



Inclusive Practice Series

PART 1: General Strategies for Constructing an Inclusive Classroom Space

UC Davis is an increasingly diverse campus. Approximately 60% of all degree-seeking undergraduate students at UCD identified as a race or ethnicity other than White/Caucasian in Fall 2017, with at least 26% identifying as underrepresented minority students, and approximately 16% as international visa-holders (see Figure 1), the majority (about 70%) coming from China. Approximately 59% of students identify as women and 44% as first-generation college students. UCD also enrolls a number of LGBTQIA+- identifying students and students who are differently-abled.

Race/Ethnicity, Degree-Seeking Undergraduates

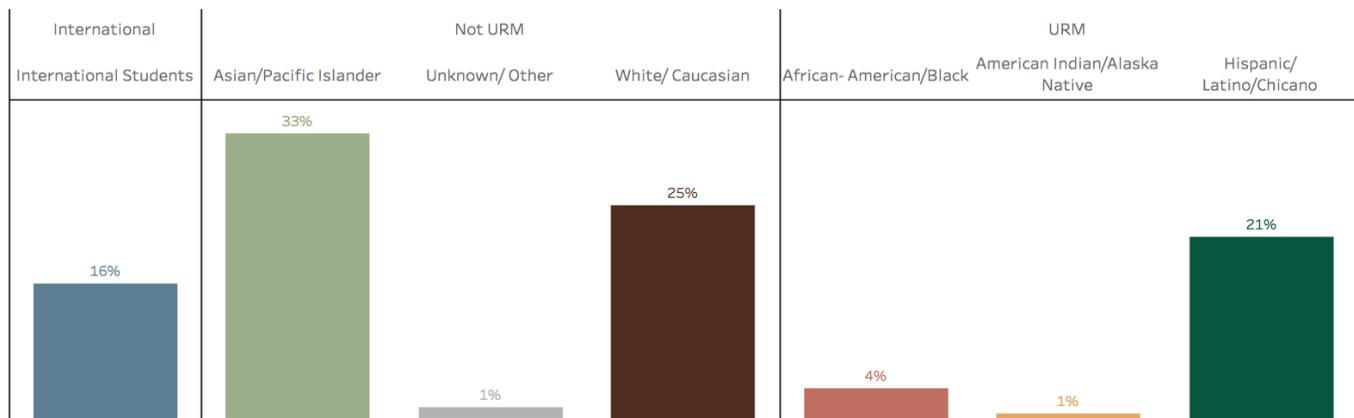


Figure 1: Fall 2017 UC Davis degree-seeking undergraduate students by race/ethnicity. Note: While Pacific Islander students are considered underrepresented minorities (URM), it is not currently possible to disaggregate data for these students from the larger category of “Asian”—thus they are incorrectly reported as “not URM.”

Classrooms are not culturally-neutral spaces as “students cannot check their sociocultural identities at the door, nor can they instantly transcend their current level of development” (Ambrose et al, 2010, 169-170). It is therefore crucial that instructors engage in pedagogical practices that acknowledge and are inclusive of students with various backgrounds, experiences, and identities. Creating inclusive spaces within the classroom is a vital enterprise that can help ensure that all students have equal opportunities to thrive. This resource series will provide classroom instructors and GSIs with strategies and suggestions for engaging in inclusive pedagogies, and creating inclusive spaces for your students both inside and outside the classroom.

Start Here: Recognize You Own Implicit Biases

Implicit biases are subconscious assumptions about people of different races/ethnicities, cultures, nationalities, religions, sexualities, gender identities, abilities, etc., that can influence how a person perceives and/or interacts with someone else. Within a higher education context, these biases often appear in the form of harmful stereotyping, particularly when it comes to perceived academic ability, identity, or viewpoint (Ambrose et al., 2010). For example, some instructors may unconsciously believe that women are not as capable as men in STEM subjects, which can influence how they interact with women in their classrooms (Handelsman, Miller, & Pfund, 2007; Kahn & Ginther, 2017).

Recognizing your implicit biases about your own students is a crucial first step toward building an inclusive curriculum and classroom space (Harper & Davis, 2016). One way to interrogate your own implicit biases is to explore free tests developed by Harvard University’s [“Project Implicit.”](#) These tests may reveal your own subconscious assumptions about students that might unintentionally be influencing the ways you interact with them. Harper & Davis (2016) also recommend that instructors “acquire racial literacy and learn new teaching methods”—see *Additional Resources* at the end of this document for a list of sources that can inform this process.



