



JOURNAL OF COLLEGE ACADEMIC SUPPORT PROGRAMS

SPRING/SUMMER 2021 | VOLUME 4 | ISSUE 1

SPECIAL CONTRIBUTION

Antiracism Glossary for
Education and Life

FEATURED ARTICLES

Online Developmental
Education Instruction:
Challenges and Instructional
Practices According to the
Practitioners

Active Learning, Students Who
Are Academically At-Risk, and
Institutional Classification

Helping Students From the
McNair Scholars Program
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A Multilevel Modeling
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J-CASP CONVERSATIONS

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PROMISING PRACTICES

Leaning Into Difficulty: A Way
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the New Normal

EXPLORATORY PIECE

Close the Metacognitive Equity
Gap: Teach All Students How to
Learn

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J-CASP CONVERSATIONS

Dr. Philip Uri Treisman
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The *J-CASP* is managed, administered, and published through The Education Institute at Texas State University (tei.education.txstate.edu). Design by Russell Gibson Content (erinmarissarussell.wordpress.com/russell-gibson-content). Layout by Cortney Akers, Print & Mail Services—Texas State University (auxiliarieservices.txstate.edu/printmail). Logo by On A Roll Designs (etsy.com/shop/onarolldesigns).

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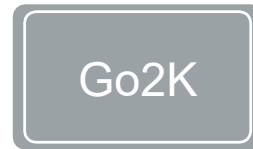
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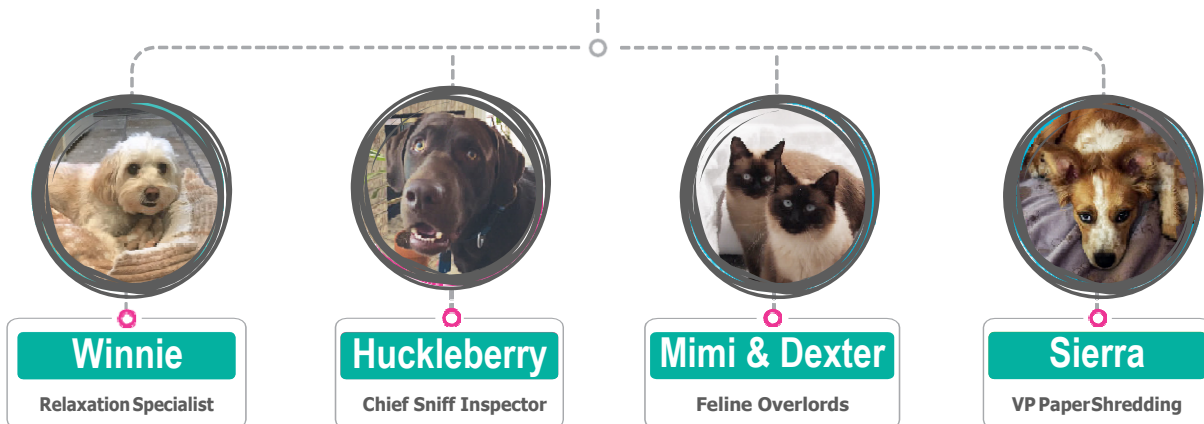
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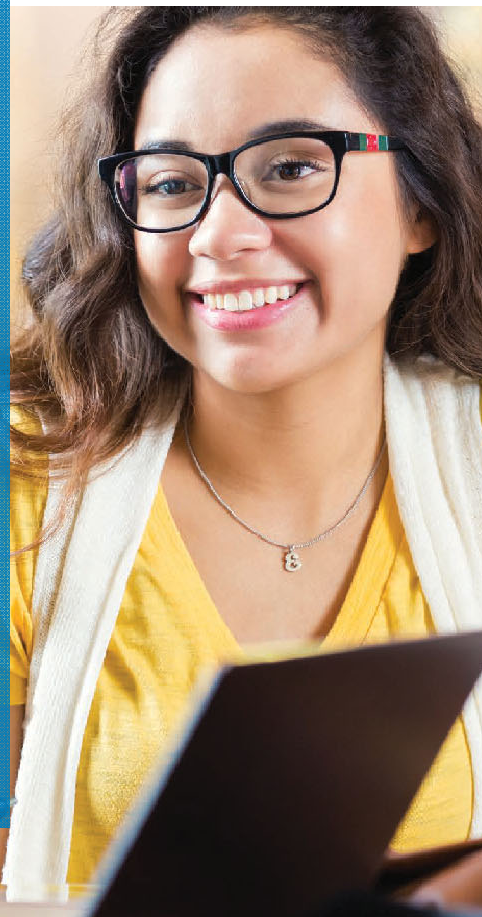
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FOREWORD

