1

Why a Student-Centered Approach to Teaching?

1.1 A Paradigm Shift?

In this book, we strongly advocate that instructors approach teaching as they would any other discipline in psychology, by using an evidence-based approach. The scholarship of teaching and learning (SoTL) literature is rich with theory-driven empirical studies that determine best practices for maximizing learning and fostering both social and intellectual development in students. These studies conclusively demonstrate that a student-centered approach, as opposed to a teacher-centered approach such as lecturing, is by far the most effective pedagogical strategy (Freeman et al., 2014; Johnson, Johnson, & Stanne, 2000). Student-centered classes draw on research from cognitive, social, and developmental psychology, and emphasize active learning and collaboration over passive listening. Rather than being the source of all knowledge, student-centered teachers play a critical role as facilitators by providing structure, guidance, feedback, and support for students as they take on various tasks (Alfieri, Brooks, Aldrich, & Tenenbaum, 2011; Barr & Tagg, 1995). Such support has been associated with student gains in perceptions of their own personal social development (Umbach & Wawrzynski, 2005) and academic skills (Alfieri et al., 2011). Thus, approaching teaching from a student-centered perspective is consistent with the mission of a liberal arts education, in that it contributes to the development of the "whole person."

We realize that this focus on active learning may require a considerable paradigm shift for new instructors, who are likely to have been educated by teachers who predominantly used lecture-based teaching in their undergraduate classes. Indeed, when we have asked graduate students in our Teaching of Psychology class to list the qualities of their "best teacher," they have tended to describe those of an excellent public speaker (e.g., knowledgeable, dynamic, entertaining, enthusiastic, funny), as well as caring and supportive attributes (e.g., understanding, caring, warm-hearted, empathetic); for similar results with undergraduates, see Keeley, Furr, and Buskist (2009). Relatedly, when asked to describe the tasks they view as most important when preparing to teach, our graduate students tend to focus on having sufficient content knowledge (e.g., preparing slides and rehearsing lectures, selecting and reviewing textbooks and other readings, making sure that one knows the material), rather than on constructing learning objectives (LOs), designing interactive activities and demonstrations,

and planning how to best assess whether the LOs have been successfully met. Taken together, these data suggest that although novice instructors acknowledge the importance of establishing rapport with their students, they often equate teaching effectiveness with the transmission of as much content knowledge as possible to a class, in an enthusiastic manner.

Teacher-centered instruction not only puts a great deal of pressure on new instructors, who may be worried about their skills as dynamic public speakers or their ability to manage potential "incivilities" in the classroom, but has also been shown to be considerably less effective as compared to a student-centered approach. A meta-analysis of over 200 studies in science, technology, engineering, and mathematics (STEM) classes showed that the grades of students taught using active learning methods were on average half a letter grade higher than among those in lecture classes, with over 50% fewer failing grades (Freeman et al., 2014). Other studies indicate that active learning is associated with lower rates of attrition among college students (Braxton, Milem, & Sullivan, 2000). The overwhelming evidence favoring active learning methods has led Nobel Laureate Carl Wieman to liken lecturing to the archaic practice of "blood-letting in medicine": blood-letting was endorsed as a therapeutic practice for hundreds of years because patients sometimes got better after its application, likely as a result of other factors (Wieman, 2014). Similarly, students who are taught predominantly in lecture classes do learn, but this is most likely attributable to their activities outside of class, such as reading and reviewing the materials (Wieman, 2014).

Current trends in higher education emphasize learning skills over memorizing content, which can quickly become outdated in our rapidly changing world. In 2005, the Association of American Colleges and Universities (AAC&U) launched the Liberal Education and America's Promise (LEAP) initiative, which recognized that college graduates need strong intellectual and practical skills in order to enter into and survive in the workforce (http://www.aacu.org/leap). Like the American Psychological Association (APA) Guidelines for the Undergraduate Psychology Major (American Psychological Association, 2013), the AAC&U advocates that undergraduate education should produce improvements in many areas, including critical thinking (CT) and the solving of authentic problems related to real-life situations, oral and written communication, information and technological literacy, scientific inquiry and analysis, and collaborative teamwork. Developing metacognitive skills about what and how best to learn has also been linked to better academic performance in terms of higher test scores and GPA (Coutinho, 2008; Everson & Tobias, 1998; Nietfeld, Cao, & Osborne, 2005; Young & Fry, 2012). Both LEAP and the APA provide well-rounded visions of what constitutes a good education, by requiring that students are engaged as agents in the learning process, with instructors serving as their guides. The Society for the Teaching of Psychology's (STP's) educational taskforce has also suggested that model instructors use methods that actively engage students in the learning process (Richmond et al., 2014).

We argue that using a student-centered perspective puts less pressure on novice instructors, by recognizing that an effective teacher does not need to be extraverted or a stand-up comedian. As Bain (2011) reported in his national study of what the best college teachers do, master teachers challenge their students and help them learn *how* to think, rather than *what* to think. This means that anyone can become a better teacher. Instructors can learn the best ways to facilitate the development of broad-based skills (e.g., CT, information and media literacy, communication, scientific inquiry and analysis, collaboration) in their

students. Therefore, with training and experience, instructors should be able to engage students in purposeful problem solving, analysis, and discussion of complex issues, while building respectful communities that value diverse viewpoints.

Setting the Stage for Transformative Learning 1.2

Bain (2011) found that the best college teachers across the United States all helped their students to engage in deep learning by encouraging them to think for themselves. In many cases, transformative learning occurred when instructors gave their students the confidence to take risks and learn from their mistakes. Students were able to alter their long-standing beliefs through knowledge constructed from their own explorations. Although they found classes in which they had to think for themselves challenging, they were motivated to learn because they were able to focus on topics that they found interesting. Echoing the tenets of critical (Freire, 1996), feminist (Brunner, 1992; Robinson-Keilig, Hamill, Gwin-Vinsant, & Dashner, 2014; Scanlon, 1993), and intersectional (Case, 2017) pedagogy, Stetsenko and colleagues have advocated for a transformative activist approach to learning that increases the agency of underserved students and leads the way to social change (Stetsenko, 2017). Within this framework, students identify personal issues that impact their lives and learning, and work collaboratively to research potential solutions to problems of inequality, with the goal of promoting both personal and community agency as they make commitments to social justice (Podlucká, 2017; Vianna, Hougaard, & Stetsenko, 2014; Vianna & Stetsenko, 2017).