Best Practices for Building an Inclusive Classroom and Curriculum

Ambrose et al. (2010) note that in addition to acknowledging and being inclusive of students' identities and backgrounds, thinking critically about how your course climate promotes or hinders student learning is important in any classroom. Course climate is subject to a host of different interacting factors, including "faculty-student interaction, the tone instructors set, instances of stereotyping or tokenism, course demographics...student-[to]-student interaction, and the range of perspectives represented in the course content and materials" (Ambrose et al., 2010, p. 170). Here are a few best practices for designing inclusive course spaces:

Strategies	Explanation	Examples/Suggestions
Examine your own assumptions about students' prior knowledge and experience	It is important to examine your own assumptions about your students' prior knowledge or experience. Do not assume that students share the same cultural or historical frames of reference as you or each other as this is often not true. Doing so can be unintentionally alienating to particular students while also putting them at a disadvantage in comparison to peers (Ambrose et al., 2010).	International or recent immigrant students often lack prior knowledge of US history, culture, and/or idioms that many of their domestic peers may already have. Some domestic students, however, may also lack such knowledge, particularly those from different racial, cultural, or socioeconomic backgrounds. It is important to consider these factors when designing assignments or exam questions, or when developing examples during lecture or discussion. This can include lecture examples that reference US popular culture, or exam questions or assignments that require that students have background knowledge in elements of US culture or history that have not been explicitly taught in class.
Diversify readings and course materials to avoid marginalizing students through content	Because of the historic privileging of white, middle-to-upper class men within higher education and broader US culture, many students rarely, if ever, are able to meaningfully engage with course materials or readings authored by individuals who share their race/ethnicity, gender, sexuality, ability, etc. Over time, this can be marginalizing and alienating, contributing to a potential disconnect between school and community life for these students (Harper & Davis, 2016).	Choose readings, materials, or examples that are inclusive of authors with diverse backgrounds, and include these in your syllabus, assignments, and lectures. You can also purposefully highlight the accomplishments of diverse scholars and experts—for example, highlighting the work of scientists of color or female scientists, signaling to students of color and female- identifying students that they belong in STEM. Consult with subject librarians at UC Davis in your content area to find materials from diverse scholars to incorporate into your class.
Avoid asking individual students to speak for an entire group	Instructors often unintentionally tokenize students during class discussions or in their feedback on assignments. Tokenizing can include expecting particular students to have expertise about issues that stereotypically impact their communities, or asking these same students to speak on behalf of their entire race/ethnicity, nationality, religion, sexuality, gender identity, ability, etc.. According to Ambrose et al. (2010), being tokenized may "disrupt students' ability to think clearly, be logical, solve problems, and so on" (p. 182).	Tokenism often arises because instructors or peers may unconsciously assume that all students of a particular identity group have had the same experiences. For example, asking an African American student to talk about growing up poor in the inner city assumes both that all African Americans are poor and that they all live in the inner city. Avoid asking a student to serve as a spokesperson for their entire community and/or putting them in a position in which they feel forced to teach you or their peers about their presumed identity group (Harper & Davis, 2016).



Be Aware of Stereotype Threat

Coined by psychologist Claude Steele, the term “stereotype threat” is defined as “the threat of being viewed through the lens of a negative stereotype, or the fear of doing something that would inadvertently confirm that stereotype” (Steele, 1999). A clear example of stereotype threat comes from Steele and Aronson’s (1995) original study in which black and white students were sorted into matched (i.e. similar ability) groups by SAT scores and assigned a task to complete. The experimental group was told they were taking an intelligence test, potentially activating the stereotype that black students are less intelligent than white students. The same test was described to the control group as a problem-solving task. Under these conditions, researchers found that black students in the experimental group performed worse than their white peers, while black and white students in the control group performed at equal levels.

Example of stereotype threat are not limited to experimental conditions. Within a classroom, instructors may, in an effort to comfort or support struggling students, inadvertently activate students’ sense of stereotype threat by communicating low expectations of their abilities. For example, telling a student of color that “it’s okay, some people just aren’t good at math,” can communicate both that you have low expectations of them and that you believe abilities are tied to uncontrollable attributes like race. This can limit students’ self-efficacy (i.e., their belief in their own ability to be successful), making it harder for them to stay motivated (Ambrose et al., 2010; Rattan, Good, & Dweck, 2012).

To avoid triggering stereotype threat, instructors are encouraged to cultivate a “growth mindset” with students by emphasizing that neither intelligence nor ability are fixed, but can grow over time with practice. Building in low-stakes quizzes or homework into your course, so that students can build skills and receive feedback on their performances over time, is one way instructors can go about this (Dweck, 2008). Communicating that you have equally high expectations of all students and believe they can all meet these expectations is also important, and can help students develop self-efficacy and motivation in your class (Ambrose et al., 2010).

