Inclusive Classrooms

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1. Why should we care?
2. Who are you as a TA?
3. Who are your students?
   - Identity
   - Unconscious bias
   - Stereotype threat
4. What is the difference between equality, equity, and equal opportunity?
5. How can we create an inclusive learning environment?
   - Transparent teaching
   - Strategies for creating inclusive classrooms
By the end of this session, you will be able to:

- Recognize and appreciate the value brought by diverse backgrounds and experiences
- Recognize unconscious bias and stereotype threat
- Understand the differences between equality, equity, and equal opportunity in the classroom
- Create an inclusive course and class environment for your students
How Diversity Makes Us Smarter

- Research shows that **socially diverse groups** (i.e. diversity of race, ethnicity, gender and/or sexual orientation) are **more innovative than homogeneous groups**

- Simply interacting with individuals who are different forces group members to:
  - better prepare
  - anticipate alternative viewpoints
  - expect that reaching consensus will take effort

How are we doing in STEM?

- Female, African American or Black, and Hispanic or Latinx students are underrepresented in most STEM fields
- There is a disproportionate loss of these students in the natural sciences and engineering when comparing intentions and ultimate degrees received by undergraduates
- **WE CAN HELP CHANGE THIS** by creating more inclusive classrooms and by ensuring we provide students with equal opportunities to succeed

Who are you as a TA?

- Before you assume your first teaching role, **reflect on your own identity, background, and experiences**
- Recognize the limitations of your own perspectives and experiences
- Introduce yourself to your students with your pronouns
  - Lay the foundation for an inclusive and welcoming environment
Who are your students?

- Make an effort to get to know your students and learn about identities other than your own.
- Become more aware of the identities and languages around you.
- **Don’t make assumptions** about your students!
Identity Iceberg

Natalie Lucier, “Iceberg in Newfoundland Canada”
https://www.flickr.com/photos/36121888@N08/3623933748
Identity Iceberg
Unconscious Bias

- **Bias** is a prejudice in favor of or against one thing, person, or group compared with another usually in a way that’s considered to be unfair.

- Biases are created and reinforced by our environments and experiences
  - Individuals tend to be biased to favor people similar to them and biased against those who are different

- When we are moving quickly or lack all the data, our unconscious biases fill in the gaps

- Once we realize we don’t know something, it is our responsibility to learn a little more

https://diversity.ucsf.edu/resources/unconscious-bias
Examples of Unconscious Bias

- For an identical CV, faculty were more likely to hire someone named John than Jennifer, but they thought that Jennifer was more likeable.
- When asked to rate a verbal skills test, evaluators gave:
  - lower scores if told an African American wrote the text than if told a Caucasian person wrote it
  - lower ratings when told a man wrote it than a woman
- Parents estimate higher math abilities for sons than daughters, despite no differences in test scores.


Stereotypes are over-simplified ideas about an entire group of people without regards for individual differences

- E.g. “All ______ are good at ______.”

Stereotype threat describes the fear that one’s behavior will confirm an existing stereotype of a group with which one identifies.
Examples of Stereotype Threat

- If female students or African American students are asked to identify their race or gender, respectively, at the start of an exam, they will do statistically worse on that exam.
- “Even groups who typically enjoy advantaged social status can be made to experience stereotype threat. Specifically, White men perform more poorly on a math test when they are told that their performance will be compared with that of Asian men (Aronson et al., 1999), and Whites perform more poorly than Blacks on a motor task when it is described to them as measuring their natural athletic ability (Stone, 2002; Stone, Lynch, Sjomeling, & Darley, 1999).”

Stereotype Threat

Social Signals

Unconscious Bias

Stereotypes

Stereotype Threat
Addressing Stereotypes and Biases in the Classroom

- Establish students’ prior knowledge
- Reward current learning over prior preparation, knowledge, or access to experiences or information
  - Design assessments with this in mind
- Be open to and seek out feedback
- Change the narrative
  - Who are your examples? Are they current? Are they young? From different places and backgrounds?
  - Be aware of the historical figures you highlight
  - Talk about how your subject ties in to others to help students from different majors relate more to the topic
- Growth Mindset > Fixed Mindset
Equality
- Treating everyone the same
- Promotes fairness only if all start from the same place

Equity
- Giving more resources to certain students

Equal Opportunity
- Giving everyone the opportunity to be successful by:
  - Being accessible
  - Giving constructive feedback/grading
  - Changing classroom structure
  - Transparent teaching
Equality
- Treating everyone the same
- Promotes fairness only if everyone starts from the same place

Equity
- giving more resources / things to do to certain students

Equal Opportunity
- Giving everyone the opportunity to be successful by:
  - Being accessible
  - Giving constructive feedback/grading
  - Changing classroom structure
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Accessibility in Online Learning

- Closed captioning and transcription features
- Repeat questions asked out loud or in the chat box during Zoom lectures
- Consider students’ abilities to engage synchronously and create opportunities for asynchronous engagement
  - Record lectures
  - Inform students about video recording
  - Save chat messages
- Include accessibility statement on your course syllabus and in Canvas
- Eliminate high-cost materials/books where possible and encourage use of more affordable early editions

Teaching Continuity at Caltech, "Accessibility and Inclusion Online.” http://teach.caltech.edu/online-teaching/accessibility-inclusion
Thoughtfully design your course syllabus
  - Be explanatory and positive

Teach with transparency
  - Focus explicitly on how and why students are learning course content in particular ways
  - Promote students’ conscious understanding of how they learn

Create rubrics for grading or evaluation

Utilize a variety of names/genders/pronouns/examples of scientists and leaders
Inclusivity in Online Learning

- Survey students *before* the start of classes
- Create a sense of community in your virtual classroom
- Communicate frequently and provide as much information as possible
- Be clear about expectations, especially around grading
- Get frequent feedback
  - Informal polls to get feedback on course logistics and understanding of material
  - At least one survey during the term
- Give guidelines for in-class discussion and/or engagement in online forums
- Acknowledge the challenges both for learning and teaching online – “we’re all in this together”
### Summary: Creating Inclusive Classrooms

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<thead>
<tr>
<th><strong>Address this (concept):</strong></th>
<th><strong>By doing this (strategy):</strong></th>
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| Understanding social identities | ▪ Learning more about our own identities AND about identities other than our own  
▪ Creating frameworks / ground rules for classroom discussions  
▪ Introducing yourself with your pronouns |
| Mitigating stereotype threat | ▪ Establishing prior knowledge and getting feedback  
▪ Rewarding current learning over prior prep  
▪ Incorporating scaffolding in assignment design |
| Creating an inclusive classroom | ▪ Thoughtfully designing your course syllabus  
▪ Teaching with transparency  
▪ Utilizing a variety of names/genders/pronouns/examples of scientists and leaders  
▪ Creating rubrics |
Articles of Interest

- https://www.insidehighered.com/news/2020/01/02/minority-students-sense-place-higher-two-year-four-year-institutions
- https://www.nytimes.com/2015/09/13/opinion/sunday/are-college-lectures-unfair.html
Articles of Interest

- https://www.universityaffairs.ca/career-advice/career-advice-article/three-recommendations-for-accessible-remote-learning/
- https://www.academicimpressions.com/blog/microaggressions-online-learning
- https://www.chronicle.com/article/how-to-make-your-teaching-more-inclusive/
- https://insidehighered.com/advice/2020/08/05/small-steps-instructors-can-take-build-more-inclusive-classrooms-opinion
Next Steps

- Please visit https://teach.caltech.edu for more resources on teaching remotely
- Visit https://learn.caltech.edu for more resources on learning remotely