First Steps to Inclusive Teaching

There is no simple way to solve all the problems of inequity and exclusion that students face in our classrooms. However, here are some initial steps we as instructors can take to begin addressing these problems. (See the page 3 for further resources on how to make more substantial changes.)

(1) Structure Courses to Promote Active Learning

Structuring a course to promote active learning helps improve the performance of all students, but disproportionately benefits students from historically marginalized populations (Ballen et al. 2017; Eddy and Hogan 2014; Freeman et al. 2011; Haak et al. 2011). These benefits seem to be mediated at least in part by positive effects on students’ sense of self-efficacy (Ballen et al. 2017) and motivation to allocate time to a course (Eddy and Hogan 2014).

Assignments: In one representative study, Eddy and Hogan (2014) found that including either a preparatory assignment (e.g., guided reading questions, pre-class reading quizzes) or review assignment (e.g., practice exam questions, post-class review quizzes) each week helped raised exam performance by about 3 percent for all students and about 6 percent for black students and first-generation students.

Lectures: Sathy and Hogan (2019, 2020) argue that providing a skeletal lecture outline can help level the playing field for students who have less experience with note-taking by helping them actively filter information and focus attention on key points. (See Harrington and Zakrajsek (2017) for more tips on how to promote student engagement with lectures.)

Classroom Discussion: In an unstructured classroom discussion, students who already feel included in the university and classroom environment are apt to be more confident in participating, and this can give them an inequitable advantage over students from historically marginalized groups in discussion-based courses. Moreover, by allowing more confident students to dominate discussions, instructors may inadvertently strengthen inequitable power structures in the classroom. We can begin to address these inequities by deliberately structuring classroom conversations to include a greater variety of participants. Here are a few simple, popular approaches:

* Think, pair, share: Give students 1-3 minutes to write about their ideas on a question. Pair students and have them identify points of agreement and disagreement. Follow with a whole-group conversation. To encourage equitable participation, consider randomly assigning a reporter (by closest birth date, darkest shirt, etc.) and calling on groups with quieter members first. Once pairs begin to repeat the same answers, you may ask if there are any pairs with different ideas to contribute. (For more on the effectiveness of this exercise, see Lyman 1981, Smith et al. 2009, and Tanner 2009.)

* Structured Group Work: As in unstructured whole-class discussions, dominant voices can take over unstructured small group discussions easily. To ensure all voices are included in small group discussions, instructors can arrange groups to minimize isolation of students of particular backgrounds or interaction styles (e.g., have more than one student of color in a group, place quieter students together) and/or assign roles within the group (Johnson et al. 1991, 1993, 1998; Tanner et al. 2003). One way to assign roles is to give students opposing sides on a debate. Another way is to use a “jigsaw” approach in which you break down material into segments and assign different segments to different students. (This can be combined
with a preliminary phase where students who are ‘experts’ on the same segment first discuss it amongst themselves before sharing their thoughts with students assigned to other segments.)

* ‘Warmed Up’ Cold-Calling: One obvious way to try to include more students in conversations is to cold-call those who are less inclined to participate. However, if a student is already subject to a stereotype threat, failure to answer correctly or articulately when ‘put on the spot’ may function as a confirmation of the perceived threat and so reinforce patterns of exclusion (Larkin and Pines 2003). Instructors can mitigate the potential costs of cold-calling by “warming up” the cold-call: they can prepare students by providing them with questions before class, giving them a couple minutes to write down their thoughts, and/or soliciting written comments before class and then selecting from those comments. Using an obviously randomized process for cold-calling, e.g., popsicle sticks, may also lessen students’ feeling of being ‘targeted’ by a teacher. (For more, see Dallimore, Hertenstein, and Platt 2006, 2012; Carstens 2015; and Knight, et al. 2016.)

Other strategies include polls and clicker-style questions, hot-seat debates, and fishbowl discussions (where each student must rotate through the ‘hot seat’ or fishbowl), written public responses (these can also be anonymous)— e.g., responding on a Google Doc, whiteboard, or notecard that may be shared with the instructor or passed around.

For more quick tips and ideas, see: “Small group activities for Zoom breakout rooms” and “The Big List of Class Discussion Strategies.” For more extended discussion, see Major, Harris, and Zakrjsek (2016); Brookfield and Preskill (2012, 2017); Life Science Education’s Evidence-Based Teaching Guide on Group Work; and The Chronicle of Higher Education’s guide to How to Make Your Teaching More Engaging.

(2) Use Practically Salient and Counter-Stereotypical Examples

Counter-stereotypical examples help narrow achievement gaps by countering stereotype threats (McIntrye et al. 2003, Davies et al. 2005, Schinske et al. 2017, Spitzer and Aronson 2015, Stout 2011). Even if core course content has not been revised to counter stereotype threats effectively, instructors can start to address stereotype threats by using counter-stereotypical examples in illustrations and applications of their core content. For more evidence-backed stereotype threat interventions see here. For more background on the importance of such interventions, see Cohen, Purdie-Vaughns, and Garcia (2012).