Additional Reading and Research Resources

- Adams, M., Bell, L.A., Goodman, D.J., & Joshi, K.Y. (2016). *Teaching for Diversity and Social Justice* (3rd ed.). New York, NY: Routledge.
- Bensimon, E. M., & Malcom, L. (2012). *Confronting Equity Issues on Campus: Implementing the Equity Scorecard in Theory and Practice*. Sterling, VA: Stylus.
- Dowd, A. C., & Bensimon, E. M. (2015). *Engaging the Race Question: Accountability and Equity in U.S. Higher Education*. New York, NY: Teachers College Press.
- Harper, S. R. (Forthcoming). *Race Matters in College*. Baltimore, MD: Johns Hopkins University Press.
- Hartlep, N. D. (2013). *The Model Minority Stereotype: Demystifying Asian American Success*. Charlotte, NC: Information Age.
- Lee, A., Poch, R., Shaw, M., & Williams, R.D. *Engaging Diversity in Undergraduate Classrooms: A Pedagogy for Developing Intercultural Competence*. Hoboken, NJ: Wiley Periodicals, Inc.
- Museus, S. D., & Jayakumar, U. M. (2012). *Creating Campus Cultures: Fostering Success among Racially Diverse Student Populations*. New York, NY: Routledge.
- Quaye, S. J., & Harper, S. R. (2014). *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations* (2nd ed.). New York, NY: Routledge.
- Smith, D. G. (2015). *Diversity’s Promise for Higher Education: Making It Work* (2nd ed.). Baltimore, MD: Johns Hopkins University Press.
- Steele, C. M. (2011). *Whistling Vivaldi: How Stereotypes Affect Us and What We Can Do*. New York, NY: W. W. Norton.
- Sue, D. W. (2010). *Microaggressions in Everyday Life: Race, Gender, and Sexual Orientation*. Hoboken, NJ: Wiley.
- Sue, D. W. (2015). *Race Talk and the Conspiracy of Silence: Understanding and Facilitating Difficult Dialogues on Race*. Hoboken, NJ: Wiley.

Additional Campus Resources

- [UC Davis Office of Campus Community Relations](#)



Citation

Center for Educational Effectiveness [CEE]. (2018). Inclusive Practice Series. *Just-in-Time Teaching Resources*. Retrieved from <https://cee.ucdavis.edu/JITT>

References

- Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.
- American Psychological Association [APA]. (2006). *Stereotype Threat Widens the Achievement Gap*. Retrieved from <http://www.apa.org/research/action/stereotype.aspx>
- Armstrong, M. A. (2011). Small world: Crafting an inclusive classroom (no matter what you teach). *Thought and Action*, Fall, 51-61. Retrieved from <https://ldr.lafayette.edu/bitstream/handle/10385/1036/Armstrong-ThoughtandAction-2011.pdf?sequence=1>
- Dweck, C. S. (2008). *Mindsets and math/science achievement*. Retrieved from http://www.growthmindsetmaths.com/uploads/2/3/7/7/23776169/mindset_and_math_science_achievement_-_nov_2013.pdf
- Handelsman, J., Miller, S., & Pfund, C. (2007). *Scientific teaching*. New York, NY: Macmillan.
- Kahn, S., & Ginther, D. (2017). Women and STEM (No. w23525). *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w23525>
- Harper, S. R., & Davis III, C. H. (2016). Eight actions to reduce racism in college classrooms. *Academe*, 102(6). Retrieved from <https://www.aaup.org/comment/3881#.Wo07PBPwYb3>
- Rattan, A., Good, C., & Dweck, C. S. (2012). "It's ok—Not everyone can be good at math": Instructors with an entity theory comfort (and demotivate) students. *Journal of Experimental Social Psychology*, 48(3), 731-737.
- Steele, C. M. (1999). Thin Ice: Stereotype Threat and Black College Students. *The Atlantic*. Retrieved from <https://www.theatlantic.com/magazine/archive/1999/08/thin-ice-stereotype-threat-and-black-college-students/304663/>
- Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797-811.
- UC Davis Budget & Institutional Analysis [BIA]. (2017). *Data visualization*. Retrieved from <http://budget.ucdavis.edu/data-reports/high-level-dashboard.html>



Inclusive Practice Series

PART 2: Inclusive Strategies for Supporting Women in the Classroom

Over the last few decades, the number of enrolled students who identify as women has increased substantially at postsecondary institutions; in fact, as of 2015 the majority (over 56%) of students enrolled in US post-secondary institutions identified as women (NCES, 2018). However, despite their increased presence on college and university campuses, women still face many obstacles in attaining postsecondary degrees, particularly in STEM-related disciplines, due to unconscious gender norms in academic cultures (Blackburn, 2017; Kahn & Ginther, 2017; Master, Cheryan, & Meltzoff, 2016; Stoet & Geary, 2018). As a result, fewer women and minorities decide to pursue STEM-related disciplines. For example, the National Science Foundation (2017) reports that women account for only about:

- 18% of undergraduate computer science majors,
- 20% of undergraduate engineering majors,
- and approximately 19% of undergraduate physics majors.