Cheers to our readers, authors, editorial review board members, and advertizers of the *Journal of Academic Support Programs (J-CASP)*, as this Spring/Summer 2021 issue marks the beginning of our third-year publishing for the fields of postsecondary learning support, developmental education, and college-readiness. Although the journal's initial focus was to provide an avenue to highlight the scholarly enterprises occurring in Texas postsecondary institutions, the *J-CASP's* appeal has attracted scholars nationwide. To meet this demand, we have invited additional national prominent scholars to join our journal's Texas postsecondary editorial review board members, and we are thankful to all for their professional service.

Articles presented in this issue connect to the theme of inclusiveness, especially for teaching and supporting students from underrepresented populations and for those underserved by their previous educational experiences. Juried articles include one qualitative and two quantitative research studies. The first feature article reveals the results of a national survey on developmental educators' use of online instructional practices and the challenges they encountered. The second feature article investigates the extent to which students who were academically at-risk and academically prepared engaged in active learning versus traditional learning methods across Carnegie Institutional Categories using the National Survey of Student Engagement (NSSE) reports from 2017 and 2018. Using federal data, authors in our third feature article use multilevel modeling to reveal graduate school enrollment rates for students participating in TRIO's McNair Scholars Programs.

Our first reflective non-peer reviewed promising practice article focuses on the implementation of a corequisite version of an integrated reading and writing course, while the second provides recommendations for educators to meet the challenges of postsecondary's *new normal* as a result of the COVID-19 epidemic. Additionally, in an exploratory essay, readers will be introduced to the term metacognitive equity gap as the author promotes the teaching of metacognitive strategies to students as early as possible as well as throughout their postsecondary experience.

This issue also includes two special *J-CASP* articles. The first is the premiere of *J-CASP* Conversations. We are honored to have interviewed Dr. Philip Uri Treisman, University Distinguished Teaching Professor, professor of mathematics, and professor and of public affairs at The University of Texas at Austin. He is the founder and executive director of the Charles A. Dana Center, which works to ensure that all students have access to an excellent education. Dr. Treisman is best known for helping to create the Emerging Scholars Program and equitable mathematics pathways for students' success. Our interview was conducted by assistant editors Arun Raman and Jonathan Lollar. This was Arun's last contribution to *J-CASP* before he succumbed to COVID-19, and his memory lives in our hearts.

Finally, we are honored to publish "Antiracism Glossary for Education and Life." A team of scholars from Colleagues of Color for Social Justice (CCSJ) identified, defined, and provided examples for 48 terms relating to racism and antiracism. As conveyed in its abstract, "This glossary of terms illustrates the daily and pervasive nature of racism that people of color experience and fills a demonstrable gap in resources of this type for college learning assistance centers and programs" (p. 75).

We end with the words of John Dewey, educational reformer and pragmatist philosopher: "The purpose of education is to allow each individual to come into full possession of his or her personal power." We hope this issue inspires you to celebrate your students' uniqueness and to aid you in helping your students possess their personal power for successful completion of college and beyond.

Russ Hodges, *J-CASP* Co-Editor
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***J-CASP* Honors Colleagues' Long-Time Careers from the National Center for Developmental Education**



Hunter R. Boylan, director for Appalachian State University's (ASU) Reich College of Education's National Center for Developmental Education (NCDE) and professor in the Department of Leadership and Educational Studies, retired on July 31, 2019. Boylan joined ASU in 1980 as the founding director of the Kellogg Institute (over 1300 attendees have attended the institute). After an 18-month leave of absence to help establish a doctoral program at Grambling State University, Boylan returned to ASU and became the director for NCDE and professor of higher education. Since 1981, Boylan has received nearly \$4,000,000 in grants and contracts. He has published 7 books and authored or coauthored over 100 articles, technical reports, and book chapters. He has delivered over 200 workshops and papers and 70 keynote addresses.