1.3 **Knowing Your Students**

Establishing strong rapport in the classroom is of paramount importance if studentcentered teaching is to be successful. Positive faculty-student interactions increase feelings of social integration and institutional commitment, which in turn increase student retention (Braxton & McClendon, 2001). For some of you, your own experiences as undergraduates may be quite different from those of your students. Given the diversity of backgrounds of today's student body, regular self-reflection about your world views, implicit biases, and privileges (Case, 2017; Stuart, 2004; Sue & Sue, 2016), as well as taking the time to get to know your students, their particular strengths, and the challenges that they face, will help you to understand how best to support their learning. We begin with a brief review of the general characteristics of today's undergraduates, including some of the challenges they face, and offer concrete suggestions for how to support them in their learning, by building rapport, fostering inclusivity, and teaching in a culturally responsive, student-centered way.

Connecting Identity with Motivation for Learning 1.3.1

In 2014, just under 64% of the 17.3 million undergraduates in the United States (including 88% of undergraduates at 4-year institutions) fell in the "traditional" 18-24-yearold age range (National Center for Education Statistics, 2016a), underscoring the fact that very many other students return to school after years in the workforce, in the military, or at home raising children. Today's students are acutely aware that having a college education significantly increases their likelihood of finding a good job and that most well-paying jobs require a college degree (Chen, 2017; White House Council of Economic Advisors, 2014). Indeed, it has been estimated that attaining a degree from a 4-year institution after graduating high school almost doubles a person's life-time earnings (Carnevale, Smith, & Strohl, 2010). Thus, the majority of today's undergraduates may be pursuing higher education in order to gain or improve their employment credentials, not because they have an intrinsic interest in the sciences and liberal arts. Furthermore, only 20–24% of psychology majors actually enroll in graduate education (American Psychological Association, Center for Workforce Studies, 2014). Therefore, students are more likely to be motivated when their course LOs highlight the development of critical skills or knowledge that will be helpful in the workplace, as well as in graduate school.

1.3.2 Teaching Digital Natives

Today's younger students are members of the Net Generation or Digital Natives (Prensky, 2001), in that they have grown up in a world in which Internet access and personal computers are widely available. Indeed, students born after the mid-1990s have never known a time when the Internet was not available. However, students from low-income families are more likely to come from homes without broadband Internet and computer access (Anderson, 2017), while older college students sometimes experience difficulties using technology (Tyler-Smith, 2006). Moreover, even tech-savvy digital natives are not yet necessarily capable of evaluating the quality of the information that they have at their fingertips (Gross & Latham, 2013; Gross, Latham, & Armstrong, 2012; Head & Eisenberg, 2009; National Survey of Student Engagement, 2015; Wineburg, McGrew, Breakstone, & Ortega, 2016). In a comprehensive study of over 7800 students from a diverse range of middle schools, high schools, and universities, participants consistently exhibited difficulty identifying website sponsors, evaluating evidence and claims, and assessing the authority and motivation behind information posted on the Internet (Wineburg et al., 2016). Therefore, in this book, we suggest various assignments and strategies for helping students to assess the reliability of information that they find online (e.g., see Chapters 3 and 4 for discussion of the use of the CRAAP test and other ways to encourage information literacy and CT).

Despite the widespread use of digital devices in their daily lives, most college students today (regardless of age) lack experience in using instructional technology, such as the course management systems (CMSs) that are essential for online instruction. Furthermore, they may find it tedious and unrewarding to use these systems to learn on their own at home, despite the promise digital technologies hold for delivering content 24/7 at the convenience and pace of the individual student (Powers, Brooks, McCloskey, Sekerina, & Cohen, 2013). This book emphasizes how multimedia instruction can both enhance learning (see Chapter 3) and help students to develop the confidence they need to work with new technologies in the workplace. However, students are best served when they receive scaffolded support while learning how to navigate online learning platforms (e.g., WileyPLUS, MyLab), CMSs (e.g., Canvas, Blackboard), and other new technologies (Powers, Brooks, Galazyn, & Donnelly, 2016).

1.3.3 Our Diverse Student Body

Although many people imagine typical college students as 18–22-year-olds attending a residential 4-year college, the reality is very different. More than 74% of today's undergraduates can be classified as non-traditional; that is, they meet one or more of the following criteria: older than 24 years (adult learner), no high school diploma, financially independent, has dependents, has one or more jobs, attends college part-time, does not live in college residences (Radford, Cominole, & Skomsvold, 2015). In 2014, undergraduates in the United States were characterized as follows: 61% attended 4-year institutions, with the remainder attending 2-year community colleges or technical schools; about 69% attended public colleges or universities, rather than private institutions; and 33% attended 4-year colleges on a part-time basis (National Center for Education Statistics, 2016a). Furthermore, in 2015, 43% of full-time students and 80% of part-time students also had a job (McFarland et al., 2017), and about half of all undergraduates offset the cost of college by living with their immediate family or with more distant relatives (Sallie Mae, 2014). Clearly, "non-traditional" students are now the norm.

In having to juggle a work/school balance, many of today's busy students experience the hassles of commuting and of having to keep up with family responsibilities. For these students, time is particularly precious. Because of the many competing demands they face, adult learners are more likely than their younger counterparts to attend college part-time (National Center for Education Statistics, 2018), and more likely to drop out (Kazis et al., 2007). Commuter students in general are less likely to view attending school social events as an important part of their college life, as compared to those who live on campus (Deil-Amen, 2011). This is particularly worrisome, as student retention is predicted in part by student engagement and by how connected students feel to their schools (Roberts & Styron, 2010). However, student-centered instruction can help to support retention, as it increases faculty-student interaction (Umbach & Wawrzynski, 2005) and provides greater opportunities for students to connect with their peers (see Chapter 5). Both of these factors are likely to lead to increased social integration and, by association, greater feeling of institutional commitment.