Additionally, women from underserved minority communities continue to face a double bind in exclusion from STEM fields as both women and persons of color, both in absolute numbers and proportionally when compared to their total population in the US (Blackburn, 2017; Malcom & Malcom, 2011; Ong, Wright, Espinosa, & Orfield, 2011). Also, students who do not self-identify in binary gender terms, but rather self-identify as gender-variant, or transgender, are particularly vulnerable to exclusion in environments where gender norms are unquestioningly accepted as part of the academic culture.

As part of our series on Inclusive Practices, this resource will provide classroom instructors and GSIs with strategies and suggestions for supporting women, both in and out of the classroom. Note: the strategies below also promote general inclusivity, regardless of gender identification, but may be particularly relevant for those who identify as women.

Best Practices for Including Women in the Classroom

Strategies	Explanations & Examples
Avoid engaging in culturally-held stereotypes of women’s abilities	<p>Research suggests that while women generally perform as well as men in science and math (Stoet & Geary, 2018), culturally-held stereotypes that suggest women are not as competent as men in STEM-related disciplines persist (Blackburn, 2017; Kahn, & Ginther, 2017). Kahn and Ginther (2017) found that not only did this stereotype manifest early in children’s images of themselves as learners, but teachers often unconsciously held this belief as well. This bias can also manifest itself as instructors attempting to be supportive by unconsciously holding women to lower standards than their male counterparts or having lower expectations of women’s abilities.</p> <p>It is important to recognize and challenge your own implicit bias, and the assumptions and beliefs you may hold about women as learners (for more on engaging with implicit bias, see Part 1). Research also suggests that emphasizing a “growth mindset” (Dweck, 2008) that suggests that intelligence and ability are not fixed but rather grow over time can help to limit women’s experience of stereotype threat (see Part 1 for more on stereotype threat) and improve their performances, particularly in math and science (Kahn, & Ginther, 2017).</p>
Create an environment that builds women’s sense of belonging	Particularly, in STEM-related disciplines, women can often struggle to feel as though they fit or belong in the classroom (Blackburn, 2017). For example, Master, Cheryan, & Meltzoff (2016) found that when traditional stereotypes about computer science were emphasized, students who identified as women reported lower sense of belonging, or the sense that they would fit in with both other people and the



	<p>activities and materials common to that environment (Master, Cheryan, & Meltzoff, 2016), as well as less interest in taking future computer science classes. On the other hand, Shin et al. (2016) and Herrmann et al. (2016) found that female-identifying STEM majors reported a higher sense of belonging after reading the biographies of successful women in STEM (Shin et al., 2016) and after receiving letters from female role models in STEM fields (Hermann et al. 2016).</p> <p>Master, Cheryan, & Meltzoff (2016) suggest avoiding engaging with traditional stereotypes about who belongs in your discipline by diversifying your course content and curriculum. For example, highlighting the achievements of women scholars and/or including course readings or materials written by women may help communicate to those who identify as women that “they are welcome and belong in this environment” which may increase their interest in taking further classes in that field (p. 435). You might consult this handout, which highlights 16 women who have made important contributions to a variety of science fields. You could also have students investigate the research profiles for female Nobel Laureates: for example, here are the profiles for Elizabeth Blackburn and Francoise Barre-Sinoussi. Consider also using examples where the engineer or scientist is from an underrepresented community and/or gender neutral. For example, when showing generic pictures containing humans, integrate images women and people of color.</p> <p>Additionally, try constructing activities or assignments that help students to personalize the content of your course, for example by having them engage with content from diverse role models in STEM fields--this can be encouraging to students who do not clearly fit the traditional mold of members in the field by allowing them to “see” their potential future selves in those role models. This does not mean lower expectations, but rather ensures that all students are given an equitable opportunity to participate in the classroom community and to connect course content to their own lives.</p>
<p>Consider that your office hours may be intimidating for students, especially women</p>	<p>For a variety of reasons, students often feel nervous or anxious about attending office hours (Weimer, 2015). This is a feeling that can be heightened for women who may already be concerned about how they are perceived, particularly by male faculty. Further, the unequal power dynamics that are always at play when faculty and students interact one-to-one can be exacerbated for women by already existing unconscious, gender-based power differences. This fear can result in students forgoing help when they are struggling in class, particularly if they are unaware of other resources that they can access for support. Additionally, students may feel even more intimidated when office hours are only held by appointment, as opposed to being planned, consistent events. Consider holding consistent office hours that are posted in the syllabus, on Canvas, and outside of the physical office door.</p> <p>Emphasize your availability for mentoring and support during office hours. At the same time, you can provide students with information about outside resources (see Additional Resources below). Another option is to consider holding office hours in a consistent, public location (such as the library or a coffee shop on campus). Students can meet you individually or in groups to discuss course matters--in fact, encouraging students in your class to come to group office hours, even if they don't have specific questions can help shy students build the confidence to begin asking questions. All of these alternatives can ensure that students still receive support in their learning.</p>
<p>Consider limiting competition between students within your curriculum</p>	<p>In their extensive review of the literature, Niederle & Vesterlund (2011) found that women and men differed in their preferences toward competition, with men preferring competitive environments and women preferring to avoid them. Research findings indicated that one likely explanation for this difference was that “men tend to be more confident in their abilities than women” (p. 625). As college classes often employ competition as a means of motivation, this can put those who identify as women at a disadvantage, and students from underserved populations as well (Blackburn, 2017; Niederle & Vesterlund, 2011).</p>