Boylan was one of the early presidents of the National Association for Remedial/Developmental Studies in Postsecondary Education, which was established in 1976 and has since undergone name changes to the National Association for Developmental Education, and more recently, in 2019, to the National Organization for Student Success. One of Boylan's most impressive accomplishments was being a trusted facilitator among organizations representing our profession. In 1996 he helped establish and then chaired the American Council of Developmental Education Associations, now known as the Council of Learning Assistance and Developmental Education Associations (CLADEA), which continues to foster mutual support among national/international organizations dedicated to postsecondary learning assistance and developmental education. Additionally, CLADEA endorses leaders who have made outstanding contributions by awarding them with the title of "Fellow." Boylan was one of 13 "Founding Fellows" inducted in 2000.



Barbara J. Calderwood retired June 30, 2021, from Appalachian State University's Reich College of Education's National Center for Developmental Education (NCDE). Calderwood joined the NCDE as managing editor and advertising director of the *Journal of Developmental Education* (1987–2003) and served as editor of *JDE* from 2004–2021. As NCDE's director of publications (2000–2021), Calderwood also edited multiple NCDE books and monographs. Having edited 34 issues of the *JDE*, Calderwood's true gift was her gentle way of mentoring authors with her superior knowledge of scholarly writing, keen eye for attention to detail, and expert APA editorial formatting skills. She presented over 30 workshops and institutes at conferences and a week-long Advanced Kellogg Institute on Scholarly Publishing. Calderwood also served as NCDE's secondary and primary voting member for the Council of Learning Assistance and Developmental Education Associations (2012–2021) and edited and produced the organization's book, *The Profession and Practice of Learning Assistance and Developmental Education: Essays in Memory of Dr. Martha Maxwell*. Calderwood continues to serve as a consultant and advisor to *J-CASP* editors.

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Online Developmental Education Instruction: Challenges and Instructional Practices According to the Practitioners

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<https://doi.org/10.36896/4.1fa1>

ABSTRACT

Using a qualitative survey research design, researchers solicited faculty input on challenges and common instructional practices applied in teaching online developmental education courses. *Online* was defined as 80% or more of the instruction of a course being delivered online. Participants of the study were faculty teaching developmental education courses online, primarily in 2-year colleges. They completed an online survey on faculty characteristics and various aspects of teaching online. The most frequently occurring challenges identified by field practitioners included technology issues, student engagement, time management, and basic literacy skills. The most commonly used instructional activities reported were discussion boards, multimedia, offering of feedback and synchronous sessions, and communication. Based on the findings, implications for practice are discussed, which can benefit faculty as they design and deliver online developmental education courses.

Keywords: online developmental education courses, developmental education, students underprepared, instructional practices

Online education continues to grow, year by year. In their research into online education in the United States, Seaman et al. (2018) reported that in 2016, more than 6.3 million students took at least one online course. This accounted for about 32% of the student population. The greatest proportion of online students (about 5.3 million) are undergraduates, and 69% are hosted at public colleges. In terms of students served and increased access to higher education, these numbers are encouraging. However, it is important to consider the challenges to effective student learning and engagement in online instruction, and especially so for students academically underprepared taking developmental education courses online.

Boylan (2002) asserted that traditional forms of instruction have not served students well who are not academically well prepared. These students are likely dealing with challenges such as low motivation, lack of study skills, and poor time management skills, in addition to low skill levels in reading, writing, and/or mathematics (Boylan & Saxon, 2012; U.S. Department of Education, 2016; Zientek et al., 2013).

Couple these issues along with challenges presented by online instruction and a further, deleterious effect is likely to occur. Instruction and teacher-student interaction filtered through time and technology is replete with challenges. Therefore, it is recommended that students are advised and prepared for these challenges. Perez and Foshay (2002) reported that students receiving orientation prior to taking online courses were more likely to succeed. Gaytan (2013) described screening students for self-direction, time-management, and computer skills as necessary for determining those best capable of succeeding in online learning environments.

