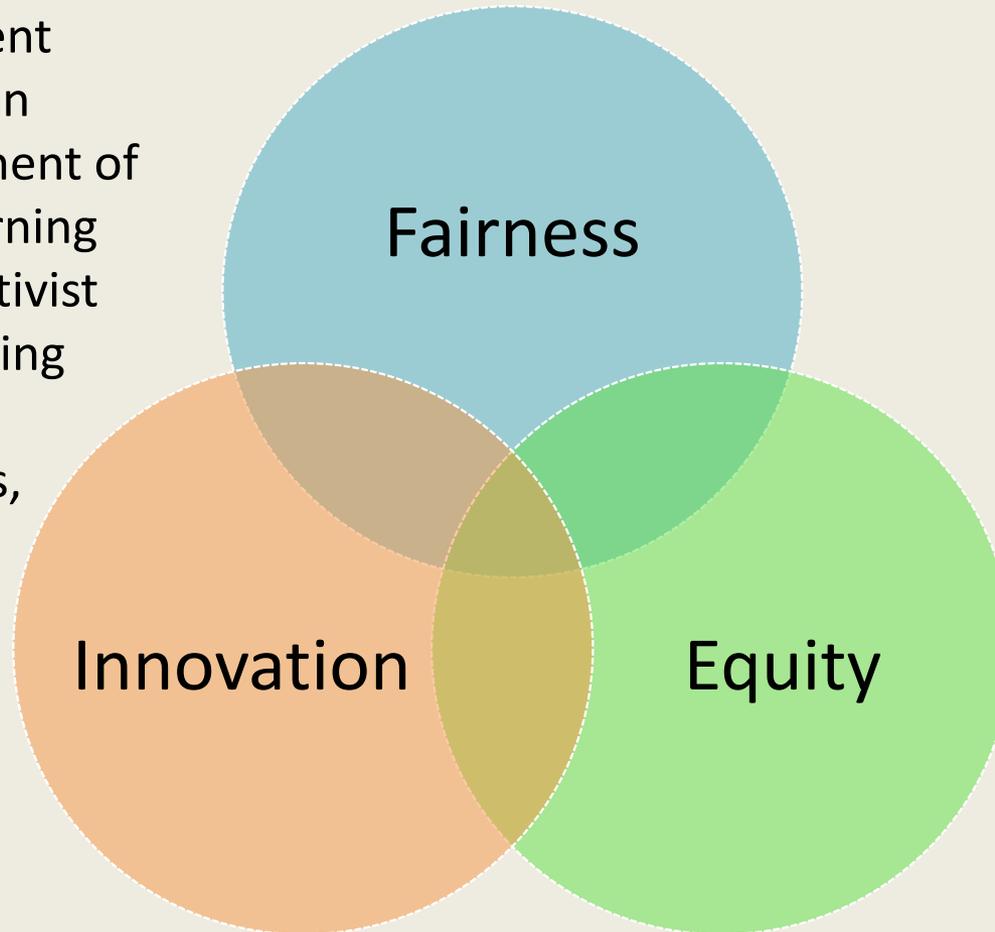
# Collaborative Learning



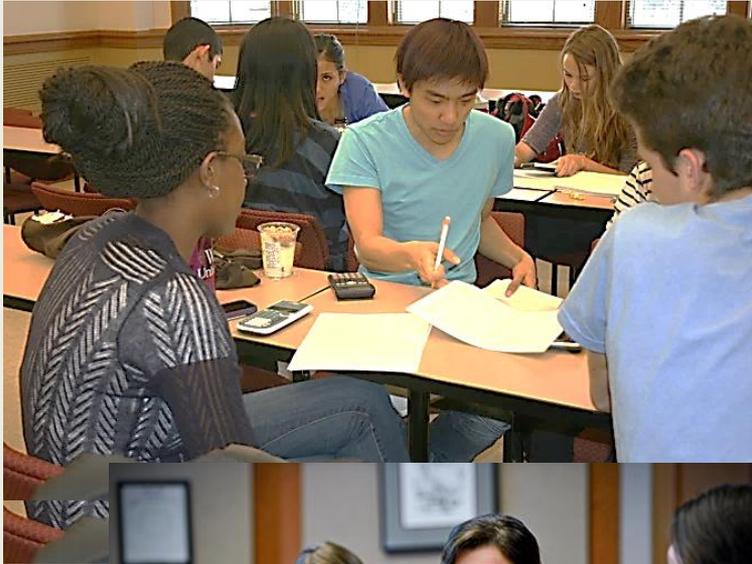
# Inclusive Teaching and Learning

Diversity of student contributions is an essential component of collaborative learning built on constructivist theories of learning

(Micari and Pazos, 2014)



# Patterns of Participation: What have you observed? What should you be watching for?



# How do students experience group work?

- I felt really uncomfortable to even speak, as I was the only Asian kid in that group. The only conversation I had with the group members is regarding the work. I was 'invisible' to them when they were talking to each other. (Asian, Male)
- When working in groups with my classmates, I was always given the easy portion of the project because they assumed that I was not capable of doing the harder parts. (African American, Female)

Harwood et al., 2015

# How do students experience group work?

- At my lab, I've had incidents where people doubt my intelligence or believe my education is not as good as theirs [because I] earned my bachelor's in Puerto Rico. They don't believe I can be intellectually at their same level. (Latino, Male)
- When it's time to separate into groups, it seems the Black student is always the last person to find a group. It makes me feel invisible—as if I don't, or shouldn't, exist here. (African American, Male)

Harwood et al., 2015.