	<p>Additionally, competition, particularly in grading practices (e.g., norm-referenced or curved grading), can be detrimental to all students’ abilities to learn and retain information, and has been shown to be a contributing factor to the loss of students from underrepresented communities in STEM fields (Schinske & Tanner, 2014).</p> <p>Niederle & Vesterlund (2011) contend that while the clearest solution would be to socialize women to be more competitive, “it is important to ask whether competitiveness, generally speaking, is a desirable attribute” (p. 626). Hyper-competitiveness can be detrimental in collaborative settings, and more broadly. Tinto (1997) found that when students were encouraged to build supportive and collaborative peer networks, academic engagement increased among all students.</p> <p>Designing your course around collaboration and cooperation, as opposed to competition among students, could help boost both men and women’s confidence in their abilities, especially if instructors emphasize that all students have valuable contributions to make.</p>
<p>Be deliberate when designing group projects to ensure equal opportunities for participation</p>	<p>Research on collaborative learning activities suggests that women often experience stereotype threat, feel less accepted, and actually experience less acceptance by their group members when working with men as opposed to women (Grover, Ito, & Park, 2017). This can be especially problematic in STEM fields, where men tend to outnumber women, making it more likely for groups to be male-dominated.</p> <p>Grover, Ito, & Park (2017) suggest that considering gender in group composition, which may include ensuring that women are grouped with at least one other student who identifies as a women either by altering group composition when possible, or creating larger groups, can help to mitigate stereotype threat. Avoid constructing groups with only one women or one person from an underrepresented community. It is also important to emphasize that all group members’ contributions are valuable and promote positive interpersonal communication between students. Setting ground rules for group interactions, members’ conduct toward each other, and assignment completion can also help ensure that all students are treated fairly (Ambrose et al., 2010).</p> <p>Consider building in structures that facilitate equal participation and shared workload. For example, you could designate particular roles for each individual student (e.g., group recorder, discussion leader, data analyst, etc.) or have students choose to be responsible for particular parts of a cooperative assignment. Make sure that students have a chance to experience a variety of project roles by having them regularly rotate with their peers--this is especially important for women who are often defaulted to the less technical roles in group activities.</p>

Additional Resources

There are a number of resources for both academic and emotional support available to women on campus. Many of these resources are directed by the [Women’s Resources and Research Center \[WRRC\]](#), including:

- W.I.S.E.: Women in Science and Engineering Program
 - W.I.S.E is a mentoring program for women in STEM-related disciplines. The program pair undergraduates students with graduate student mentors in STEM. For more information, email wrrc@ucdavis.edu.
- STEM Cafe
 - According to the WRRC website, “STEM Cafe is a free tutoring service that seeks to create an inclusive space for womxn, trans*, nonbinary, and gender expansive scholars to receive support in Math and Chemistry.” The program starts the second week of the term and runs until finals week, and all tutors are upper-level undergraduate students and graduate students in science and math. For more information, email wrrc@ucdavis.edu.



Other on-campus and national resources include:

- [ADVANCE UC Davis, Mentoring Resources](#)
 - Resources for both mentors and mentees developed by ADVANCE UC Davis, and initiative on campus to support STEM education for underrepresented groups.
- [UC Leads: Leadership Excellence Through Advanced Degrees](#)
 - UC LEADS is a two-year program designed to identify educationally or economically disadvantaged undergraduates in science, mathematics or engineering who show promise of succeeding in doctoral degree programs.
- [McNair Scholars Program at UC Davis](#)
 - The McNair Scholars Program is designed to prepare undergraduate students for doctoral studies through involvement in research and other scholarly activities. McNair participants are either first-generation college students with financial need, or members of a group that is traditionally underrepresented in graduate education and have demonstrated strong academic potential.
- [BUSP: Biology Undergraduate Research Program](#)
 - BUSP is an intensive enrichment program for undergraduates who have a strong interest in undergraduate research in biology. BUSP students enroll in a specially designed, rigorous academic program during their first two years of college, can work in a biology research laboratory during their sophomore year, and meet regularly with skilled advisers who offer academic guidance and personal support.
- [Student-Run Health Clinic Opportunities](#)
 - Medical students, typically in their first or second year, and undergraduates have the opportunity to receive course credit by staffing student-run health clinics in the Sacramento area. These clinics are important avenues for women in resource sharing on and off campus and can provide networks for peer mentoring.
- [UC Davis LGBTQIA Center's Guide to Pronouns](#)
 - According to the LGBTQIA Center: "Pronouns are linguistic tools that we use to refer to people. (i.e. they/them/theirs, she/her/hers, he/him/his). We believe that it is important to give people the opportunity to state the pronoun that is correct to use when referring to them." This non-exhaustive guide aims to help faculty recognize and respect the pronouns used by their students.
- [Society of Women Engineers](#)
 - This resource includes a mentoring program that feature upper division students mentoring lower division students and also exposes students to female engineering professionals who can act as role models.

