PART I

Changing Ourselves

Engaged pedagogy does not seek simply to empower students. Any classroom that employs a holistic model of learning will also be a place where teachers grow, and are empowered by the process.

—**bell hooks**, *Teaching to Transgress*

CHAPTER 1

Why Change Now?

Where It Started

Before we change our classrooms, we need to look inwards at ourselves and backwards to understand how we got here. We have inherited attitudes, structures, and expectations that are not of our own making. Where did these come from? To embrace the goal of making the classroom a place where every student learns and improves, we need to unlearn some of our most deeply inculcated assumptions about the function of higher education. It's useful to know that there's nothing "natural" about these. Most were invented in the last part of the nineteenth century by educators dedicated to redesigning higher education for the modern world of automation, industrialization, and standardization and needs of the new, modern global corporation. The assembly line, the punch clock, and the Model T were powerful technologies that were reshaping the world. If educators of the time could reshape the Puritan college into the modern research university to prepare students for their future, we can reshape the archaic practices we've inherited, especially in the one realm over which we have the most control, our classroom.

A little bit of history goes a long way to helping us understand the university we've inherited. Charles Eliot, who served as president of Harvard University for forty years (1869–1909), was one of the leaders most responsible for inventing and institutionalizing many of the features of higher education that we now take for granted.[1] He spent an extended time in Germany and France studying the massive changes undertaken in those countries over the course of the nineteenth century to modernize higher education. Eliot took as his model a European system that would train mostly elite men to be the leaders of the industrialized Western world and to influence the countries they colonized. Values of standardization and top-down management hierarchies, influenced by Taylorist ideas of productivity, were key to certifying and credentialing new professions for a growing global managerial class.

Among the changes Eliot adopted for US higher education include such things as college entrance exams, majors, minors, electives, and degree requirements. Along with other colleagues at the nation's elite private institutions, Eliot advocated giving letter and number grades rather than offering students oral and written feedback on their work. He commissioned Pennsylvania executive and engineer Morris Cooke to find a way to align higher education with the industrial workforce, leading to the design of the Carnegie credit hour (now known as "seat time") and the standardized, full-time student course load.[2] Needless to say, not a single feature in that list requires explanation or definition since these are basic structures we all still work within (and sometimes work around).

Interestingly, at the same time that the United States was creating land grant universities throughout the country and developing junior colleges—both ways of spreading and democratizing higher education—Eliot and other peers were formalizing the structures adopted across all of higher education that continue to shape the siloed, discipline-based form of education our twenty-first-century students receive to

this day. They created the first American graduate school, for example. They also founded the collegiate law school, nursing school, and business school. They designed tenure, sabbaticals, faculty pensions, peer-reviewed publications, donor-named chairs, and corporate sponsorship of research. They also founded the first accreditation and ranking systems by which all colleges and universities, then and now, are still rated and judged.[3]

As we think about changing how we teach, it's useful to remember that the classroom we've inherited was designed to prepare students for an economy utterly upended by industrialization. Further, the founders of the university we've inherited had a specific kind of elite student in mind and created a system they saw as the best for perpetuating their role in society. Many of the educators of the time, for example, embraced eugenics, a belief in the inherited, biological superiority of white, Anglo-Saxon aristocrats, and they saw elite higher education as a way to support and perpetuate a ruling class. In England, Sir Francis Galton invented modern statistical methods and used his "bean machine" to demonstrate the "bell curve" to Parliament as part of his campaign to have working-class women sterilized and aristocratic women subsidized to bear more children. In the United States, Eliot, like many of his peers, was a dedicated eugenicist and served as the vice president of the First International Eugenics Congress.[4]

As we think about how we can change our own classrooms, it's useful to consider how many features of modern education are rooted in social assumptions about the importance of preserving hierarchy, ranking, and selectivity. We live and work at a great distance from Eliot's time, yet the vestiges of old habits (including the ugly ones) remain. It's no wonder most of the Ivy League schools in the United States, like many of the elite universities of Europe such as Oxford and Cambridge, were all-male schools and had rigidly enforced, albeit informal, rules against admitting too many members of certain ethnic, religious, and minority groups, a practice that continued into the 1960s.[5] That's a

long and complicated history for any instructor to shoulder. We can't wind the clock backwards and change the past, but we can, at the very least, recognize it for what it was.

There is one further bit of history that helps us to rethink our own role and practices as instructors. Although Eliot founded the first professional school of education, he explicitly defined its scope as preparing K–12 teachers—and not college professors.[6] As Jonathan Zimmerman notes in *The Amateur Hour: A History of College Teaching in America,* Eliot also followed the European model in believing that the business of a college professor was research. A graduate student determined to pursue a career in academia was supposed to emulate his advisor, carrying forth that professor's research and replicating his teaching methods. Understanding pedagogy—the science of actual learning—was not a job requirement for an academic career.[7]

That is a large inheritance in many directions—social, cultural, philosophical, pedagogical. It would seem that this history is itself a formidable obstacle to change. And yet it is also inspirational to realize that this system isn't very old in the grand scheme of things. It's not fixed, natural, or necessary. If nineteenth-century educators reinvented college, so can we.

We've been saying for decades that higher education is in crisis. The renowned designer Bruce Mau argues that "the biggest problems create the biggest opportunities" for change, for redesign.[8] Further, because of the global pandemic, we now have irrefutable proof that higher education is capable of change. We have all partaken in changes at a dizzying pace and scale. In a matter of weeks, an estimated 1.8 billion students worldwide went online. Entire countries made drastic changes on every level and pooled every resource. Gambia distributed solar-powered radios across communities without electricity, and Morocco's television sports channel became the new school channel. On a worldwide scale, we broke nearly every rule, including changes in break schedule, added flexibility for grades and incompletes, and revision of scholarship rules. We even altered the seemingly sacred Carnegie credit hour.[9]

And here you are, reading this book about how to change. By committing to innovative and inclusive teaching, you are already defying the ingrained habits and biases embedded in the long inheritance of our profession and looking for a better way.