Salient examples and applications may help narrow achievement gaps by enhancing the perceived utility value of course material. One successful strategy Harvey Mudd College used to help reach gender parity in its computer science and engineering majors was to add sections to courses that focused on applications of course material to topics that female students had expressed particular interest in (in this case, topics in biology) (Klawe 2017; Weisul 2018). Harackiewicz and Hulleman (2010) argue that students’ interest in course readings and assignments positively correlates with the perceived ‘utility value’ of material (how useful they think those readings and assignments will be to them later) and show that this effect is particularly strong for students who have the lowest expectations for success. Hurtado et al. (2007) argues that a high perceived utility value positively impacts underrepresented students’ sense of belonging in the classroom.

(3) Set the Right Tone

Creating a fully inclusive classroom climate may require systematic changes in course readings; it also takes time and practice to learn to navigate effectively discussions where sensitive identity-based issues arise.
While it is important to engage in this kind of long-term work, here are some small things instructors can do at the beginning of the course to help set the tone for more inclusive discussions:

- Share pronouns: share your pronouns and ask students to share them as well when they introduce themselves.
- Remind students that when sensitive material related to their identity comes up, they are not expected to serve as a representative for their group.
- Encourage students to come speak to you if something other students or you say (or fail to say!) causes concern. You may also consider encouraging students to attend micro-aggression workshops held on campus this semester.
- Ask students to bring it to your attention if experiences outside of class (including, in particular, identity-related experiences) are affecting their performance.
- If authors on the syllabus are mostly from a particular identity group (e.g., white males), discuss with students why this is the case. What power structures and systematic injustices have contributed to the academic dominance of those authors?

The next page includes a sample DEI statement you might consider including as an insert to your syllabus.

---

**Beyond first steps: Further resources for promoting equity and inclusion.**

Life Sciences Education (LSE) provides a thorough, evidence-based guide to inclusive teaching [here](#). (For a companion article, see Dewsbury and Brame 2019). The Chronicle of Higher Education offers a primer on inclusive teaching [here](#) and a webinar on inclusive online teaching [here](#).

**Responding to Micro-aggressions:** Rebecca Knight provides helpful guidance in [this](#) Harvard Business Review article.

**Preparing for Difficult Conversations:** These resources can help you prepare both for unexpected moments of tension and pre-planned conversations around sensitive identity-related topics.


In Chapter 7, “Creating the Conditions for Racial Dialogues,” Merriweather, Talmadge, Elaine offer practical activities to reflect on and implement.


**Self-Awareness:** Dewsbury and Brame (2019) emphasize the importance of examining how our personal histories affect our relationships with students. For more detail, see the page on “Develop Self-Awareness” at LSE’s evidence-based guide to inclusive teaching.

**Growth Mindset Interventions:** Emphasize to students that performance in a class is not pre-determined by fixed markers of intelligence; rather, a growth mindset can improve the performance of students from historically marginalized groups. For more information, see Aronson et al. (2002), Broda et al. (2018), and Yeager et al. (2016).
Sample DEI Syllabus Insert

---

**Equity and Inclusion Statement**

**Course Content:** The authors you find on this syllabus reflect structural injustices of the past. Powers of colonialism, racism, and sexism have worked to the advantage of wealthy, straight, cis-gendered males of European descent. They have been provided with opportunities for education that others were deprived of, and—even among others who also were able to attain an education—their voices have received disproportional amplification in the academy. Different texts reflect the privileged positions of their authors to different extents, and we will examine some of the biased assumptions of the authors we read. We will also see that even texts written by privileged authors can be used to critique the injustices that privilege reflects and perpetuates. Students are encouraged not to treat any author as a final authority on the issues they discuss. Students’ unique and diverse backgrounds can give them insights that privileged authors may have missed, and so they are encouraged to participate actively in the continuing development of our collective body of knowledge.

**Course Discussion:** As participants in this course, we must all work hard to be sensitive to the variety of ways in which our statements can impact others negatively, including, in particular, those who belong to historically marginalized groups. Even despite our good intentions, you or I may say something that inadvertently causes harm to another student. If or when this happens, we must be receptive to criticism. If other students or I say something in class that causes hurt or concern and you don’t feel comfortable speaking up in class, please come talk to me. I hope that I am able to earn your trust enough so that you feel comfortable talking to me; however, if you do not feel comfortable talking to me in person, please feel free to leave an anonymous comment at [https://forms.gle/fwdFC7Mk7hSqddVK8](https://forms.gle/fwdFC7Mk7hSqddVK8).

**Coursework:** If your performance in the class is being impacted by your experiences outside of class, please don’t hesitate to come and talk with me.

If you wish to discuss any other issues related to diversity, equity, and inclusion, I would love to talk to you. I am available after class most of the time. You can set up an appointment with me easily by emailing me at [coetsee.jepson@gmail.com](mailto:coetsee.jepson@gmail.com).


Carstens, B. A. (2015). The effects of voluntary versus cold-calling participation on class discussion and exam performance in multiple sections of an educational psychology undergraduate course.