Acknowledgements

This resource was developed with the input of [Colleen Bronner](#), PhD, UC Davis Department of Civil and Environmental Engineering; [Elizabeth Constable](#), PhD, UC Davis Department of Gender, Sexuality, and Women's Studies; [Lorena Garcia](#), MPH, DrPH, UC Davis School of Medicine; and [Anne Todgham](#), PhD, UC Davis Department of Animal Science.

Citation

Center for Educational Effectiveness [CEE]. (2018). Inclusive Practice Series. *Just-in-Time Teaching Resources*. Retrieved from <https://cee.ucdavis.edu/JITT>

References

Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

Blackburn, H. (2017). The status of women in STEM in higher education: A review of the literature 2007–2017. *Science & Technology Libraries*, 36(3), 235–273. Retrieved from <https://doi.org/10.1080/0194262X.2017.1371658>

Dweck, C. S. (2008). *Mindsets and math/science achievement*. Retrieved from http://www.growthmindsetmaths.com/uploads/2/3/7/7/23776169/mindset_and_math_science_achievement_-_nov_2013.pdf



- Grover, S. S., Ito, T. A., & Park, B. (2017). The effects of gender composition on women's experience in math work groups. *Journal of Personality and Social Psychology*, 112(6), 877-900.
- Herrmann, S. D., Adelman, R. M., Bodford, J. E., Graudejus, O., Okun, M. A., & Kwan, V. S. (2016). The effects of a female role model on academic performance and persistence of women in STEM courses. *Basic and Applied Social Psychology*, 38(5), 258-268.
- Kahn, S., & Ginther, D. (2017). Women and STEM (No. w23525). *National Bureau of Economic Research*. Retrieved from <http://www.nber.org/papers/w23525>
- Malcom, L., & Malcom, S. (2011). The double bind: The next generation. *Harvard Educational Review*, 81(2), 162-172.
- Master, A., Cheryan, S., & Meltzoff, A. N. (2016). Computing whether she belongs: Stereotypes undermine girls' interest and sense of belonging in computer science. *Journal of Educational Psychology*, 108(3), 424-437.
- National Center for Education Statistics [NCES]. (2018). *Fast facts: Enrollment*. Retrieved from <https://nces.ed.gov/fastfacts/display.asp?id=98>
- National Science Foundation, National Center for Science and Engineering Statistics. (2017). Women, Minorities, and Persons with Disabilities in Science and Engineering: 2017. *Special Report NSF 17-310*. Arlington, VA. Retrieved from www.nsf.gov/statistics/wmpd/
- Niederle, M., & Vesterlund, L. (2011). Gender and competition. *Annual Review of Economics*, 3(1), 601-630. Retrieved from <https://web.stanford.edu/~niederle/NV.AnnualReview.Print.pdf>
- Ong, M., Wright, C., Espinosa, L., & Orfield, G. (2011). Inside the double bind: A synthesis of empirical research on undergraduate and graduate women of color in science, technology, engineering, and mathematics. *Harvard Educational Review*, 81(2), 172-209.
- Schinske, J., & Tanner, K. (2014). Teaching more by grading less (or differently). *CBE-Life Sciences Education*, 13(2), 159-166.
- Shin, J. E. L., Levy, S. R., & London, B. (2016). Effects of role model exposure on STEM and non-STEM student engagement. *Journal of Applied Social Psychology*, 46(7), 410-427.
- Stoet, G., & Geary, D. C. (2018). The gender-equality paradox in science, technology, engineering, and mathematics education. *Psychological Science*, 0956797617741719.
- Tinto, V. (1997). Classrooms as communities: Exploring the educational character of student persistence. *The Journal of Higher Education*, 68(6), 599-623.
- University of California Infocenter. (n.d.). *UC STEM degree pipeline*. Retrieved from <https://www.universityofcalifornia.edu/infocenter/uc-stem-degree-pipeline>
- Weimer, M. (2015, January). Why students don't attend office hours. *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/articles/teaching-professor-blog/students-dont-attend-office-hours/>