Where We Are Now

We're at exactly the right moment when we can unlearn a system originally designed for standardization, for ranking and rating the elite few. Instead, we can find fair and effective new ways to teach the diverse men and women in our classes today. Along with content, students can learn the higher-order skills they need to thrive in a world upended now by global information technologies—adaptability, cooperation, and innovation.

Today, around 40 percent of US workers live gig to gig. Trillions of dollars are spent and earned globally in the gig economy, where freelancers and independent contractors pick up temporary work. In some countries with extensive nationally funded retirement programs, such as Norway, switching careers late in life is less risky, because the need to save for retirement is lower. In the United States, radically changing career paths late in life can be catastrophic. The more we prepare students to consider problems from multiple positions, using different approaches and strategies, the better adapted they will be to the struggle of keeping up with a fast-paced workforce. That's the least we can do. In the best of worlds, these skills might also help college graduates to organize and fight for better working conditions and equal pay for equal work.

Most of us, however, have not been prepared to teach the students who are actually in our classrooms for the complex future they face. Gail Mellow, president emerita of LaGuardia Community College, says that the requirement of college today should be to reach and teach "the Top 100%." That means understanding the diversity of students today. She notes that of the roughly 18 million undergraduates attending

college in the United States, more than 40 percent attend community college, 40 percent work more than thirty hours a week at paying jobs, a quarter are over twenty-five years old, 30 percent are first-generation college students, nearly a quarter come from low-income families, a quarter suffer from food and housing insecurity, nearly 60 percent are female, and almost half are people of color. While those numbers vary greatly in every country, the fact remains that the demographics of students attending college are becoming more diverse.

We have a demographic mismatch between faculty and students. According to a 2017 study by the National Center for Education Statistics, "76 percent of all college and university faculty members were white, compared to 55 percent of undergraduates. By ethnic group, just 5 percent of faculty members were Hispanic, compared to 20 percent of students. Six percent of professors were Black, compared to 14 percent of their students."[10] Part of the mission and project we have undertaken in this book is to encourage all—teachers and students—to identify and resist the imbalances and inequities of our time and to use the classroom as a platform to understand and prepare for that struggle while ensuring that our diverse student body also leads to a new generation of professors who are as diverse as they can be.

Only 0.4 percent of all students in our universities in the United States attend the Ivies, but most books and articles written about higher education and pedagogy seem to assume students from those universities. Perhaps that's not surprising, given that a majority of professors today themselves come from highly selective institutions. As we think about changing ourselves in order to change our classrooms, we need to be aware of that disparity. We need to be introspective about how we were trained and what we were encultured to believe academic "success" looks like. One recent study of college professors revealed that some 80 percent of all faculty at all US colleges were trained at the most elite 25 percent of universities.[11] A study of political science departments revealed that more than half of all tenure-track vacancies were filled by applicants from only eleven graduate political science

departments.[12] In short, most professors who have been hired and have achieved tenure do not share the lived experiences of the majority of our students today.[13]

The nineteenth century lingers in another way: educational achievement today correlates closely with wealth. Excellent schools, private tutors for entrance exams, and other costly ways of improving a child's chances of being admitted to college mean that the wealthiest students have a head start. These factors together mean that too much of higher education contributes to, stabilizes, and perpetuates income inequality and all the attendant social inequalities that correlate with income—specifically, racial, ethnic, and gender disparities within and across institutions and fields.

Let's break that down. We have spent the twentieth century and the first decades of the twenty-first developing a system of education that is more likely to select for wealth than for intelligence, motivation, or academic achievement. In countries where a far smaller percentage of students go on to college, the "sort" of who is or isn't college material happens as early as middle school, age eleven or twelve. Inequality and privilege come in many forms—native language, immigration, income—and operate differently in particular countries. In the United States, we take pride in a more democratic system where every student has the opportunity to go to college. Yet, given that school boards and school budgets are determined locally and funded largely through property taxes, the correlation between "college readiness" and wealth is precise. A map of the United States showing SAT score distribution is nearly identical to a map of US income distribution (which correlates with racial segregation and discrimination too).[14]

For the last decade, Harvard economist Raj Chetty and his team of researchers have been analyzing higher education and social mobility. Previously, the most common metric for gauging a school's success was figuring out how much their new graduates earned. Chetty's team looks at the difference between a student's family income upon entering college and a student's earnings when they graduate from college.[15] True,

new Princeton graduates earn the most money upon graduation. They also come from families with the highest income levels. By contrast, as of 2021, according to *U.S. News and World Report,* seven colleges from the City University of New York (CUNY), three from the State University of New York, and seven from the University of California rank in the top twenty national and regional universities facilitating social mobility, specifically in moving students from the bottom to the top income quartile.[16] Chetty's research helps us to see our students in a new way, which is crucial if we are going to change ourselves and change our sense of what "works" in a classroom.

Changing ourselves means changing our assumptions about the students we teach. For starters: they aren't "kids." Professor Kandice Chuh uses the phrase "the people in our classrooms who are students" to remind us of the range of people, diverse in every way, in today's classrooms and the different kinds of obligations for work, family, and community that each one might have.[17] It also helps us to rethink "college readiness" as an extrinsic attribute of students and, instead, consider the multiple factors which make it difficult for students to succeed. In the catchphrase of the Association of American Colleges and Universities, this means "becoming a student-ready college."[18] More personally, it means making our own courses student-ready.

We, as instructors, can both pave the way and step out of the way as we help our students transition from lacking insider knowledge to navigating smarter. As we unlearn many of our old habits, we are also helping our students to understand how to learn and how to use that understanding to make better decisions in their lives, both in school and beyond.