The 2010 U.S. Census revealed that 18-34-year-olds in the general population were more diverse than ever before, with about 57% identifying as non-Hispanic White, about 24% speaking a language other than English at home, and 15% being born in a country other than the United States (U.S. Census, 2014). The increased diversity seen in the general population of this generation is also reflected in the current student body (White House Council of Economic Advisors, 2014), especially in broad-access public universities and community colleges, which tend to have wider ranges of students in terms of age, gender, race/ethnicity, and socioeconomic status (SES) as compared to private institutions (Deil-Amen, 2011). Recent estimates also suggest that 2% of undergraduates are undocumented immigrants (Suárez-Orozco, Katsiaficas, et al., 2015), and so face additional challenges. In addition, over one million international students enroll in U.S. colleges and universities each year, with the majority coming from China or India (Institute of International Education, 2017).

Latino/as comprise the largest growing minority group in the United States. Therefore, perhaps not surprisingly, enrollments for Latinx college students have increased significantly in recent years (Krogstad, 2016), especially at community colleges and broadaccess public universities (Deil-Amen, 2011). However, graduation rates for Latinx students are disproportionately low compared to other groups (National Conference of State Legislatures, 2011). About 50% of such students are the first in their families to attend college, and they frequently report that they lack access to much-needed information about financial aid or what to expect in college (National Conference of State Legislatures, 2011; see also Section 1.4 on Supporting First-Generation College Students).

Diversity among today's students extends beyond race, ethnicity, and age. Between 2003 and 2007, about 11% of undergraduates reported that they had a disability (Sparks & Malkus, 2013). With changes in legislation, such as the Americans with Disabilities Act (ADA) Amendments Act of 2008 and the 2008 Higher Education Opportunity Act, this number will likely increase in the future, especially at public institutions, where students with disabilities are more likely to enroll (Raue & Lewis, 2011). Although the most commonly registered disability among undergraduates is a specific learning disability (such as dyslexia) or a visual or hearing impairment, increasing numbers of students register with other so-called "invisible" disabilities, such as autism spectrum disorder, attention-deficit hyperactivity disorder, or an anxiety disorder (Raue & Lewis, 2011). Many of these students require accommodations in order to learn effectively; however, they encounter very different support systems in college than they did in high school. In high schools, it is the legal responsibility of the school to identify students who need support and to determine how best to provide it. That is, K-12 students with disabilities receive an Individualized Education Program (IEP), as mandated by the Individuals with Disabilities Education Act (IDEA). However, in accordance with the ADA, once a student enters college, services can only be provided if they have registered their disability status on campus (usually at a Center for Student Accessibility). Students often choose not to register, perhaps due to the stigma associated with their disability or to a lack of skills in self-advocacy (Eckes & Ochoa, 2005; Lynch & Gussel, 1996). In general, instructors should be mindful that many students who are entitled to accommodations under the law may not be receiving them; instructors who are reassuring and sensitive when students disclose information about their disability status are more likely to encourage them to register so that they can receive the support they need.

Keeping an open mind helps us to recognize the potential difficulties students may face as they navigate the college environment. Students who are members of minoritized groups often experience significant discrimination and/or harassment from their peers—and the broader college community—on the basis of their race, ethnicity, gender, sexual orientation, SES, or physical or mental health (Hurtado & Ruiz, 2012; Rankin & Reason, 2005). Although campus climate has most commonly been investigated in terms of race, a growing number of studies have looked at other aspects of diversity, including sexual orientation and gender identity. In 2016, a Gallup Poll reported that the proportion of people in the U.S. population identifying as lesbian, gay, bisexual, or transgender (LGBT) was at an all time high (4.1%), with higher rates of disclosure among Millennials compared to any earlier generation (Gates, 2017). In a survey of over 33 000 college students in the same year, even higher proportions (9.9%) self-identified as non-heterosexual, with the majority identifying as bisexual or asexual¹ (American College Health Association, 2016). There is an increasing awareness of the rights of

¹ Some students in the survey identified as pansexual, a term increasingly used to describe sexual identity (Belous & Bauman, 2017).

LGBT and queer (Q) people at U.S. colleges and universities (Beemyn & Rankin, 2011). Many more students are disclosing their sexual identities in high school, and a growing number of campuses have LGBTQ centers and mission statements that affirm policies of tolerance and appreciation of diversity. A 2010 Campus Pride survey of more than 5000 LGBT students and faculty in different institutions reported that 50-76% of LGBT individuals indicated that they felt comfortable on campus; however, LGBT students were still twice as likely to experience harassment on campus as were heterosexual cisgendered students (Rankin, Weber, Blumenfeld, & Frazer, 2010). Transgender and gender-nonconforming students experience particularly high rates of discrimination, in addition to often being denied access to appropriate housing and bathroom/locker room facilities on campus (Grant et al., 2011). Thus, despite some improvements, the campus climate at many colleges (or in many college classrooms) may still not be one of inclusivity toward sexual minorities.

Although overt racism and other forms of discrimination have generally reduced over the years, members of minoritized groups are often the recipients of other more subtle forms of discrimination, commonly known as "microaggressions" (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014; Sue, Lin, Torino, Capodilupo, & Rivera, 2009). Microaggressions include stereotyping, making derogatory remarks related to another's minoritized status, making racial jokes, and invalidating another's lived experience (e.g., by using verbal or non-verbal behaviors to suggest they are overly sensitive to their minoritized status and are misinterpreting the behavior of others) (Sue, 2010; Sue et al., 2007). Students belonging to various underrepresented groups have been shown to experience high levels of microaggressions in U.S. colleges (McCabe, 2009; Nadal et al., 2014; Suárez-Orozco, Casanova, et al., 2015; Sue et al., 2009). As Nadal et al. (2014) point out, experiencing microaggressions is stressful, and this can negatively impact a student's self-esteem and mental health.