Inclusive Practice Series

PART 3: Creating Inclusive Classroom Spaces for LGBTQIA+ Students

UC Davis has a history of active support for our LGBTQIA+ student population. In 2016, the advocacy group Campus Pride ranked UC Davis in the [top 30 LGBT-friendly](#) institutions of higher education in the US, giving our campus a rating of [4.5 out of 5 stars](#) on their Campus Pride Index (a measure of an institution’s commitment to LGBT-inclusive policies and practices). This type of institutional support is vital as research has shown that students in the LGBTQIA+ community are more at risk for experiencing psychological, social, and academic distress when compared to their heterosexual and gender-conforming peers (Kirsch, Conley, & Riley, 2015, p. 155; see also Ridner et al., 2016). This increased stress on students, particularly in their first year of college, can result in internalization of psychological distress, as well as increased engagement in risk behaviors and maladaptive coping strategies (Riley et al., 2016). Classroom instructors and GSIs play a critical role in supporting students, not only in terms of their academic success, but also in their social and emotional health. This resource will provide strategies and suggestions for supporting students from the LGBTQIA+ community, both in and out of the classroom.

Acknowledging, Respecting, and Making Visible LGBTQIA+ Identities

College is an important period of time for identity formation and it is critical that instructors create inclusive spaces where students’ unique identities are both acknowledged and respected--this is especially true for students from the LGBTQIA+ community.

Strategies	Explanation	Examples/Suggestions
Provide opportunities for students to share their preferred names and pronouns	LGBTQIA+ students can experience significant stress related to first day of class activities like taking attendance and individual introductions (Schmalz, 2015). This stress can be caused by a constellation of factors, including whether course rosters include their preferred name or whether your classroom is a safe space to request the use of their preferred pronouns.	<p>The UC Davis LGBTQIA+ Resource Center suggests asking all students in your classes to include both their preferred name and pronouns in their introductions to their peers at the beginning of the term. This can help gender-variant students feel more comfortable sharing their preferred pronouns, as they are not the only student doing so.</p> <p>Additionally, instructors themselves should include their preferred pronouns in their own introductions, as well as on their syllabi and email signatures (Zane, 2016). For example, you could introduce yourself using the following script: “Hello, my name is [title and name]. I use [she, her, and hers] pronouns.”</p>
Use gender-neutral terms when possible and remind students to respect each other’s preferred pronouns throughout the term	It is also important to make sure that acknowledgement of students’ preferred names and pronouns is not simply relegated to the first day. For example, students may forget their peers’ preferred pronouns during class or group discussions in later classes, which can result in accidental misgendering. Additionally, you or your students may unintentionally use gendering language like “you guys” or “ladies and gentlemen,” which can again exclude students for whom those terms do not apply.	Use gender-neutral terms whenever possible, and encourage students to do so as well. For example, instead of “you guys” you could say “y’all” or “everyone” (Zane, 2016). Additionally, if a student accidentally uses the incorrect pronouns for a peer, politely and unobtrusively correct them--this can help a gender-variant student feel acknowledged and included without singling them out.



Make LGBTQIA+ topics visible in your curriculum	Normative perspectives often tend to be overrepresented in courses across the curriculum. For example, instructors may unintentionally only include perspectives that validate normative sexual or gender identities (i.e., heterosexuality, cisgender). Renn (2017), however, argues that “minoritized students report that they are motivated to learn when their identities are affirmed and included in the curriculum.”	Consider including perspectives from scholars across the LGBTQIA+ spectrum in your readings and course materials, and/or design projects or course units that ask questions relevant to the experiences of students from these communities. For example, when possible, allow students to choose topics that are relevant to their identities—for example, students could explore issues important to their communities, including the LGBTQIA+ community related to the course subject matter.
		Additionally, try not to present heterosexual or gender-conforming identities as “normal,” as this can further marginalize and exclude students across the LGBTQIA+ spectrum whose identities do not fit within the normative mold.

Syllabus Statement

In addition to the above strategies and suggestions, the UC Davis LGBTQIA+ Resource Center also recommends adding the following statement in your syllabus:

Pronouns are linguistic tools that we use to refer to people. (i.e. they/them/theirs, she/her/hers, he/him/his). Because pronouns in English are often associated with gender identity, using each other's correct pronouns is an important way to show respect to each other and create a learning environment that is inclusive to trans and gender-non-conforming scholars. Consistent with core values for this course, we will collectively create an inclusive learning environment by doing the following:*

1. Offer opportunities for our classmates to share their correct pronouns
2. Use each other's pronouns correctly, or if pronouns are not known, refer to people by name or with gender neutral language
3. Discuss the group using gender neutral language (i.e. "y'all" or "everyone" versus "you guys")

For more suggestions on how to be an ally to students from the LGBTQIA+ community, see the UC Davis LGBTQIA+ Resource Center’s [“Ally Tips”](#) page.

