

Commentary

Teach with heart!

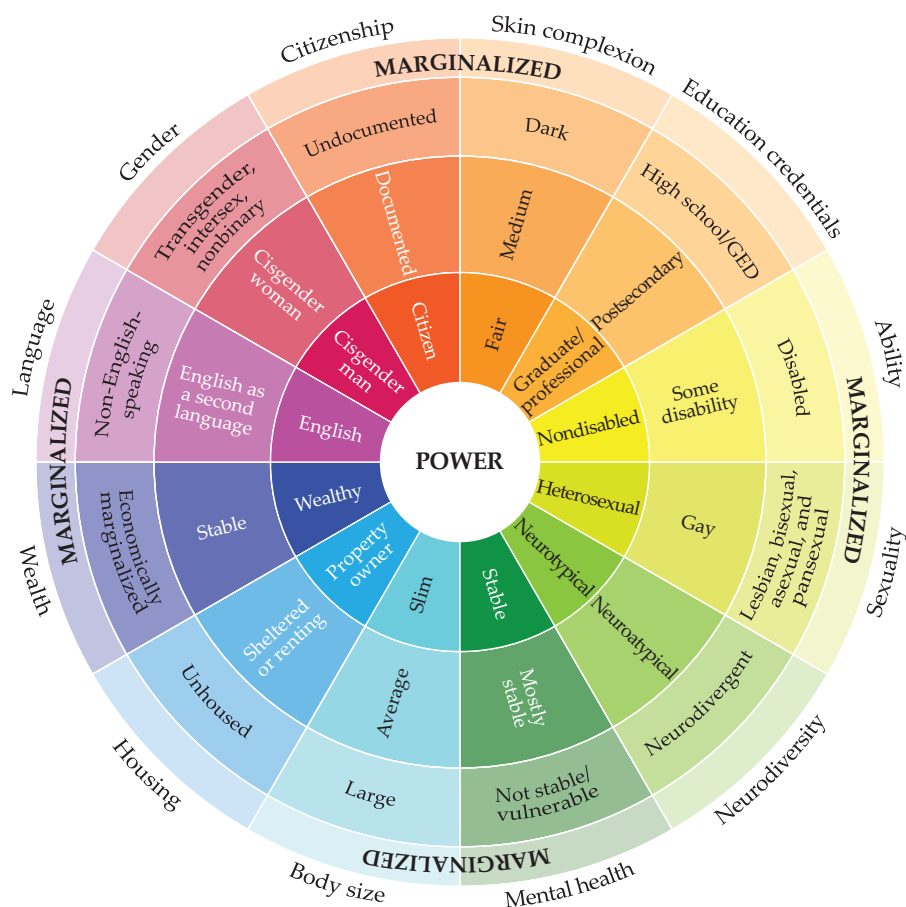
Are you concerned about the well-being of your students? Are you under so much pressure that you aren't fully present in the classroom the way you want to be? Do you feel that you rush through material without really connecting with your students? Do you want to offer more to your students than the technical aspects of your discipline?

Research shows that about 40% of postsecondary students faced a significant mental health challenge even before the pandemic.¹ In the rush to deliver the curriculum and deal with the pressures of academic life, many faculty members are overwhelmed, on the verge of or experiencing burnout.² After three years of adjusting education approaches in response to the COVID-19 pandemic, students and teachers, having had little time to reassess and recharge, are feeling the ripple effects of that disruption.

In the face of those challenges, how do we create a caring classroom environment in higher education that supports both faculty and student well-being? Can educators serve as role models of caring practices in the delivery of discipline-specific content to allow for development of the whole student and to give attention to student well-being? The Teaching with Heart project (<https://twh.mines.edu>) aims to support educators as they develop the mindset and teaching habits to create a caring class environment in science, technology, engineering, and mathematics fields in higher education. The project, which is supported by the John Templeton Foundation, offers workshops, creates an online community of faculty participants, and studies the impact those practices have on students and teachers.

In this commentary, we describe 12 Teaching with Heart practices that educators can incorporate into the higher-education classroom. Each practice takes little classroom time and doesn't disrupt the delivery of learning activities and content.

1. Use name tents and ask for preferred pronouns. We all have a deep



THE WHEEL OF POWER indicates different aspects of identity or background as differently colored sectors. The closer one's identity or background is to the center of the wheel, the more likely that person will be recognized or empowered. (Adapted from a figure by Timmo Dugdale/University of Wisconsin–Madison/CC BY-NC 4.0.)

desire to be heard and seen, and our students yearn to be known as individuals. Hence it is important for teachers to use students' names. Handing out name tents is an easy way to start using names immediately and learn them more quickly. Going over the name tents during a lull in class activities is an easy way to memorize names. Asking students to indicate preferred pronouns on the name tent helps teachers recognize and honor the identity of students, but students should not be forced to share them.³ Simply inviting students to identify as they want creates a supportive and inclusive learning environment.

2. Ask students how you can best support them. Many students have specific needs, challenges, or insecurities,

and it helps us as teachers to be aware of them. An easy way to learn about those needs is to ask students through an optional questionnaire. Open-ended questions, such as "How can I best support you?" or "Is there anything I need to know about you?," give the most revealing answers. Students appreciate just being asked such questions.