The student body is different at every institution. Some demographic information can be found on an institution's website, and institutional centers for research, planning, and assessment are typically happy to share the data they collect about the student body with college instructors. Some of their statistics may be very surprising. For example, Broton and Goldrick-Rab (2016) reported that an increasing number of students experience housing and food insecurity, meaning that they are at risk of losing their home or do not have enough money to buy adequate amounts of healthy food on a regular basis. Our institution, the City University of New York (CUNY), reported that during 2011, 1% of its undergraduates lived in a shelter, 42% had an insecure housing situation, and 39% had food security issues (Freudenberg et al., 2013). Having an awareness of this kind of information may affect your decisions about accepting late work, allowing make-up tests, or making sure that students who are waiting for financial aid are not penalized or handicapped if they cannot yet purchase textbooks or other materials for the class.

In sum, many of today's students face multiple challenges in their lives. According to the American College Health Association (ACHA), increasing numbers of students feel stressed and suffer from stress-related mental health issues. Indeed, stress is the leading impediment to academic performance (http://www.acha-ncha.org/data/ IMPEDIMENTSF06.html). Therefore, trying to help students manage the stress in their lives may be an important goal in many psychology classes. In terms of course planning, it is also helpful to know the range of SAT scores at your institution, the percentage of first-generation students (i.e., students whose parents did not attend college), and how many hours a week the typical student is likely to work. Such information will help you to design instruction that better meets your students' needs. However, we also want to emphasize that even with prior awareness of the characteristics of the students at your institution, every student—and therefore every class—is unique. Discovering information about the individual students in your classes is the only way to really get to know them.

1.4 Supporting First-Generation College Students

The diversity of college students today brings both rewards and challenges. Having a college population that reflects the diversity within the United States bodes well for social mobility and for increased equity for minoritized groups. It enriches our classrooms by providing students with exposure to a greater range of experiences and perspectives. However, it also brings about variability in the barriers to success that students encounter during their college years. About 29% of all college students are first-generation students, and so do not have a person at home they can ask about navigating the college environment. This may explain why first-generation college students are less likely to seek help (Deil-Amen, 2011; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012), or to engage in activities that increase the likelihood of academic success, such as interacting with faculty, studying with peers, and making use of support services (Engle & Tinto, 2008), as compared to their continuing-generation peers. Barriers to first-generation student success are particularly prevalent in institutions where large lecture-based classes are the norm and instructors take the role of the "sage on the stage" (Kim, 2009), which again underscores the deficiency of this model of teaching. Low-income and working class first-generation college students in particular face many more challenges that their continuing-generation peers; not only are they more likely to have attended lower-quality schools, but they often struggle financially and have to work to support themselves (and sometimes their families) during college (Covarrubias & Fryberg, 2015). Not surprisingly, first-generation students have lower retention rates than their continuing-generation peers, and they may find it particularly difficult to thrive in college environments that value independence (Stephens et al., 2012), or fail to acknowledge that many students need help adjusting to college life. Student-centered classrooms may help counteract some of these problems by providing more opportunities for dialogic interactions with both instructors and peers, encouraging collaboration, and placing increased emphasis on scaffolding the development of academic skills.

First-generation college students are also at risk of experiencing the "imposter syndrome," where they feel they do not belong in higher education (Jehangir, 2010; Rendon, 1992; Stebleton & Soria, 2013), and they may contend with "family achievement guilt," as they surpass the educational achievements of their close family members (Covarrubias & Fryberg, 2015). These feelings can lead to depression and loneliness (Stebleton & Soria, 2013) and increase the risk of dropping out (Pathways to College Success Network, 2004). Members of underrepresented groups in general are likely to experience stress related to feelings of exclusion in the college environment. Creating an inclusive classroom environment that is welcoming to all students is critical in addressing such issues (see Section 1.5.1).

In 2007-08, 20% of first-year students required at least one remedial class (Sparks & Malkus, 2013) due to lack of proficiency in academic reading, writing, or mathematics. In Chapter 2, we will describe Universal Design (UD) as an approach to supporting students with varying levels of skills, abilities, and preparedness for college. UD promotes the view that pedagogical tools designed to support at-risk students are often beneficial for the student body in general (Silver, Bourke, & Strehorn, 1998). In recognition of the developmental needs of incoming students, many institutions now offer first-year seminars or summer bridge programs aimed at helping them make the transition from high school to college. These courses focus on the development of academic skills, such as time management, test taking, note taking, use of campus support services, and strategies for dealing with stress. Such initiatives have been shown to increase GPAs (Covarrubias, Gallimore, & Okagaki, 2016; Kuh, Cruce, Shoup, Kinzie, & Gonyea, 2008; Lotkowski, Robbins, & Noeth, 2004) and graduation rates (Kuh et al., 2008; Lotkowski et al., 2004; Schnell & Doetkott, 2003). Teaching broad-based skills and providing opportunities for students to practice such skills makes it possible for all students, regardless of their level of preparedness, to gain the essential foundation upon which to build their future educational experiences.

1.5 **Culturally Responsive Instruction**

Given the diversity within today's student body, in order for teaching to be truly student-centered, it also needs to be culturally responsive, so that every student regardless of their background feels empowered and valued. The growing need for culturally responsive instruction is highlighted by the fact that diversity within the student body has outpaced that among college faculty. In fall 2013, profiles of full-time faculty at degree-granting institutions were reported as 78% White, 10% Asian/Pacific Islander, 6% Black, and 4% Hispanic, with less than 1% Native American or of two or more races (National Center for Education Statistics, 2016b). In contrast, profiles of college students were reported as 58% White, 17% Hispanic, 15% Black, 6% Asian/Pacific Islander, and 1% Native American (Kena et al., 2016).