Normalizing and Promoting Help-Seeking for Students

A recent study by Rutgers University (Intrabartola, 2017) analyzing survey responses from over 90,000 students across 902 institutions found that students who identified as LGBTQIA+ were far more likely to report having engaged in self-injury behavior, experienced severe depression, or seriously contemplated suicide when compared to their heterosexual and cisgender peers. This research corroborated findings from other studies indicating that students from the LGBTQIA+ community are more likely to experience feelings of psychological and social distress than their heterosexual and gender-conforming peers (Kirsch, Conley, & Riley, 2015; Ridner et al., 2016; Riley et al., 2016). It is also important to consider that students’ identities are intersectional (i.e., students may experience multiple sociocultural identities at once). LGBTQIA+ students may also identify with other minoritized communities, such as: communities of color, first-generation college students, low-income students, and other sociocultural identities (Consortium of Higher Education, 2016; Renn, 2017). For example, LGBTQIA+ students of color may experience social, psychological, and academic challenges related to their both their racial identity(ies) and their sexuality/gender-identification.

Consider including information about on campus social-emotional support services and wellness resources in your syllabus and on Canvas, highlighting this information on the first day of class. Doing so both normalizes and promotes the importance of help seeking, not just for LGBTQIA+ students, but all students. Potential resources for students include:

- [UC Davis LGBTQIA+ Resource Center](#)
- [UC Davis Counseling Services](#)



- [UC Davis Student Health and Wellness Center](#)
- [UC Davis Women's Resource and Research Center \(WRRRC\)](#)
- A more complete list of campus resources for you and your students can be found [here](#).

Additional Resources

- UC Davis LGBTQIA+ Resource Center's [Glossary](#)
- UC Davis LGBTQIA+ Resource Center's [Ally Tips](#)
- UC Davis LGBTQIA+ Center's [Guide to Pronouns](#)
- [Education Resources at Gender Spectrum](#)
 - NOTE: these resources are written for a K-12 context, but the pedagogical strategies and considerations they advance are still valuable for higher education contexts as well.
- The Chronicle: [“Ask Me’: What LGBTQ Students Want Their Professors to Know”](#)

Acknowledgements

This resource was developed with the input of [elizabeth coté](#), Director of the UC Davis LGBTQIA+ Resource Center.

Citation

Center for Educational Effectiveness [CEE]. (2018). Inclusive Practice Series. *Just-in-Time Teaching Resources*. Retrieved from <https://cee.ucdavis.edu/JITT>

References

Consortium of Higher Education LGBT Resource Professionals. (2016). Recommendations for Supporting Trans and Queer Students of Color. Retrieved from <https://lgbtcampus.memberclicks.net/assets/tqsoc%20support%202016.pdf>

Intrabartola, L. (2017). LGBTQ College Students Experience Depression, Suicidal Thoughts Four Times More Frequently Than Heterosexual Peers. *Rutgers Today*. Retrieved from <https://news.rutgers.edu/lgbtq-college-students-experience-depression-suicidal-thoughts-four-times-more-frequently/20171023#.Ws8YgtPwYb1>

Kirsch, A. C., Conley, C. S., & Riley, T. J. (2015). Comparing psychosocial adjustment across the college transition in a matched heterosexual and lesbian, gay, and bisexual sample. *Journal of College Student Development*, 56(2), 155-169.

Renn, K. (2017). LGBTQ Students on Campus: Issues and Opportunities for Higher Education Leaders. *Higher Education Today*. Retrieved from <https://www.higheredtoday.org/2017/04/10/lgbtq-students-higher-education/>

Ridner, S. L., Newton, K. S., Staten, R. R., Crawford, T. N., & Hall, L. A. (2016). Predictors of well-being among college students. *Journal of American College Health*, 64(2), 116-124.

Riley, T. J., Kirsch, A. C., Shapiro, J. B., & Conley, C. S. (2016). Examining stress and coping as a mediator for internalizing symptomatology: A comparison between sexual minority and majority first-year college students. *Journal of Adolescence*, 49, 124-133.

Schmalz, J. (2015). ‘Ask Me’: What LGBTQ Students Want Their Professors to Know. *The Chronicle of Higher Education*. Retrieved from <https://www.chronicle.com/article/ask-me-what-lgbtq/232797>

Zane, S. (2016). Supporting Transgender Students in the Classroom. *Faculty Focus*. Retrieved from <https://www.facultyfocus.com/articles/effective-classroom-management/supporting-transgender-students-classroom/>