CHAPTER 2

Structuring Active Learning

*M*aria Montessori in Italy, John Dewey in the United States, and Rabindranath Tagore in India were just a few of the Progressive Era educators who opposed the Taylorist structures of education that Charles Eliot and his colleagues were so busy constructing. They developed alternative models for orphanages and preschools as well as for primary and secondary schools and even for universities based on the fundamentals of agency, independence, problem-solving, and collaboration. As some parents reading this book well know, Montessori schools today continue to pride themselves on giving young students independence—toddlers who can prepare their own snacks and invent their own games to play with peers. "Education is a social process; education is growth; education is not preparation for life but is life itself," Dewey famously wrote, making explicit the relationship between education and society.[1] Tagore was even more adamant in his disdain for educational standardization. In his allegory "The Parrot's Training" (1918), a king seeking to educate his priceless bird forces it to eat pages from a standard textbook until it dies.

Active learning insists that college students should be at least as independent as preschoolers and lots freer than Tagore's parrot. Imagine

a classroom alive with vibrant activity, where the intrinsic rewards of learning become not just a goal for our course but a lifelong project. Active learning carries forward the vision of teaching with the aim of making a better society and a better world, with students as the architects of the future.

As in all architecture, structure is crucial. Active learning is not "anything goes." Giving students freedom to be curious, to create, and to lead requires planning and organizing activities for them to use that opportunity and autonomy productively. Active learning guides students in taking that leap with us and offers them some structure to buttress their learning even as we give them the flexibility and room to grow.

Before we create the New College Classroom, it's useful to frame some key principles of learning and cognitive science that are foundational to active learning. We have several decades of research supporting us as we make our vision a reality. Literally hundreds of pedagogy theorists and practitioners have addressed the relationship between structure and openness, beginning with intensive study into how we learn and how we learn differently in different situations.

This chapter surveys four key pedagogical approaches that themselves have been studied, tested, revised, debated, expanded, and implemented innumerable times by experts in this field. They are useful in understanding the "why" behind certain redesigns of, say, our syllabus or final exams. These concepts are also useful in explaining active learning to students, parents, and administrators who have inherited traditional values about higher education and might wonder about the learning science undergirding our classroom innovations.

In this chapter:

Scaffolding
Growth Mindset
The Flipped Classroom
Backwards Planning

Scaffolding

Scaffolding is one of the most basic terms associated with active learning. It is based on a progressive idea of learning, that all we learn becomes the support for what we learn next and that the instructor's role is to create the framework for success for the more difficult tasks ahead. In its simplest application, we scaffold by building cumulative assignments, structuring them from easier to more difficult, from "low-stakes" (for instance, little to no impact on a student's evaluation) to "high-stakes." When we scaffold, we break up what we want students to learn into chunks, making the whole process more manageable. When a child learns to read, for example, they might first be introduced to the alphabet, then challenged to sound out short words. You don't teach a child how to read by giving them a copy of *War and Peace*. This principle applies throughout most of education. In college, many fields are structured by implicit scaffolding: you don't learn calculus before precalculus.

The term *scaffolding* was coined in the 1950s by Jerome Bruner, one of the founders of the field of cognitive psychology. Bruner proposed a theory of children's intellectual and emotional maturation, arguing that children are ready to learn certain kinds of content and understand certain concepts at specific points in their lives.[2] In what is called a "spiral" approach, Bruner advocated revisiting important ideas and lessons at different stages in a child's development, when their meaning would become increasingly deep, complex, and difficult. His ideals for complex learning and educational growth have been translated in many ways, including in the stepped approach of the traditional school curriculum. In the United States, physical science is taught in 9th grade, biology in 10th grade, chemistry in 11th, and physics in 12th.[3] The general and empirical principles learned in physical science scaffold increasingly difficult and abstract scientific ideas.

Bruner's principles of scaffolding build on a particular understanding of child development formulated by the Russian psychologist Lev

Vygotsky. Vygotsky coined the term *zone of proximal development* to signal the milestones in a child's life when they are mature enough for certain kinds of insights. Vygotsky added that children can be motivated to learn beyond their limits if guided by an adult or a peer who can support them as they move to the next level.[4] Scaffolding provides that support along the way.

Whether you are a seasoned professor proposing a brand-new course or are yourself new to teaching, thinking about gradual, stepped learning (scaffolding) can be an excellent place to begin implementing active learning. For example, routines that you put in place at the start of the semester can become more student-driven. Say one of your goals in teaching upper-level Spanish is to assign a research project that students complete in groups. Perhaps in the first week you hand out a "to-do" list for each group to get them warmed up—and it ends with a question: "¿Qué más?" ("What else?"). Students add anything else they want to prioritize. As the weeks go by, students begin to keep track of tasks without your prompting, becoming more and more self-directed.

Yet, even as scaffolding is useful, it is crucial, as Bruner himself attested, to expect breakthroughs that disrupt all the progressive learning spirals and instead leap ahead several giant steps. A new Venezuelan roommate moves in with a student in your Spanish class. Or a student takes a semester abroad in Peru. Suddenly, there is no clear step-by-step, but everything happens for that student all at once.

We can scaffold our students' active learning—and, to use a radically different metaphor—we can also structure challenging moments that toss them into the educational deep end. When they have gained confidence in their abilities, they won't sink but instead will learn to swim—and to help one another—when offered new challenges. In their book *Small Teaching Online: Applying Learning Science in Online Classes,* Flower Darby and James M. Lang advocate asking students to solve a problem *before* they are ready. They note, "When we ask people to complete tasks before they learn something new, they will learn it

more effectively."[5] The most effective and memorable lessons bring a little real-world chaos into the classroom and demand some creative thinking from students.

Growth Mindset

Beginning in the last decades of the twentieth century, researchers in the areas of decision theory, systems theory, and cognitive psychology have focused on "mindset," the idea that people or groups of people hold assumptions, a worldview, or an evaluation about themselves or others that influences how they act in the world. This mindset, it is argued, governs choices people make and also how willing they are to change—which is to say, how willing they are to learn. In her 2006 best-seller *Mindset: The New Psychology of Success,* Stanford University psychologist Carol Dweck melded the extensive research on motivation and human development that she began in the 1980s with research on the role of socioeconomic conditions on a child's ability to learn, a disciplinary crossing of psychology and sociology. She identified internalized modes by which students judge themselves as having a firm and unchangeable nature ("fixed mindset") or one capable of learning and improving ("growth mindset").