Ginsberg and Wlodkowski (2009) suggest that there are four key elements to culturally responsive teaching. First, an environment of inclusivity needs to be established, by building a culture of mutual respect in which different opinions, values, and beliefs are validated, so that students develop an appreciation of the fact that we are all shaped by our experiences. Second, learning activities need to be structured to provide students with choices and assignments that are personally relevant and that foster positive attitudes toward the learning process. Third, instructors need to use active collaborative methods shown to enhance student learning (we provide many suggestions of such methods throughout this book). Finally, instructors need to foster a sense of competence by using a variety of assessments that encourage students to reflect on their learning and how it might be helpful to them. In the following sections, we expand on the first three of these elements. To avoid excessive duplication, with the exception of assessment of student participation, we have not covered the fourth (fostering a sense of competence with varied assessments) in this chapter, as assessment is addressed throughout the book.

1.5.1 Fostering an Environment of Inclusivity

Cultivating an atmosphere of respect in which students feel that the instructor is invested in their personal success, and in which cultural differences are discussed and valued, helps them to feel more included and builds self-confidence (Rendon, 1992). When students feel safe and respected, they are more likely to be motivated to take the kinds of academic risks that can lead to deep learning (Ginsberg & Wlodkowski, 2009). The APA has three sets of guidelines for psychologists spanning the domains of practice, research, consultation, and education, focusing on multiculturalism (American Psychological Association, 2017b), working with LGB individuals (American Psychological Association, 2012), and working with transgender/gender-nonconforming individuals (American Psychological Association, 2015). All three sets highlight the need for psychologists to educate themselves about the complexities of the lives of minoritized groups and the struggles they face, and to develop a greater self-awareness regarding their own personal views and implicit biases.

Regular self-reflection is a helpful exercise toward becoming more mindful of one's world views, biases, and privileges, and may reduce the likelihood that these will impose on one's professional life (Case, 2017; Stuart, 2004; Sue & Sue, 2016; see also Chapter 4 for a discussion of Beverly Daniel Tatum's work on racial identity development in college students and Kim Case's work on intersectional pedagogy). For example, many of us have been influenced by mainstream U.S. culture, in that we tend to value independence, single-mindedness, and rational decision-making over interdependence, a desire to get on well with others, and a willingness to acquiesce, but our students (especially those from collectivistic cultures) may not share these values. Culturally responsive teachers try to counteract their biases by broadening the range of assignments and assessments that they use in classes, so that they can draw on the diverse strengths and talents of their students. As described in Chapter 7, self-affirmation psychosocial interventions have also been shown to be effective in validating minoritized students' lived experiences and boosting their self-esteem, problem solving, academic performance, and graduation rate (e.g., Covarrubias, Herrmann, & Fryberg, 2016; Yeager & Dweck, 2012). Student-centered classes help to break down barriers between faculty and students and to lessen the power differential, because the instructor acts as the "guide on the side" rather than the "sage on the stage." Greater instructor immediacy—actions that communicate openness, warmth, interest, and availability—has also been linked to increased rapport and greater motivation for learning (Frisby & Martin, 2010). Immediacy behaviors can be verbal, such as using encouraging language, affirming students' points of view, addressing students by their names, and being receptive to students' ideas and contributions, or non-verbal, which includes smiling, making eye contact, nodding, using other expressive gestures, adopting a pleasant tone of voice, having a relaxed posture, and moving easily around the classroom (Georgakopoulos & Guerrero, 2010; Wilson & Ryan, 2013). Both types of immediacy have been linked to positive perceptions of professors (Georgakopoulos & Guerrero, 2010; Wilson & Ryan, 2013), increased motivation in students (Frymier & Shulman, 1995), and greater class participation (Rocca, 2008). Even in cultures² where

² To get a better feel of how these values vary by country, Geert Hofstede provides a useful Web resource with statistics for a wide range of cultural values in many different countries (https://www.hofstede-insights. com/product/compare-countries/).

there is a high power differential between students and professors, or a greater focus on verbal than on non-verbal behaviors, non-verbal behavior still plays an important role in students' perceptions of instructor friendliness, approachability, openness, and respectfulness (Georgakopoulos & Guerrero, 2010). In a six-country study (the United States, Australia, Japan, Korea, Taiwan, and Sweden), Georgakopoulos and Guerrero (2010) found that across all countries, students reported that the best professors used more non-verbal expressions of immediacy than did the worst.

Students also report feeling greater rapport with professors who are compassionate and who encourage their questions (Wilson & Ryan, 2013). Similarly, using multicultural images and names in examples and on exams can help foster an environment of inclusivity and demonstrates that the instructor values diversity (Simon & Nolan, 2017). Positive student perceptions of instructor rapport have been associated with better instructor evaluations (Richmond, Berglund, Epelbaum, & Klein, 2015; Wilson & Ryan, 2013), as well as increased attendance and higher final grades (Wilson & Ryan, 2013).

Taking students on field trips and meeting with them outside of class deepens an instructor's understanding of them and increases the likelihood that the students feel that their identity is valued (Rendon, 1992). In their international study, Georgakopoulos and Guerrero (2010) found that the best professors met with students outside the classroom more frequently (and had more in-class discussions) than did the worst. Similarly, in a large multi-institutional study of over 4000 U.S. students, Lundberg and Schreiner (2004) found that the frequency of faculty-student out-of-class interactions correlated with students' perceptions of learning gains in both academic and personal development. During such meetings, faculty encouragement to work harder was particularly influential in promoting student growth. This relationship held across racial groups. African American and Native American students were most likely to interact with faculty, but were less likely to find the quality of the interactions as satisfying as White students. Even so, faculty-student interactions had a greater effect on learning for students of color than for White students. The results of this study were extended by Einarson and Clarkberg (2010), who surveyed over 30 000 students at research universities. In addition to replicating the general finding that increased interactions with faculty were associated with increased intellectual and personal development, they also reported that Asian Americans had least contact with faculty. They suggested that this may be because in many Asian cultures, there is a high power differential between faculty and students, and so students may feel that it is disrespectful to ask questions or to say that they don't understand (Chu & Walters, 2013).