Despite the growth in online education and the role that faculty play in transitioning from face-to-face to online teaching environments, research offering faculty perspectives of the challenges they

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face is limited. Many studies of online courses have examined the course quality (Kebritchi et al., 2017), effective pedagogical practices (e.g., Bailey & Card, 2009; Chametzky, 2014; Doherty, 2016), student perspectives and expectations (e.g., Rouhani, 2017), and course dropout and retention rates (e.g., Huston & Minton, 2016; Smart & Saxon, 2015; Xu & Jaggars, 2011; Zavarella & Ignash, 2009). The purpose of this study was to garner the perspectives of a unique group of online teaching professionals—those who have been charged with developing and administering online developmental education courses. Online courses in this study were defined as courses where 80% or more of the class instruction was delivered online. This definition was developed by the researchers after reviewing several syllabi for online developmental education courses as well as consulting with those who currently teach online.

Review of Related Literature

In the last several years, research on faculty perspectives on delivering developmental education courses has been emerging. Recent studies have focused on soliciting input from faculty teaching accelerated developmental education mathematics (e.g., Saxon & Martirosyan, 2020) and integrated reading and writing courses (Martirosyan et al., 2019) delivered primarily in face-to-face settings. There is a lack of research focused specifically on soliciting faculty input on challenges and instructional strategies for online developmental education courses. After a careful and thorough search of literature, we expanded the literature review search to cover areas such as online developmental education course completion, cognitive and non-cognitive characteristics necessary for successful online learning, and best practices in online teaching. Moreover, because of the limited research availability in the field, research reviewed in this section covered a 20-year span.

Online Courses, Completion, and Grades

Though more research on this topic is in order, there is some evidence that suggests that online developmental education might not be a better option for some. Zavarella and Ignash (2009) compared technology-based and lecture-based instruction in a developmental mathematics course. They found that students were twice as likely to withdraw from the computer-based format (either hybrid or distance learning) than from the lecture-

based course. Likewise, Huston and Minton (2016) found that students in online intermediate algebra courses had statistically significantly lower course completion rates than those in traditional face-to-face courses. Smart and Saxon (2015) identified statistically significant effects of course format (i.e., face-to-face, hybrid, and online) on student performance and withdrawal rates in developmental education courses at an Alabama community college. Students ($n = 146$) enrolled in online developmental education courses were more likely to withdraw than those ($n = 317$) in face-to-face courses. Moreover, analysis of final grades showed that students performed far better in face-to-face than in online classes (Smart & Saxon, 2015). Similarly, even after accounting for gender, ethnicity, first-generation status, prior achievement, and level of student motivation of 2,411 community college students in developmental mathematics, researchers found that online students had statistically significantly lower pass rates and numeric grades than face-to-face students (Francis et al., 2019).

Xu and Jaggars (2011) also revealed performance gaps among all types of community college students in online courses. They studied 51,017 students in Washington State community colleges during the Fall 2004 semester. Students who had previously taken a developmental education course had similar noncompletion rates in online courses as the rest of the student body. This noncompletion rate was about 7% to 8% lower than face-to-face classes. For students taking developmental education courses online (online developmental English $n = 358$, online developmental mathematics $n = 1,684$), the completion rate differences were slightly higher. Students completed online developmental education courses at rates of about 10% to 12% lower than classroom-based courses.

In a similar study, Jaggars and Xu (2010) examined online learning in Virginia community colleges. They examined about 24,000 students from 23 colleges. Course completion was defined as a student earning a grade of D or higher. Online course completion was found to be 12% lower than traditional courses. For students in online developmental English classes, completion was 26% lower. For online developmental mathematics courses, completion was 13% lower. Perhaps interestingly, student variables such as age, minority status, gender, and dependency

Instruction and
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interaction
filtered through
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replete with
challenges.

status showed no statistically significant effect on course completion.

More broadly, in a study of 1.2 million courses taken by students (not necessarily in developmental education) at over 1,800 U.S. institutions during 1994–2007, researchers found negative effects on grades and completion rates (Bacolod et al., 2018). On average, online course takers had course grades that were 0.19 lower compared to traditional classroom course grades. Even more concerning, for the bottom two fifths of the students, the effect was more pronounced, as much as almost a full letter grade lower (Bacolod et al., 2018).