Dweck defines *growth mindset* as "the belief that skills can be improved with time and effort." Practically from infancy, upper- and middle-class parents give their children special lessons, extracurricular classes, and tutors to enhance their abilities and also to demonstrate to young students that, with guidance and feedback centered on their improvement, they are capable of advancing. They go to well-funded schools that pay special attention to subject areas where they are considered "gifted" or provide tutors to help them go from poor work in certain areas to a much better result.

By contrast, many low-income and minority students, in particular, absorb negative social evaluations practically from birth and learn to see themselves in the latter category, "fixed" in failure. In a nationwide

empirical study published in 2016 that was conducted on high school students in Chile, Dweck and a team of Chilean researchers found that students from the most impoverished backgrounds were the most likely to have internalized a fixed mindset about their own ability to improve and the least likely to achieve at the highest levels.

Dweck's insights are important in the New College Classroom because they help us, as instructors, to reevaluate our own ideas about "excellence" or "rigor" or "college readiness" as well as ideas about "motivation." They help us to understand that there are deep, underlying social conditions that children can internalize that undercut their confidence in their own ability to learn. Since agency is one of the key values of active learning, it is crucial to understand the ways social bias undermines a student's sense of agency. In Dweck's educational experiment in Chile, the students who were nurtured to develop a growth mindset were "appreciably buffered against the deleterious effects of poverty on achievement: students in the lowest 10th percentile of family income who exhibited a growth mindset showed academic performance as high as that of fixed mindset students from the 80th income percentile."[6] Dweck argues that understanding their own mindset can become a tool for students. In the Chilean study, students were able to use this new self-understanding to counter the debilitating impact of years of traditional school failure.

Growth mindset has become something of a growth industry, with TED Talks, workshops, and multiple millions of dollars in funding from grants and philanthropic foundations—it has also gained plenty of critics.[7] Some have insisted that they have not been able to duplicate Dweck's growth mindset results.[8] Other fault finders think the binary of "fixed" and "growth" is too simplistic. Most of us embody some combination of both, depending on the situation. There are real, tangible factors to consider, too: it can feel too environmentally deterministic to assume that in a global pandemic, for example, a student is underperforming due to a fixed mindset.[9] A growth mindset certainly helps,

but without a significant improvement in circumstances, it may not be enough.[10]

Biochemist and science educator Beronda L. Montgomery offers what she calls a "bilateral" approach to mindset theory, emphasizing the importance of "considering the contributions of both the individual and the environment." She insists that we move past any idea that failure to thrive or learn is the student's "fault." Instead, she offers a powerful botanical analogy: "If a plant is not faring well, the caretaker may, as a very last resort, attribute this outcome to a failure to identify how to facilitate the plant in thriving, but not to a failure on the part of the plant itself."[11] The caretaker who finds that their plant isn't flourishing immediately addresses all of the conditions of light, soil, water, and nourishment. They don't assume that the plant is the problem; they work to improve the plant's environmental conditions to optimize its growth. That's a powerful lesson for all of us.

The Flipped Classroom

In the flipped classroom, students watch lectures, read assignments, or do problem sets outside of class and then, in class, answer challenges or problems presented to them by the instructor, typically working with partners. This is not the same as a discussion format ("raise your hand if you know the answer") but is an inventory method where *everyone* proposes an answer at the same time. Often answers are demonstrated in a low-stakes, preliminary way.

In a large lecture, a professor can poll students and have them use electronic clickers (remote control keypads that communicate student answers to a central computer) to offer an answer. There are equivalent polling affordances for online classes. Their aggregate poll results are then projected on a screen. The professor might highlight the distribution of the answers and solicit a few student opinions about which answer is right but typically does not confirm or refute the results.

Instead, in the New College Classroom, students work in groups or with a partner to think through the alternative answers and argue the case within their group about which is best. The professor then takes another poll. When it goes well, students learn by correcting one another, arguing viewpoints, and observing the different ways classmates arrive at their answers. Optimally, everyone eventually develops the thinking and knowledge to arrive at the correct answer.

The flipped classroom frees the instructor from lecturing and allows them to devote more time to mentoring and pushing students toward greater depth and insights. Professors Donna McGregor and Pamela Mills flipped their chemistry classes at Lehman College so that all content is explained outside of their class meetings. Students study at home through audio or video instruction, which affords the instructors the opportunity to use active, participatory learning strategies in class. They invite students to apply real-world examples to their lessons.[12]

Physics professor Eric Mazur at Harvard University is one of the nation's most eminent proponents of the flipped classroom method.[13] He uses clickers to poll students on the answers and also to find out which areas from the homework students either do not understand or that may hold little interest beyond the classroom. Students come to his class having explored key physics principles, and then, in real time, he asks students to apply the content to a real-world problem, such as, "What if a gamma ray burst hit the Earth?"

Similarly, in a business law class, Craig Cameron and Jennifer Dickfos, professors at the Griffith Business School at Griffith University in South East Queensland, Australia, ask students which legal principles addressed early in the course have relevance to their own businesses. The typical business student never takes another law course beyond "Introduction to Business Law," a class that is often mandatory but is rarely esteemed by most students. Rather than lecture, Cameron and Dickfos structure their class to present the course's key legal principles early and then ask students to contribute ways that

the principles had applications to the product, consumer relations, management situations, or business plans in their own industries.[14] They then use the students' own examples to restructure the second half of the course, turning legal theory into business practice.