Inclusivity can also be fostered by building a sense of community among students, through cooperative learning activities (Ginsberg & Wlodkowski, 2009; see Chapter 5 on Group Work). In cooperative learning, students mutually support one another, rather than competing against one another. This enhances both their academic and their social development (Johnson, Johnson, & Stanne, 2000), and provides them with strategies for effectively working with others—skills that are likely to help them succeed in the workplace as well as in college.

Diverse groups of students gain the most when they work together for extended periods of time (Watson, Kumar, & Michaelsen, 1993), and so it is wise to begin collaborative work at the very outset of the course (see Chapter 5). Having students establish ground rules for class discussions as an introductory activity on the first or second day fosters respect and inclusivity, helps instill a sense of community, and diminishes negative behaviors (Case, 2011; DiClementi & Handelsman, 2005). Modeling immediacy behaviors, such as taking the time to get to know one's students and using interactive teaching strategies to help the students get to know one another, helps increase student connectedness and participation (Sidelinger & Booth-Butterfield, 2010).

Classroom dynamics evolve over time both within small groups and at the wholeclass level (see Chapter 5). In class, and in small groups, students initially may lack trust and fail to identify with their classmates; as such, their interactions may be driven by their own interests, and they may have difficulty working together (Birmingham & McCord, 2004). But, in the supportive environment of a student-centered classroom, students' anxiety levels will decrease over time as they acquire collaborative skills that allow them to respect and trust one another while working synergistically to tackle academically demanding tasks (Birmingham & McCord, 2004). When students work cooperatively, they feel more socially integrated with and supported by their peers (Johnson, Johnson, & Stanne, 2000). Social integration has been shown to be particularly important in building academic confidence and motivation (Pathways to College Success Network, 2004). In fact, Kennedy, Sheckley, and Kehrhahn (2000) found that even students with low GPAs were likely to persist at an institution if they felt strongly socially connected. In the same vein, Tinto (2000) found that students who developed close peer relationships were more likely to experience a sense of belonging within an institution and had better GPAs and graduation rates compared to those who did not.

Providing opportunities for peer mentoring and the formation of study groups in classes also instills a sense of inclusivity and has been linked to increased student engagement (Mangold, Bean, Adams, Schwab, & Lynch, 2002; Padgett & Reid, 2002). Community building through peer mentorship can extend outside the classroom. For example, as described in Chapter 7, at-risk students have been shown to benefit from hearing more senior students describe the difficulties they experienced during their first year of college and how they overcame them (for review, see Yeager & Walton, 2011). A final tip for helping establish connectedness from the outset is to mirror what outstanding professors do on the first day of class (Iannarelli, Bardsley, & Foote, 2010): they establish community by gathering information about their students (both orally and in writing), display immediacy by giving information about themselves and their willingness to assist students, go over the syllabus in detail, and attempt to stimulate interest in the course. It has been shown that students particularly value having their professors review the syllabus in detail and provide an overview of the class (Henslee, Burgess, & Buskist, 2006; Perlman & McCann, 2001).

Outstanding professors also use icebreakers, especially with more junior students (Iannarelli et al., 2010), to help them get to know their students better and to give the students a chance to get to know one another in an informal setting. However, some studies have shown that not all students appreciate icebreaker activities (Henslee et al., 2006), so it is probably best to use ones that are related to the content of the course itself (Iannarelli et al., 2010) or that help establish guidelines for the discussion of sensitive issues that are likely to arise in class (Case, 2011; DiClementi & Handelsman, 2005; Tatum, 1992). One such activity is the reciprocal interview technique, whereby students answer questions posed by the instructor in terms of their goals, concerns, relevant experience/expertise, and willingness to contribute to discussions of sensitive topics, as well as their suggestions for how the instructor can best support their learning

(Case, 2011; Hermann, Foster, & Hardin, 2010). Students answer the questions individually and then discuss their answers in small groups and later with the whole class. They then collaboratively formulate questions to ask the instructor in turn (Case, 2011; Hermann et al., 2010). This method has been shown to be effective in making the class atmosphere more comfortable for students, as well as in clarifying their expectations for the course (Case, 2011; Hermann et al., 2010). Hermann et al. (2010) found that the benefits persisted beyond the first day of the course, and that end-of-semester ratings were higher for courses that used the reciprocal interview technique on the first day. For icebreaker activities like these, it is very helpful for students to wear nametags. We also like to ask each student to write their name very clearly in thick, black marker on a folded index card, and to place it on the table in front of them at the start of each class. This practice helps the instructor (and their classmates) to learn their name and makes it easier to call on them. The cards can be collected at the end of each class period and used for taking attendance. Giving them out at the beginning of class helps the instructor to memorize the students' names more quickly and provides an opportunity to interact with them. If your class is too large for you to efficiently collect and distribute these name tents yourself each session, you could instead ask a representative from each row to pick up a bag containing that row's names from the front of the class and pass them out. If students are absent, then their name tents can be bundled together with an elastic band and left in the bag, making it easy to record attendance. Alternatively, consider taking photos of your jumbo-sized class (row by row) and creating a seating map to use as you call on different students. Box 1.1 provides some resources for icebreakers and other first-day-of-class activities that work well in student-centered classes.

Box 1.1 Suggestions for Icebreakers and Other First-Day-of-Class Activities

Use our class website link, http://futuresinitiative.org/teachingpsychology/2017/05/24/ ice-breakers/, to find a game of Human Bingo. This game requires students (and the instructor) to go around the class looking for people who fit the boxes on their card. Once one or two people complete a line the game stops, but it is then fun to go through the items on a card and ask students to stand up if they match each one.

Also consider a syllabus scavenger hunt or a college or library scavenger hunt, with students working together in small groups!