Cognitive and Non-Cognitive Characteristics

Several cognitive and non-cognitive characteristics have been specified in the literature as helpful to online learning success. Student motivation is a much-touted non-cognitive characteristic. When students are highly self-motivated with regard to interest in a subject matter, they are more willing to engage and interact in an online learning environment (Artino & Stephens, 2009; Kerr et al., 2006). In a study of 229 college students enrolled in an online developmental mathematics course, Cho and Heron (2015) reported that motivation positively influenced student's final grades. Students with an internal locus of control (Parker, 2003) and high self-regulated learning strategies (Wong et al., 2019) tend to also fare better in online courses. In a study of successful students enrolled in online developmental mathematics, Wadsworth and colleagues (2007) identified student motivation, self-efficacy, information processing skills, and the ability to self-test as being important to predicting achievement. Kerr et al. (2006) attributed reading and writing skills as the strongest predictors of online learning success. They noted that computer literacy and time management skills are important as well. Generally, these skills benefit students in any learning environment; however, they have been identified as especially important in online courses.

Online Education Best Practices

Successful online instruction requires more than just technical proficiency; instructors need pedagogical and content expertise as well (Hickey et al., 2020; Skidmore et al., 2015). In a phenomenological study, award-winning online instructors described effective online pedagogical practices as those that foster relationships, engagement, and communication; offer timely feedback; are organized, flexible, and set high (and clear) expectations; and effectively used technology (Bailey & Card, 2009). These researchers also discussed that more experienced instructors tended to encourage students, were understanding and flexible in acknowledging online student challenges, provided timely and relevant course-related feedback, and encouraged students to engage with each other

and with the course content. Bailey and Card (2009) noted that online instructors primarily engaged students via emails and discussion boards. Similarly, in the statewide Developmental Education Technology Survey (Martirosyan et al., 2017), developmental education instructors reported emails and discussion boards as the primary communication tool.

Drawing from nearly a decade of feedback from online mathematics courses, Rouhani (2017) summarized several helpful practices that students requested, including the accommodation of learning preferences and frequent communication with faculty and peers. It was suggested that in a course spanning a semester, biweekly communication that clearly and succinctly reminded students of goals, objectives, and assignments was helpful and motivating. Students further expressed the desire to engage with video and audio media specifically related to course content. Rouhani (2017) also recommended timely grading and feedback on assignments, quick response to emails, and words of encouragement to students. In terms of organization, course content and assignments that were structured and consistently scheduled allowed students to develop a consistent routine. Finally, Rouhani (2017) offered suggestions such as videoconferencing and posting professional photos and videos of the course instructor to allow students the sense that a "real person" was behind the instruction that was taking place (p. 6).

In a literature review focused on providing an overview of necessary components for successful online developmental education courses in Europe, researchers noted that course design that emphasized interaction and communication, timely and directed feedback, and technical support made a crucial difference in students' online experiences (Brants & Struyven, 2009). Jaggars and Xu (2016) used multilevel modeling to explore the relationship between course design features and course outcomes and found that the quality of interpersonal interactions in online coursework had a statistically significant positive relationship with student grades. Using a phenomenological approach, other researchers interviewed community college students enrolled in online courses with failure rates of 30% or higher (Bambara et al., 2009). The researchers found that students expressed feelings of loneliness in the virtual environment and desired more interaction with both the instructor and their peers (Bambara et al., 2009). Other concerns with the online environment included poor course organization and technology and academic challenges (Bambara et al., 2009). Nonetheless, the researchers found that a positive disposition towards the course coupled with a commitment to personally invest in the course allowed students to take ownership of it (Bambara et al., 2009).

Xu and Jaggars (2011) reported on a community college system that provided supports to “create an environment conducive to high-quality online learning” (p. 2). These supports included a readiness assessment that offered students insight as to the likelihood they would be successful in an online learning environment, a tutorial on the learning management system (LMS) used for online courses, 24-hour technical and reference librarian support or students, and faculty training on the LMS and professional development or online teaching. Similarly, Coleman et al. (2017) highlighted the importance of providing support services and technical support along with other instructional considerations such as having a structured course, communicating frequently, and offering self-directed learning opportunities. Other researchers have suggested that the online environment be flexible enough to allow students the ability to have control of their own learning (Brants & Struyven, 2009). As instruction has shifted from that of a teacher to that of a facilitator, additional instructional support is necessary as well (Bailey & Card, 2009; Brants & Struyven, 2009). As such, supporting the training and development of faculty and staff as student-centered facilitators is necessary to stimulate, guide, and support online instruction (Brants & Struyven, 2009). To successfully move students through online developmental education courses, a concerted effort is necessary. As Castillo (2013) noted, the proper utilization and implementation of online programs is not something that will occur automatically; it will require careful thought, the utilization of research, and a spirit of experimentation on the part of faculty members, administrators, and community college students alike for this experiment in educational innovation to succeed. (p. 43)

The review of the literature demonstrates that there is a lack of research on faculty opinions regarding online developmental education courses. The purpose of this study was to solicit feedback from faculty members who were charged to teach developmental education courses online with or without adequate training. This study was an initial step to fill the gap and potentially promote more research in the field. Although having a smaller sample, this study is timely in assisting practitioners as they navigate challenges of online instruction. It offers ideas for practice and research that have the potential to support student success in a fully online environment.