Most importantly, the model works. It prioritizes practice, mentoring, and coaching. As reported in a 2017 *Inside Higher Ed* article by Jennifer Goodman, the flipped classroom model "boosts passing rates to 80+ percent."[15] The flipped classroom helps students at every stage of learning, whether they need individual attention or want to delve deeper into information.[16] Right answers aren't the point. The process of acquiring and sharpening the tools needed for gaining expertise and finding the best ways to learn together are all embedded in the flipped classroom and are useful to different forms of engaged, effective teaching and learning.

Backwards Planning

The term *backwards planning* comes from outcomes-based forms of learning where instructors or programs decide in advance which learning outcomes are most important for students. It allows students to know "why" from the beginning. The course or curriculum is then constructed "backwards" with the intention of arriving, in the end, at the intended goals. Backwards planning requires breaking down each part of the learning into a specific module or skill set directly related to the final task. Anyone who takes a Lamaze class knows this pedagogical technique: the end result is, if all goes well, exactly what you're practicing for.

Advocates of backwards planning often focus on it as an efficient method of moving toward the learning goals, with fewer disruptions and less time spent in tangents and byways. In active learning adaptations of backwards planning, we avoid rigidity and use the cognitive pay off of the "why" as inspiration, not as a narrowing of purpose to a solitary goal. In Part II, we show ways that students can be included in

designing the learning outcomes for a course—to contribute more meaningful "whys" and goals based on their biggest questions and deepest interests. We especially like asking students how a course might change their lives and what skills they hope to develop during the term to be successful in the next semester, in the next year, and in the next five or ten years.

CHAPTER 3

Teaching Is Mentoring

What makes a good mentor? "Mentor" is the name the goddess Athena assumed when she appeared in human form to serve as the trusted adviser to the twenty-year-old Telemachus while his father, Odysseus, the Greek king, was at sea. Mentor intervenes in the youth's chaotic life—and not by telling him exactly what to do. Instead, Mentor instills Telemachus with the mental fortitude he needs to be the hero of his own story.[1] That's a big role, and Homer had it right. A mentor is a trustworthy guide with good intentions who advises someone else's child (no matter how old). In the dire case of Telemachus, the stakes were very high, necessitating Athena's wise intervention. Fortunately, no one expects any of us to be a goddess.

That heroic tale underscores the crucial role of mentoring in a person's life, and it's a good reminder of the best gifts we can pass on to our students: skills to help them become self-directed learners, such as sound reasoning, resourcefulness, critical thinking, and time management. Mentoring is not just what happens in office hours: the best teachers mentor in the classroom by modeling best practices for students, sharing strategies for success—how we would approach an assignment or how former students have done it and how much time it

took them. Likewise, teaching extends beyond the classroom, and we can be good mentors to our students by encouraging them to study together and go to one another with questions before they come to us professors. Forming networks of peer-to-peer support bolsters student learning because learning is social—and students may make the friendships of a lifetime in the process.

Mentoring can sometimes feel overwhelming to mere mortals. Every student has their own unique needs, and we only have so much time and advice to give. That seemingly insurmountable problem—one of us; hundreds of students—is also the solution.[2] We cannot be everything to our students. Instead, we can give them a little bit of our humanity, our honesty, our limited perspective, our understanding, and guide them to collect strategies and skills from a wide range of people—advisers, bosses, coaches, and peers—with different experiences and perspectives, not just one. Mentoring is a form of caring for others—caring for the souls of our students, as bell hooks aptly phrased it in *Teaching to Transgress*—to ensure that they are given their best chance to learn and to make the most of their time with us.[3] Professor Maha Bali at the American University of Cairo refers to this as "a pedagogy of care."[4]

Yusef Waghid, Distinguished Professor of Philosophy of Education at Stellenbosch University, South Africa, proposes using the *ubuntu* practice as a model of caring for our students.[5] The *ubuntu* practice involves (1) showing moral respect to all; (2) considering all humans worthy of our acknowledgment and engagement, even those we resent; and (3) prioritizing the humanity of all, recognizing that all are equal and that no person should undermine or disrespect another's right of belonging to humanity.

The *ubuntu* pedagogies of care imply that the care must be mutual, applying equally to instructors and students alike. As mentors, we are often in difficult situations, trying to advise students who are themselves also in difficult situations. A good mentor establishes healthy boundaries to prioritize care for themselves and also model appropriate self-care in the workplace for our students by ending office

hours on time, not answering emails on weekends to respect time off, and so on.

Finally, the best mentor (and here again, Homer is a good guide) helps the mentee to mentor themselves and, ideally, others too. Even worse than not having a good adviser is having one who infantilizes you, makes you feel dependent on them. In very simple, practical terms, we ask our mentees to bring a written agenda when they meet with us, where they write out their own priorities and what they hope we can discuss together. As in other instances throughout this book, we know that, as soon as they write out their priorities, they are already learning how to be more self-directed and to apply "self-care" to their studies. They are already practicing agency, empowerment, and a sense of self—even as we are pledging to help them on their journey.

This chapter focuses on ways to translate best practices of active learning into our mentorship in order to create an engaged and equitable learning community for all.

In this chapter:

What Do I Want Students to Call Me?

It may seem unusual to begin a section on mentoring by talking about how we want our students to address us, yet, as in all active learning, respect is a great place to begin, and titles are part of that. In some

How To Be a Good Mentor: The 3-Minute Manifesto

This 3-minute exercise by acclaimed designer Bruce Mau helps anyone facing a complex task to greater self-knowledge on the way to designing a workable solution. Mau notes that a designer's job is to accept the biggest challenges we face today as the beginning, not the end of a process. This includes learning how to be a good mentor. He keeps the exercise short to spark ideas and emotions. Three minutes is enough, he insists, because people know what future they want—all we need to do is ask them.*

Choose one of these prompts to get started. If you finish before time's up, then go to another, and another:

- **What kind of mentor do you hope to be?**
- **What special talents do you have to offer?**
- **What can you give?**
- **What are your boundaries?**
- **Who are your students?**
- **What kind of students do you work with best?**
- **Where can you improve?**
- **If you were your own ideal mentor, how would you mentor the student you?**

* Bruce Mau, *MC24: Bruce Mau's 24 Principles for Designing Massive Change in Your Life and Work* (New York: Phaidon Press, 2020), 65.

places, this is straightforward. In German-speaking universities the title "Professor" is reserved for those with full professor status. In Japanese culture you would never call someone who was not an immediate family member by their first name—and certainly not one of your professors.