Introduce students to the concept of CT in psychological science by using a myth-busting demonstration. For suggestions, see Chapter 4, and this book by Scott Lilienfeld and colleagues:

Lilienfeld, S. O., Lynn, S. J., Ruscio, J., & Beyerstein, B. L. (2011). 50 great myths of popular psychology: Shattering widespread misconceptions about human behavior. Chichester, U.K.: John Wiley and Sons.

Here are some other resources you might find useful: http://topix.teachpsych.org/w/page/55139707/First%20Day%20Activities http://teachpsych.org/resources/Documents/otrp/resources/eggleston04.pdf

This site makes specific suggestions for a first-day lesson plan: https://www.cmu.edu/teaching/designteach/teach/firstday.html

Colleges that have made concerted efforts to make learning experiences more relevant to underserved students have made great strides in increasing student graduation rates. For example, graduation rates were substantially increased when Tribal Colleges and Universities connected the curricula of STEM disciplines to local culture (Ambler, 1998), and when other minority-serving institutions introduced authentic assignments, in which students grapple with real-life problems (National Science Foundation, 2017). Knowles, Holton, and Swanson (2012) suggest that adult learners also learn better when engaged in authentic problem solving.

Relatedly, Simon and Nolan (2017) suggest "internationalizing" psychology courses as a way to validate students' diverse cultural backgrounds and enhance their preparedness for employment in an increasingly global workforce. Learning about people whose experiences, culture, and language background are different from one's own increases perspective-taking skills (Kurtis & Adams, 2017) and can promote insights into one's own identity development (Tatum, 1992). Examining the linguistic landscape of various communities by analyzing the signage in different neighborhoods is another technique that can be used to explore immigration, bilingualism, cultural diversity, and social use of language (Saver, 2009).

Simon and colleagues offer helpful resources for finding relevant news stories that provide insights into how psychological science is similar or varies across different countries and cultures (Simon, Galazyn, & Nolan, 2012; Simon & Nolan, 2017). For example, the U.N. monthly video newsmagazine (http://www.unmultimedia.org/ tv/21stcentury/) hosts short documentaries that deal with a variety of social issues of relevance to psychology. To illustrate our point, in a quick search of this resource, we found a host of stories that would be suitable to incorporate into undergraduate psychology courses. One was about the high incidence of teenage pregnancies in the Dominican Republic, which could fit well in a developmental psychology course. Another was about the caste system in India, which is of relevance to the issues of prejudice and discrimination typically covered in a social psychology course. A third linked the diabetes epidemic in the wealthy Gulf state of Qatar to the sharp increase in sedentary lifestyles and obesity, which would be relevant in a physiological psychology or health psychology course.

Fostering Positive Attitudes toward Learning 1.5.2

Ginsberg and Wlodkowski (2009) emphasize the importance of fostering positive attitudes toward learning in culturally responsive classrooms by making classes relevant, affording students choices and variety in learning activities and assignments, and providing clear goals and guidance. Being explicit about why and how various assignments are relevant to students' lives and future careers has been associated with increased motivation (Frymier & Shulman, 1995). Therefore, even though the initial motives for taking a course may be extrinsically driven, if a class is sufficiently interesting to students, they should develop intrinsic motivation that will give them the affective push typically needed in order to learn effectively (Ginsberg & Wlodkowski, 2009).

Student motivation can be improved by using a range of instructional methods and assessments—a principle that is also at the heart of UD (see Chapter 2). Every student has strengths, weaknesses, and preferences for different types of assignment, and so adding variety helps to make learning and assessment more equitable. UD is more flexible than traditional teaching methods, and, as emphasized by Ginsberg and Włodkowski (2009), greater flexibility in instruction increases students' intrinsic motivation and may also decrease stress. Students feel empowered when they are invited to give their input to the course. This can be achieved in a number of different ways; for example, you might ask students for their feedback on the efficacy of a particular activity or teaching method (this provides a formative assessment of your teaching efficacy), you might allow students to make collaborative decisions about due dates for assignments or grading structures (Ginsberg & Wlodkowski, 2009), or you might even have your students help to design your course (Case, Miller, & Jackson, 2012; Davidson, 2017).

Expanding students' choices within a class (such as letting them choose their own topic for a research study) has been shown to increase motivation, self-efficacy, and self-regulated learning (Ames, 1992; Pintrich & Schunk, 1996). However, it also has its downsides, especially in large classes. First, if every student chooses a different topic, then the time required to give effective feedback to each is likely to be unmanageable. Second, if students work individually on different topics, then they are constrained in terms of what information and/or data it is feasible to collect and assimilate over the course of a single semester, which may in turn limit their learning gains. Third, students often need guidance in picking suitable topics for further exploration. Thus, we highly recommend that assignments are designed so that students can work with peers with similar interests on literature reviews, research studies, and other projects. Ideally, instructors should first solicit ideas from students about topics of interest and then assign a limited number of choices, so that the time and effort required for grading and feedback are manageable (see Chapter 5 on Group Work and Chapter 6 on Writing).

1.5.3 Enhancing Meaning for Students through Active Learning

Ginsberg and Wlodkowski (2009) advocate using a variety of student-centered active learning activities, especially within cooperative structures, to help students learn in a culturally responsive classroom. Working cooperatively with others from diverse groups on real-world problems encourages students from different backgrounds to share their experiences in order to find solutions. Diverse groups typically offer a wider range of perspectives and generate more potential solutions than do homogeneous ones (Watson et al., 1993). Having students tackle real-life problems makes it easier for them to recall strategies and solutions in the future, and so provides practice for life after college (Lattuca, Voigt, & Fath, 2004). Questions that are relatively open-ended and have multiple solutions are likely to promote students' epistemic development in terms of their flexibility and acceptance of multiple viewpoints (Lattuca et al., 2004). Solving challenging authentic problems with peers has been found to be effective in increasing graduation rates among underserved students (National Science Foundation, 2017). Moreover, assigning challenging problems helps to convey that one has high expectations of and confidence in one's students, which helps to build self-esteem. Simon and Nolan (2017) also champion the need for instructors to broaden their students' experiences with research methodologies by making sure that considerations are given to cultural differences and by exposing students to a form of community-based research called participatory action research. Participatory action research is a practice in which researchers work with community members to identify their most pressing needs; subsequently, both groups participate in designing and implementing research projects aimed at identifying how best to bring about social change (Reardon, 1998; see also Section 4.7 on Service Learning and Community-Based Research).