# Micro-Aggressions

“Brief and commonplace verbal, behavioral, and environmental indignities--**whether intentional or unintentional**--that communicate hostile . . . [or] denigrating hidden messages” (Sue et al., 2009)

# Set a Tone for Learning across Differences

- Describe for students the **environment** you want to create and maintain. Set **ground-rules and expectations** at the start of the semester. Remind students of ground-rules throughout semester, especially if you are concerned about disrespectful conduct.
- **Assign roles** within groups to encourage sharing of work.
- **Monitor participation** and talk with students individually if their speech or conduct could be silencing, denigrating, or excluding others. Remember: silence is often read as endorsement. Therefore, it is important to take action.
- **Be aware of power imbalances** in the classroom and of your own authority in communicating verbally and non-verbally about –
  - Whose ideas or contributions matter, who has the potential to succeed in the field, and what happens when an incorrect answer is given.

# Make Resources and Help Available to All

- Be careful to avoid giving some groups “inside information” —or appearing to
- Call on different students, and groups, in class
- Do not assume that all students have access to same resources/devices (e.g. SMART phones and laptops)
- Do not assume equal knowledge of academic resources or likelihood to seek out help

# Study of “Social-Comparison Concern” in Peer-Led Team Learning (PLTL)

Background: Social-comparison concern is a fear of looking “dumb” in groups

- Hinders cognitive engagement

## **Survey Items on Social-Comparison Concern**

I feel different from the other people in this group.

I often leave the workshop feeling like I am not as smart as others.

I often feel intimidated to participate in the group.

I often leave the workshop feeling like I am the only one who doesn't understand the material well.

I worry about getting things wrong in front of my group.

I have generally understood the material as well as the others understand it.

(Micari and Drane, 2011)

# Study of “Social-Comparison Concern” in PLTL

Study of 205 students in PLTL groups in Chemistry, Biology, and Engineering found that higher levels of social-comparison concern were correlated with

- Lower levels of comfort participating in groups
- Lower levels of self-efficacy (belief in ability to succeed in field)

Students who dropped out of PLTL reported higher levels of social-comparison concern.

(Micari and Drane, 2011)

# Study of “Social-Comparison Concern” in PLTL

- Higher levels of social-comparison concern were also correlated with female identity and under-represented minority status;
  - but not correlated with lower GPA and SAT scores
- Women outnumbered men in the study groups,
  - but reported feeling less comfort than men in sharing their ideas and participating
- Students who were in underrepresented racial groups reported more social-comparison concern at end of term than at beginning of term.

(Micari and Drane, 2011)

# Follow-Up Study: Growth Mindset Intervention in PLTL

- Study involving 195 students in PLTL in Bio and Chem
  - Treatment A: Received info (via peer leaders) on intelligence as changeable (Growth Mindset)
  - Treatment B: Received info (via peer leaders) on study skills
  - Treatment C: Received no extra resources
- Results
  - Treatment A students had significantly lower levels of social-comparison concern than Treatment C students
    - Effect was greater for less-prepared students
  - No significant differences found between A and B or between B and C

(Micari and Pazos, 2014)



# Facilitating Full Participation and Inclusion in Groups

- **Require students to alternate roles** that they take on in groups and help them see essential importance of all roles
  - e.g. help them see past common biases that suggest the spokesperson is the most important role or that recorder is simply writing down what others say.
- **Circulate to quietly monitor participation. Observe uneven participation and gently intervene to help groups get everyone involved.**
  - E.g. “Before moving on, check in with the recorder to determine what questions she or he has for the group.”
  - “If you are stuck, ask the manager to help you identify an idea that was suggested but not discussed earlier.”
  - “Remember: as a spokesperson, your job is to represent the ideas of everyone in the group.”



# Encouraging a “Growth Mindset” Environment

- Approach faltering as opportunity for learning and improvement
  - Describe struggling as crucial to learning
  - Show that failure can lead to development of new ideas and discoveries (give examples)
  - Ask questions such as “Did you find any stumbling blocks or places where you struggled? How did you work through those difficulties?”
- Actively show enthusiasm for ideas of ALL students
  - Show interest via verbal and NON-VERBAL cues
  - Encourage students to think out loud and point to specific strengths of their contributions and questions



# Group Discussion

- How might you apply knowledge about “social-comparison concern” to planning and facilitating group work?
  - Work in pairs or a small group to brainstorm specific ideas for 5 min.
  - Select one idea to present to the larger group



# Gather Feedback and Refine Your Approach

- Ask a colleague to observe your teaching and to report back on any observed patterns of participation and interaction
- Ask students for frequent feedback on how groups are functioning (e.g. during second week and at midterm)

Keep an open mind to information you gather and be ready to make adjustments to improve the learning environment.



# Key Strategies for Fostering Inclusion in Group Work

- Set expectations and ground-rules
- Assign roles in group work and require students to alternate roles
- Actively facilitate collaboration within groups—do not expect it to happen automatically
- Give students feedback on their participation; Talk with students individually and as a group to help them correct any issues
- Give students an opportunity to provide feedback on how group work is going
- Ask a colleague to observe and provide ideas for adjustments

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