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Method

For this study, we used a survey design (Creswell & Creswell, 2018) to solicit input from faculty who teach developmental education courses online. The survey was qualitative in nature (i.e., questions included in the survey were open-ended). The following research questions were addressed: (a) What challenges do faculty encounter when teaching online developmental education courses, and (b) what instructional strategies and activities do faculty use when teaching online developmental education?

Population and Sample

Participants of the study were developmental education faculty recruited through two venues: the National Association for Developmental Education (NADE) 2016 Conference and the McGraw-Hill Education’s Developmental English faculty network. A link to an online survey was placed on the NADE electronic conference program main menu, and the survey was promoted at several conference sessions where participants were encouraged to complete it. In addition, a representative from McGraw-Hill Education assisted in emailing the link to all developmental English faculty who were in its database at the time of the survey. This organization simply provided the contacts. All communication came from the researchers, and McGraw-Hill had no further involvement in the study.

The e-mail sent through the McGraw-Hill database reached 771 individuals who opened and/or read the e-mail. Of the 771 individuals, 63 (8.2%) clicked on the survey link itself. The number of participants who viewed and completed the survey through the NADE guidebook was not tracked. At the closing of the data collection window, a total of 76 responses were received, of which 67 were complete and 19 incomplete. The first question on the survey had asked participants to indicate whether they were teaching developmental education courses online at the time of the survey or not. Of the 67 complete responses, 37 participants indicated that they taught developmental education courses online and therefore were given access to the full survey. The remaining 30 participants, who did not teach developmental education courses online at the time of the survey, were thanked for their willingness to contribute to the study and did not gain access to the full survey.

The final sample (37 participants) was comprised of 31 full-time and six part-time faculty

teaching at 2-year ($n = 33$) and 4-year ($n = 4$) institutions in the United States. The majority of the participants were female ($n = 33$). Of the 37 participants, 18 taught developmental English, 14 taught Integrated Reading and Writing (IRW), eight taught developmental mathematics, and three participants taught college success courses online. It is important to note that 13 participants taught both IRW courses and developmental English or developmental reading courses at the time of the survey.

Data Collection

Data were collected through a 13-item online survey that focused on faculty characteristics and various aspects of teaching developmental education courses online (e.g., faculty demographics, challenges, instructional activities, training and support services, etc.). The survey was developed by researchers of this study who have extensive professional experience in developmental education and online teaching. The survey was then pilot tested among a group of faculty who taught developmental education courses online.

At the beginning of the survey, participants were provided with the definition of online courses. Online courses were defined as courses in which 80% or more of the instruction of the class was delivered online. The answers to two of the open-ended questions included in the survey were used to answer the research questions in this study:

1. List up to three challenges you have encountered in teaching online developmental education courses.
2. List up to three instructional strategies/activities that you use in your online course(s).

Data Analysis

Both questions included in this study were open-ended and allowed participants to provide qualitative responses. They were asked to provide at least one and up to three answers. After transferring data from the online database to Microsoft Excel, we applied a content analysis approach (Krippendorff, 2013) to analyze the data. There were 109 data points for the *challenges* question and 108 data points for the *instructional strategies/activities* question. A number of themes emerged as a result of several coding cycles (Saldaña, 2016). One of the researchers acted as the primary coder, while another researcher was responsible for cross-checking to ensure the accuracy of the coding. The researchers had prior training and experience in coding qualitative data, and each had at least 10 years of experience in online teaching. To control researcher bias when coding data, the coding researcher kept an analytic memo (Saldaña,

2016) and reflected on their own perspectives of best practices in online instruction. Additionally, participants were very specific when listing the challenges they faced and instructional practices they used, which made it even easier to control research bias when interpreting and coding data.