3. Be available, arrive at the classroom early, and reach out to students. A spontaneous in-person conversation is one of the best ways to connect with students. As teachers, we can easily create moments for such conversation by arriving at class five minutes earlier, not to tinker with projection equipment but to strike up conversations with students. We can send a quick email to a student

who has missed classes to remind them of support options. A walk from one building to the next after class is another opportunity to connect with students.

4. Be aware of privileges. The wheel of power and privilege⁴ (see figure) offers a graphic way to review factors such as gender, skin color, and sexual orientation. It can help us be aware of characteristics that determine privileges and access or barriers to opportunities. Being aware that students may face challenges that we individually may not have experienced allows us to develop compassion for our students and empowers underprivileged students through visibility.

5. Show up as a whole person, and be willing to be vulnerable. As teachers, we cannot educate the “whole person” if we do not show up as a whole person in class. Students appreciate it when we share our passions, our insecurities, and other drivers of our behavior. When intellectual humility becomes part of our teaching, we come off our pedestal as educators, which helps students connect with us as humans who are also learning.

6. Encourage students to be fearless. Many students live in fear of being “wrong,” because being “right” is important for passing tests and for being rewarded in many classes. Learning is, however, an activity of trial and error, and being wrong is part of the creative process. We can encourage our students to think boldly, to experiment with different ideas, to express themselves fearlessly, and, yes, to be wrong at times without being judged negatively.

7. Develop students’ analytical and intuitive thinking. Technical fields, including science and engineering, lean heavily on analytical thinking. But progress in those fields often relies on creative sparks, courage, mistakes, play, and free-

flowing conversations. Bringing intuitive thinking into the classroom not only helps progress in science and engineering but also fosters the development of balanced young professionals.

8. Promote students’ well-being. In the rush to get through class material, we may forget to address the well-being of students. We can show that we value student well-being by spending some class time on a conversation about wellness and campus resources, by not giving assignments over breaks, and by embodying healthy wellness practices ourselves. But most importantly, we should avoid reinforcing the common perception that higher education is only about grit and competition. Being meaningful educators involves caring about our students’ growth and fulfillment.

9. Prioritize important issues over the class schedule. Sometimes traumatic events occur that preoccupy students’ minds. An example is a suicide on campus. Students appreciate having a class conversation when such events happen. By creating an opportunity for one, we not only provide a platform where students can discuss unsettling events, but we also emphasize the importance of coming together as a community in times of crisis. A 20-minute class conversation can make a huge difference.

10. Focus on the potential of students instead of on their current level. Some teachers get their satisfaction from teaching students who are performing at the highest level. It is natural to like teaching your star students, but, by definition, not all students are “the best.” Our perspective and satisfaction as teachers can shift dramatically when we focus not on the current academic achievement of students but on their growth rate. When we make that mental shift, our teaching is driven by student growth, not by metrics and rankings.

11. See the inner person beyond the outer person. We all have outer lives, including our body and verbal expression, and inner lives, including our emotions and dreams. It is easy to exclusively focus on the outer lives of students. Through careful observations and compassionate listening, we can get glimpses of our students’ inner lives. Those can help us to connect better with students and support them more meaningfully.

12. Always love your students, even if you don’t feel like it. If only we could

always be a loving presence! The reality is that we sometimes are stressed or irritated and find it difficult to teach with a loving mindset. Cultivating our own well-being and approaching student interactions compassionately helps us consistently create a classroom environment in which students feel safe and cared for.

The practices listed above take little time to incorporate and easily merge with the delivery of classroom material. Habits 1–3 require no new skills, just a change of behavior. Habits 4–10 require a reflection on teaching methods and intentionally adapting our thinking and behavior over time. Such changes need attention and take some practice at first, but they can eventually become second nature. Habits 11 and 12 represent a sustained practice of Teaching with Heart.

We encourage teachers to select practices that fit them best to begin to shift their pedagogy. In doing so, they can make a positive change to the classroom atmosphere in higher education, one habit at a time. We invite you to join our efforts to elevate classroom interaction through attention to student and faculty well-being.

If you have found habits that are effective but are not listed here, please send them to us at rsnieder@mines.edu.

References

1. National Academies of Sciences, Engineering, and Medicine, *Mental Health, Substance Use, and Wellbeing in Higher Education: Supporting the Whole Student*, National Academies Press (2021).
2. R. Salimzadeh, N. C. Hall, A. Saroyan, *Front. Educ.* **6**, 660676 (2021).
3. B. Álvarez, “Why pronouns matter,” *NEA Today*, 5 October 2022.
4. T. Dugdale, University of Wisconsin–Madison Center for Teaching, Learning, and Mentoring, “Wheel of privilege and power” (10 January 2023), <https://kb.wisc.edu/instructional-resources/page.php?id=119380>.

Roel Snieder
(rsnieder@mines.edu)

Courtney Holles
Colorado School of Mines
Golden

Qin Zhu
Virginia Tech

Blacksburg
Cynthia James
Cynthia James Enterprises
Pine, Colorado

CONTACT PHYSICS TODAY

Letters and commentary are encouraged and should be sent by email to ptletters@aip.org (using your surname as the Subject line), or by standard mail to Letters, PHYSICS TODAY, American Center for Physics, One Physics Ellipse, College Park, MD 20740-3842. Please include your name, work affiliation, mailing address, email address, and daytime phone number on your letter and attachments. You can also contact us online at <https://contact.physicstoday.org>. We reserve the right to edit submissions.