In the United States and some other countries, the question of titles is a more vexing issue with no right answer but with lots to think about.

Just as we deride any faculty member who refers to their students as "kids," we are aware that titles carry much more than denotative meaning. When Dr. Jill Biden fiercely defended her title (and her doctor of education degree) to her critics, many of us cheered, including other community college professors too long denied status because of the hierarchical nature of higher education.

Every institution has its own explicit or implicit ways of showing respect or disrespect, and what we expect from our students in part depends on what is considered the norm. I (Cathy) know a woman administrator at a famous school of medicine who once showed me the minutes of a meeting in which she was listed by first name only on a roster of male doctors who were all labeled as "Dr. So and So."

There is no right answer to this question, but there are plenty of things you don't want to be called. I (Cathy) know another distinguished scientist who has received every imaginable award short of a Nobel Prize, yet, because she is less than five feet tall, is often addressed by a diminutive nickname she doesn't use herself. For this reason, she asks students, lab assistants, and junior colleagues to call her "Dr." or "Professor" in order to remind them not to diminish her professional stature. Many of my graduate students who did their undergraduate training at historically Black colleges and universities (HBCUs) continued to call me "Dr. Davidson" even after they became distinguished professors in their own right. In response to our country's long history of racism, their undergraduate professors at HBCUs insisted that their students use their titles when addressing them, even in contexts where other schools might have encouraged the students to use first names when addressing their professors.

What we expect from our students in part depends on what is considered the norm. As an adjunct, I (Christina) struggled with this question each time I began teaching at a new institution. I taught for ten years before I earned my doctorate, so "Dr." was not an option, and, as an adjunct, "Professor" wasn't right, either. When I taught in Florida, students conditioned to respond to authority with southern

manners automatically called me "Mrs.," much to my offense (I wasn't married) and despite my repeated requests that they call me anything but that. When I taught in New York City, I met many students who were the first in their families to go to college, and it was an honor for them to be able to call their instructors "Professor," so I gave up resisting that, too. In general, I prefer my students to call me "Christina" because I want to earn their respect, not demand it. At the end of the day, what I've learned is that everyone shows respect in their own way, and allowing students to honor you in the way that is most meaningful to them also honors their hard-won admittance to college.

Prioritizing Student Wellness

Good mentoring includes cultivating resourcefulness in students as well as thinking about how students' lives outside the classroom impact their learning. One of the best ways to do both things at once is to help students find all the tools and support that an academic institution affords them. Sometimes the last page of the syllabus furnishes information about accommodations as well as helpful details about where to find tutoring. Take a moment to do some digging and offer students more, particularly for those students who face food and housing insecurity. Often, more students can benefit from this information than you might think, and it is a hundred times more challenging to learn course material when their basic needs are not regularly being met.

Adashima Oyo, who teaches health care courses as an adjunct at Brooklyn College and New York University, spends extra time updating that page of her syllabus every year to include information about campus offices with resources on internships, jobs, and writing help as well as "social determinants of academic success." She shares that she's not a social worker or a therapist, but she still wants students to know where they can find what they need to thrive, such as the campus health clinic, the mental health center, and the social service center. These

resources can be a lifeline to students who are navigating college for the first time, managing language and cultural or disability barriers. In addition, as she reminds us, "There are also many students who need to know where and how to access a food pantry, health insurance, emergency housing, legal support, or other urgent issues like referrals for those students dealing with domestic violence or substance abuse. I remind students that these services are confidential, shame-free, and free of charge."[6] We cannot be experts in all these things, but we can learn where these offices are located and share that information with students to help them be resourceful and gain access to what they need.

Whole institutions can help here as well. At Purdue University, the first-year Cornerstone program offers integrated general education courses to some four thousand students a year.[7] Taught by full-time faculty, this program integrates reading, writing, and listening skills with content that addresses some of the biggest problems in the world today, such as sustainable solutions to environmental disasters, medicine and health care, and human rights and conflict resolution. Equally important—and integral to the program itself—Cornerstone assigns faculty mentors to the first-year students, building counseling into the learning experience. This means that faculty too are trained to offer advice on everything from mental health to study abroad. Rather than mentoring being an "add-on" assigned elsewhere, it is designed into the most foundational learning experiences of Purdue students—and, not incidentally, of Purdue faculty too.

How Can I Be Personable Without Getting Too Personal?

It's daunting, especially at the start of your career, to assume that you know how to balance being *personable* while maintaining professionalism. We care deeply about our students, and we genuinely want to help them. Setting healthy boundaries *is* a form of caring. Modeling a healthy work-life balance is as good for our students as it is for us.

There are easy ways to support the sociality of learning and encourage students to form bonds with their peers. Community-building within a course is personable and generous, and it keeps the focus on students' lifelong learning through sound pedagogy. An effective and fun way to do this on the first day of class is to create a student "yearbook." Sam Arsenio, a third-year student at the John Jay College of Criminal Justice in New York City, introduced this idea in an interdisciplinary CUNY Peer Leaders program in 2021. He asked all of the returning and new peer leaders to introduce themselves in their Zoom meeting by creating an autobiographical slide. Their slides instantly allowed students to feel a sense of community and engagement while also setting their own personal parameters for privacy and sharing. Inspired by this student, Professor Shelly Eversley, Interim Chair of Black and Latino Studies at Baruch College, adapted the method for the first meeting in her online class a few weeks later. Eversley created a blank template of a yearbook using Google Slides and asked her students to spend five minutes filling in a slide of their own to introduce themselves to their peers. Each student added their name, pronouns, and a few pictures or things about themselves that they wanted their peers to know.