Findings

In the first question, faculty were asked to identify challenges they face when teaching developmental education courses online. In the second question, faculty were asked to list up to three instructional strategies/activities that they use in their developmental education online courses. Table 1 displays themes and relevant codes for each question.

Instructional Challenges

Seven distinct themes emerged from data analysis for the *Instructional Challenges* question. *Technology issues* was the most prevalent theme in the data with two distinct codes: *technology skills* and *technology access*. The majority of respondents who noted technology as an issue stated that students in developmental education lacked adequate educational technology skills to succeed in online courses. Specifically, instructors noted, “students don’t know how to use educational technology,” they “lack technology readiness” and “don’t know how to use their word processing software.”

Table 1
Instructional Challenges and Practices

	Themes	Relevant codes
Instructional challenges	Technology issues	Technology skills; Technology access
	Engagement	Student engagement; Communication; Interaction
	Time management	
	Basic literacy skills	Reading skills; Grammar skills
	Motivation	
	Dropout	
	Misconception	
Instructional practices	Discussion boards	
	Multimedia use	Video recordings; Screen captures; Annotated pictures
	Feedback	Instructor feedback; Peer review
	Communications	
	Synchronous sessions	
	Exercises/Quizzes	
	Computer software instructions	

Several faculty indicated student access to technology as a challenge. They pointed out that many students “do not have computers at home” and have “inadequate access to technology for an online class.” One faculty member noted that some students have “dial-up Internet,” while others reported students encountering “regular technology system errors” due to lack of access to technology and reliable internet.

The second most prevalent theme in the data was *engagement* with three relevant codes: *student engagement*, *communication*, and *interaction*. One faculty noted that it was difficult to keep students “working and engaged in the course.” Other faculty members emphasized the importance of “building relationships” and reported “not having the ability to connect with students on a personal level like we do in F2F [face-to-face] classes” as a challenge. Additional challenges reported were “lack of synchronous interaction,” “interaction with students” and “communication with students.” Some students do not respond to the instructors’ attempts to contact them, while others “don’t understand the importance of checking emails” and “regular participation” in online classes.

Time management was the third theme present in the data. Many students enrolled in developmental education courses have poor time management skills, which lead to missing assignments and falling behind. There is also a misconception among students in terms of online courses being easy and the time needed to complete such courses successfully. Students do not understand that taking a course online requires more work, not less. They “wait until the day it [assignment] is due to do all of the work for the week” and “underestimate the time commitment for an online class.” Moreover, “some students don’t even access the course regularly[,] which ultimately affects the on-time submission of assignments.”

The next theme present in the data was *basic literacy skills* with two relevant codes: *reading skills* and *grammar skills*. Several respondents noted the lack of basic literacy skills as a challenge. According to them, “students’ reading comprehension is already low,” they

have “under-developed reading skills” and “struggle with the basic skill that is a necessity for online learning.” Participants of the survey also emphasized the fact that “online courses are very reading intensive,” and therefore, basic reading skills are extremely important for online learning. In addition, it was noted that many students “lack many basic grammar skills” that are “absolutely necessary” for student success.

Additional challenges noted by the study participants were *motivation*, *dropout*, and *misconception*. Several faculty members stated that “motivating students to keep up with the schedule” was an issue along with student motivation in general. Attrition rates were reported to be higher for online courses. As mentioned earlier, “many [students] think taking a class online should be easier” and do not “log in often enough even though there are attendance requirements.”

Instructional Practices

For the *Instructional Practices* question, a total of eight themes emerged from the data analysis. The top-ranked instructional practice recommended by participants was *discussion board activities*. Discussion boards were used to engage students in course content and to provide students with opportunities to “interact with one another and the instructor” and “share ideas and feel like part of the course.” A number of faculty used weekly discussion boards where “students engage in discussion with a summary/response to a reading assignment, and they create a lab activity” because “...[their] textbooks sometimes do not have online lab applications.” Discussion boards were also used for weekly reflections.