In active learning classes, every student needs to participate in order to benefit. The phrase "total participation" was popularized by Himmele and Himmele (2011) in their book on techniques for K-12 classes; it conveys the expectation that every student in the class will be engaged in active learning. Similarly, Doug Lemov, in his book Teach Like a Champion, describes 62 techniques that elicit total participation and enhance learning in K-12 classes (Lemov, 2015). We encourage instructors to review these techniques, as many of them are applicable in college settings. Examples include using the Think-Write-Pair-Share (T-W-P-S) technique to prepare students to engage in discussions; gathering data on a daily basis in order to gauge students' understanding, and acting upon this; asking students for an exit ticket, on which they write the most important thing (or the muddiest point) from the day's class; and cold-calling. We particularly like using the T-W-P-S method to help level the playing field when asking students to respond to discussion questions (see Box 4.2). It is not unusual for students to be reluctant to speak in class, perhaps due to a lack of assertiveness, non-native fluency in English, or a cultural background in which thinking is valued over speaking (Chu & Walters, 2013). Using a technique like T-W-P-S allows everyone to participate in the thinking process, as they write down their answers to the questions. If called upon, students are likely to feel more confident because they can read their answers and have already shared them with a peer. In Chapters 4 and 5, we describe a wide range of methods by which to engage every student in the classroom.

Fostering a classroom climate of respect, encouragement, and collaboration also encourages greater participation, as does self-disclosing information that makes students feel more connected to their instructor (Rocca, 2010). Affirmation of student participation also helps in this regard (Rocca, 2010). In large classes, the use of clickers or other audience response systems is invaluable in ensuring that all students are engaged (see Chapter 3 on Effective Multimedia Instruction for more ideas). In the absence of such technology, response cards marked with True/False or A, B, C, D (or different colors) can be held up by students; this too has been shown to increase participation (Marmolejo, Wilder, & Bradley, 2004).

At some but not all institutions, student attendance is mandatory; however, if you have designed a course in which important learning occurs in every class, you want students to attend regardless of your institution's attendance policy. One way to increase student attendance is to have classroom participation factor into the final course grade. This practice is also consistent with the principles of UD and culturally responsive instruction, which call for student learning to be assessed using a variety of methods. However, as Petress (2006) points out, participation can be difficult to operationalize and grade, and students and instructors have been shown to have different ideas about what constitutes participation (Fritschner, 2000). Fritschner (2000) found that in traditional classes, students tended to consider being very interested in the course and exhibiting non-verbal behaviors associated with paying attention as important indicators of participation, whereas instructors focused on verbal contributions to class discussions. Clearly, it is important to be transparent about grading policies in this regard.

Participation in a student-centered classroom may encompass a multitude of behaviors. Keeping track of each student's verbal contribution to a class discussion can be challenging, especially in large classes. However, students are often required to produce

multiple pieces of low-stakes writing during each class period (see Chapter 6 on Learning to Write and Writing to Learn). These can be collected and graded as complete/incomplete, and thus collectively can make up a participation grade that is not solely dependent on verbal exchanges in the classroom. Using short in-class formative assessments that count toward the final grade has been shown to increase attendance (Butler, Phillmann, & Smart, 2001; Drabick, Weisberg, Paul, & Bubier, 2007). Dancer and Kamvounias (2005) found that student participation improved when students first defined and then self-evaluated their participation at various points across the semester, while receiving formative written feedback along the way. Although Dancer and Kamvounias found that students' self-assessments were somewhat higher than those given by teaching assistants (TAs) within the class, they found consistency between TA ratings and peer assessments given by other group members. Thus, selfand peer assessment could potentially be used to grade participation. This strategy lifts the burden of assessment from the instructor and empowers students in a way that is consistent with culturally responsive teaching (Ginsberg & Wlodkowski, 2009).

1.6 Starting Off with a Student-Centered Philosophy

Throughout this book, we provide evidence for the efficacy of student-centered teaching practices. We realize that embarking on a whole new way of teaching may feel like a daunting task, and we very much encourage new instructors to seek mentorship from more experienced teachers and peers who are already using a student-centered approach. Box 1.2 provides some suggestions for locating helpful resources. We have found that collaborative course preparation, in which resources are shared among instructors teaching the same or related courses, is a great way to both jump-start and grow your teaching practice; see Schwartz, Powers, Galazyn, and Brooks (2017) for ideas on how to organize a teaching collective. We hope that this book will provide you with lots of specific suggestions to help enrich your teaching.

Box 1.2 Locating Resources for Student-Centered Teaching

Society for the Teaching of Psychology

teachpsych.org

Graduate Student Teaching Association

http://teachpsych.org/gsta/index.php http://teachpsych.org/ebooks/howweteachnow

Campus-Based Centers for Teaching and Learning

Most campuses have a Teaching and Learning Center (often referred to as TLCs). We have provided a few here:

https://tlc.commons.gc.cuny.edu/

https://tlc.commons.gc.cuny.edu/college-of-staten-island/

http://www.jjay.cuny.edu/tlc-teaching-and-learning-center

https://www.cmu.edu/teaching/

http://wacenter.evergreen.edu/

1.7 **Summary**

- 1) Student-centered teaching utilizes active learning methods that develop the whole student, emphasizing personal growth and academic and professional skills, in addition to content knowledge.
- 2) Student-centered teaching is culturally responsive, through recognizing and valuing students' diverse experiences and talents. Drawing on principles of Universal Design, student-centered teaching provides multiple ways for students to learn.
- 3) Abundant research indicates that traditional lecture-based teaching is ineffective and should be abandoned in favor of active learning approaches.