Community-building activities like these thoughtfully invest time in centering students' lives and prompt students to get to know one another's names and not just that of the professor. In addition to laying the foundations for a healthy and respectful learning environment, this activity shows students that they are not alone, that they have a support network they can go to before they come to you with questions—and that takes off a bit of the pressure on us professors, too.

Remembering that we're neither goddesses nor therapists is freeing and can aid us in determining who really needs our help and who needs help from a professional with a skill set we do not possess. Once you decide where your boundaries lie—including ones involving time—set them in place. If you know yourself to be poor at setting those, err on the side of making stronger boundaries. Then consider ways that the

whole learning community might be structured to support students' learning beyond one-on-one help from you.

This is where student-centered learning helps everyone, especially the professor. Students can go to one another (via an email list or Slack channel) for support and answers, becoming more independent and developing their own ability to network in addition to having us to guide them. That's how we care for our students while also guarding against faculty burnout.

Office Hours That Empower Students

On his YouTube and TikTok advice channels, "First Gen Prof," Tom Mulaney, a professor of Chinese history at Stanford University, offers students insights into "How Academia Works." He frequently provides viewers with information he wishes he had when he was the first member of his own family to go to college. "When I was an undergrad, I *never* went to office hours. I assumed that unless I had a burning question or a brilliant idea, that I was wasting the professor's time. Then I became a professor and no one was coming to office hours, and I realized maybe this is a systemic problem, maybe everyone has the same assumptions. So let me say, you do not need a good excuse to go to office hours. Your professor wants to meet you. Trust me."[8] Since his TikTok video received over thirty-eight thousand likes and a thousand comments on the first day it was posted, it's safe to say that, yes, not going to office hours is a widespread concern.

In addition to encouraging students to come to office hours, there are ways to make office hours more welcoming or to highlight their importance to student success. Even the term *office hours* is intimidating and alienating to many students because it carries many of the resonances of failure: being sent to the office for detention or counseling in grade school or high school. Recently, some institutions have renamed them "student hours" or redesigned "course centers," blocks of time set aside in empty classrooms where students can come together

to work outside of class with peers and with the instructor present to give advice or feedback. Sometimes faculty from different programs supplement traditional office hours by holding joint course centers. At one college, instructors in an Introduction to Symbolic Logic and an Introduction to Physics course held joint sessions with instructors and teaching assistants moving between the rooms to offer advice to those studying for exams or writing research papers.[9] Some professors require them: they build attending at least one or two one-on-one meetings or collective office hours into their course requirements.

What Happens If a Student Tells Me About Sexual Harassment?

In an urgent and immediate situation like this, you can be compassionate but should also facilitate a formal introduction to the best and most trustworthy people at your institution who are responsible professionals trained to address these issues. It is far too serious, on every level, for an amateur, no matter how well-meaning you may be. In addition, as Sara Ahmed warns in her starkly compelling book *Complaint!* (2021), bureaucratic structures for complaint can often end up harming the person making the complaint.[10] Given this turn in institutional defensiveness, it is crucial to help a student, first, remove themselves from potential harm and, second, make sure they are aware of and follow procedures if they wish to offer a formal complaint.

Not knowing how to proceed might cause you to exacerbate what is already a terrible situation. It's your responsibility to have this contact information on hand and to familiarize yourself with your college's health and wellness center and security department, and to know what the next steps would be if a student came to you with a problem beyond your area of expertise.

There are things we all can do at our various institutions to be proactive and create networks of support for ourselves. After all, students

are not the only ones who experience harassment. After hearing numerous complaints from female and gender-nonconforming adjuncts about sexual harassment—from advisers, peers, and students—I (Christina) formed an advocacy group for adjuncts called "Better to Speak" with my colleagues Destry Sibley, a Fulbright National Geographic scholar, and Alicia Andrzejewski, then a graduate student and now an assistant professor at the College of William and Mary. Named after a poem by Audre Lorde, our group adopted the mission to "create spaces in which women and gender nonconforming graduate students and adjunct faculty members share experiences and support." The group provided a space for colleagues to exchange advice on the best ways to handle delicate or even aggressive situations. As with in-class peer-to-peer collaborative groups, this mentoring network helped us to turn to one another and ask "Am I right that this does not feel right?" Once validated, we used one another to help address the issues we were facing.

How Do I Address Racial and Other Forms of Discrimination?

The same cautions for gender and sexual harassment apply to racial discrimination. Before you even encounter such a situation, it's important to know your university's policies and, even better, to educate yourself and establish your own zero-tolerance policies for your classroom (for instance: "We do not tolerate racist, sexist, transphobic, and other kinds of aggressive comments directed at any group of people"). In addition, it's helpful to be an informed participant in your campus community and to know where students might seek friendship and support, such as your local Hillel group, PRIDE group, and organizations for Asian American, Black, Indigenous, Latinx students as well as any other group. If you want to become even more familiar with managing or participating in difficult discussions in your classroom, department, or campus, a book that deftly addresses this question from multiple perspectives is *Difficult Subjects: Insights and Strategies for Teaching About Race, Sexuality, and Gender,* edited by Badia

Ahad-Legardy and OiYan A. Poon. For a more theoretical approach that offers an Indigenous or decolonial perspective, you might consult the excellent essays in Sandy Grande's *Red Pedagogy: Native American Social and Political Thought.*[11] Beyond that, you might also seek bystander intervention training, which will prepare you to address racial and other forms of discrimination when they arise. Depending on the situation, you might intervene, or you might realize that the best thing you can do is to ask someone for help—before you do, we advocate being thoughtful about whom you approach and how you approach someone for help. People of color are not responsible for educating everyone else about racism.

Faculty of color spend far more time mentoring students of color, including offering advice about how to proceed in situations where they face tacit bias or overt discrimination.[12] We believe universities should be aware of what Nicole Truesdell calls "cultural taxation," the ways primarily white institutions often assume that faculty of color will become mentors to students of color, without offering credit or compensation for this "invisible labor."[13] Similarly, part-time or adjunct faculty often are overburdened with mentoring duties that they are not compensated for in their salaries or in other reward systems. Universities need to find ways to address these glaring inequities—and some of them are doing so. Examples include the Hope Center for College, Community, and Justice at Temple University; the Percy Ellis Sutton Search for Education, Elevation, and Knowledge (SEEK) program; and the Accelerated Study in Associate Programs (ASAP), which began at the City University of New York (CUNY) and now exists at ten other colleges in five states. Students in ASAP (where mentoring is a key part of the program) are twice as likely to graduate in three years compared to similar students not in the program.[14]

What should you do in a case where a student accuses you or someone in your class of being insensitive to their particular identity or experience? Self-education and a little bit of role playing can do a lot of good to prepare you for moments like this. We highly recommend Melissa

Schieble, Amy Vetter, and Kahdeidra Monét Martin's *Classroom Talk for Social Change,* a book filled with examples of various scenarios in which professors become mediators to difficult and highly charged conversations.

Sometimes, deep listening is the answer. Dr. Jade E. Davis, director of educational technology and learning management at the University of Pennsylvania Library System and a rare African American in her technology field, once suggested to a seminar of mostly white participants: "If a person of color overcomes their own inhibitions and takes the time to point out that something you (a white person) are doing that feels racist, you should have one response: listen! Most people won't even tell you." Her point is generalizable to many different situations. However uncomfortable the experience, listening without defensiveness is an act of trust (on all sides), a learning experience, and a precious opportunity for unlearning and relearning that will serve you well in the future.

How Do I Support Students with Cognitive and Physical Disabilities?

At the Spring 2021 workshop "Is Universal Design Enough? Learning from the Neurodiversity Movement How to Engage Diverse Learners," Kristen Gillespie-Lynch, a psychology professor at the College of Staten Island, noted that no design, no matter how well intentioned, is actually "universal."[15] What works for the abilities of one student might be crushing and confusing for another. She argues that "universal design is an iterative process," a constantly changing and adaptive response to whatever situation presents itself. Universal design requires understanding, explaining, adaptation, and, most fundamentally, a willingness to observe and to be flexible in all the ways that define the New College Classroom.

To make this point, she showed a video clip by Stephen Shore, a professor of special education at Adelphi University who is himself

autistic. In one assignment, he had his students write about the workings of a new electronic sound device.[16] One student in the class was stymied by poor penmanship and an inability to write rapidly and asked if, instead of writing about the device, he could draw a map. Professor Shore was stunned when the student produced an elegant map on the spot, but what stood out to him was how easy it would have been for him—an autistic professor teaching students with disabilities about disability—to have missed this student's contribution. "The exercise was supposed to be about mastery of content, not handwriting," he noted.

Sometimes, however, we aren't as flexible as Shore, and we simply fail to give each student the opportunity and support they deserve. If a student reports a problem, we should address issues of accessibility in the same way that we do other complaints. There should be an official at your institution charged with maintaining standards of compliance and access for your students. As with racism, we all have much to learn when addressing those who have different perspectives, identities, points of view, and abilities than our own. In the case of cognitive difference, it is important to remember that part of mentoring is helping students make their case—for themselves and with their professors, in their communities, and with future employers. "Camouflaging" is commonplace among those with invisible or cognitive disabilities, so inviting students to talk about the best ways of representing and presenting themselves can be especially helpful to their academic success.

How Can I Be a Good Mentor to Returning Students?

In college today, over a quarter of all students are "nontraditional" or "returning" students—over the age of twenty-five, working full-time, with family and other personal obligations, and typically commuting to campus. All too often, older students are not offered mentoring and advice at institutions that cater to students of "traditional" age.

Todd McCullough, president of Adults Belong in College, a nonprofit advocacy organization, argues that every returning student needs five

kinds of support from institutions: financial aid specialists (to help with the complex rules around part-time and transfer students); transition advisers (to help returning students acclimate to a new campus and to find out what services are available); supportive student organizations for returning students; mentors and counselors; and an institutional and classroom atmosphere of inclusion.[17]

In addition to these ways of mentoring, it is also crucial to help our returning students be aware of all the ways their institution offers credit for prior work and life experiences. More and more institutions offer credit for prior learning (CPL) or Prior Learning Assessment (PLA), which are two names for the same thing: a means whereby institutions assess and give college credit for students' training and workforce experience outside of college. These include military training, standardized exams, industry credentials such as licenses and certifications, and community service. A good discussion to have with older students would include evaluating prior work and life experiences combined with advising them on which prerequisites are worth retaking at this stage in their careers so that they can benefit the most from their time to graduation.

Finally, and this will come as no surprise, we advocate organizing peer mentoring groups for nontraditional, returning students. Most colleges and universities aren't equipped to address all of the varied issues nontraditional students face—from childcare to carpools, health insurance to veterans' benefits. Returning students can often be the best sources for information and support for their peers, because most resources on campus are geared for traditional students between eighteen and twenty-two years old. This is not to exempt schools from providing services for the nontraditional students they accept but to acknowledge that peer mentoring, in most places, has proven to be extremely successful in addressing the complex educational and life challenges faced by returning students. Programs such as Pioneer Connections, a peer mentoring program for adult and nontraditional students at Volunteer State Community College, a public, comprehensive

community college in Gallatin, Tennessee, are a promising feature in the higher education landscape. Once a year, the college seeks out successful adult learners with leadership potential and offers them professional development to enhance their own leadership skills as well as a scholarship and stipend so that, during their tenure as students, they can also earn money teaching other adult learners to be peer mentors for incoming and returning students.[18]

Teaching is mentoring, and mentoring is teaching. As with other forms of active learning, sometimes the single greatest gift we can offer is knowing when to support students, when to advise them, when to help them take their skills to the next level, and when to honor the knowledge and experience they bring and then step out of their way.