Use of multimedia in online classes was the second theme in the data. Multimodal instructional units consisting of videos, documents, and annotated pictures were used to deliver instruction. Video recordings and screen captures were the most commonly used strategies within this theme. Faculty incorporated video instructions to reduce the amount of text that the students had to read. Video recordings were used to read part of the text for the students as well as to demonstrate skills necessary for the students to be successful in a course. Several of the participants used video clips for course announcements and

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for offering feedback on student papers by going “over a student’s essay and explaining what they had done well and what they needed to work on.” Others used videos for notes, weekly lesson overviews, workbook solutions, and text reviews. It is important to note that not only did faculty members use multimedia when delivering instruction, they also required students to use multimedia when completing some of their assignments. One example was a video recording of a presentation for the class. As one participant noted, “students must use a web-based program to video record an oral presentation on their future career.”

The third theme that emerged from the data analysis was *feedback* with two relevant codes: *instructor feedback* and *peer review*. Faculty offered timely feedback through “quick grading and comments/feedback so that students can keep up with their grades and learn from their mistakes and improve.” Feedback was given on rough drafts/essays before submitting the final version. Peer review was also used for providing feedback. One participant had “the students post rough drafts of their essay and make comments on each other’s essays.” Peer review was used primarily for written assignments.

Communication and *synchronous sessions* were the next themes in the data analysis. Faculty reported emailing students regularly. Personal emails were sent to students “who are behind on homework,” and phone calls and virtual office hours were used for class communication. As for synchronous sessions, participants used them for different purposes. Some examples included: live online meetings to provide individual assistance; biweekly meetings to go over posted course information; individual conferences with students, chat sessions, twice-a-week real-time meetings; and live-review conferences.

The last three themes that emerged from participant responses were *exercises/quizzes*, *computer software* and *instructions*. The quiz feature within a learning management system was used to offer learning exercises and quizzes. Reading quizzes and textbook/practice exercises were commonly used activities in addition to weekly lab exercises “to complement topic introduction and study.” To support student learning, several instructors incorporated various software programs (e.g., math lab, learning lab) into their instruction. Finally, instructions were provided to the students in various forms. Examples included a “learning guide,” “an outline of all assignments with dates and a calendar,” and “written instructions with examples.”

Discussion and Implications for Practice

As online education is becoming more prevalent, it is important to not discount the multiple challenges associated with delivering developmental education courses online. Students enrolled in developmental coursework are already underprepared, lacking basic skills (e.g., reading, writing, and/or mathematics) and non-cognitive characteristics necessary to be successful academically, which places them at an even greater risk of failure in an online learning environment.

Participants of this study identified a number of challenges they faced when teaching developmental education courses online. Consistent with previous research, dropout and retention (Huston & Minton, 2016; Smart & Saxon, 2015; Zavarella & Ignash, 2009), motivation (Artino & Stephens, 2009; Cho & Heron, 2015; Muilenburg & Berge, 2005), and basic literacy skills (Kerr et al., 2006) were among the challenges reported in addition to technology issues and time management skills. Therefore, an online learning assessment or readiness assessment, as recommended by Xu and Jaggars (2011), for students in developmental education is in order. At a minimum, students need to consider and reflect on their time management skills, access to technology, and their motivation to engage in learning through technology. On the other hand, administrators and advisors should ensure that appropriate screening and course placement procedures are in place to assist students in selecting a course modality that is best for them (Bishop et al., 2017; Xu & Jaggars, 2011). Moreover, offering institutional support once students are enrolled in online courses is recommended. The importance of academic support services for students underprepared in the traditional classroom has been well-documented (Boylan, 1995; 2002; Boylan et al., 2017), and online developmental education courses are likely not exceptions. Tailoring existing academic support services and adding extra services designed specifically for these students is necessary to facilitate the academic performance of those students in virtual learning environments.

Faculty input on the types of instructional strategies/activities used to teach online revealed a number of practices worth considering when designing and delivering developmental education courses online. Not surprisingly, discussion boards were the most commonly used activity by participants of this study, similar to those reported in existing literature on both technology integration in developmental education (e.g., Martirosyan et al., 2017) and in online education in general (e.g., Bailey & Card, 2009; Caldarola, 2014). Faculty in

this study implemented many of the best practices supported in the literature, such as the use of multimedia (Bailey & Card, 2009; Brants & Struyven, 2009; Xu & Jaggars, 2011); timely feedback and frequent communication opportunities (Bailey & Card, 2009; Brants & Struyven, 2009); and clear instructions. These practices align with student preferences as reported in a recent study by Rouhani (2017), who used years of student feedback taken from online mathematics courses to identify instructional practices that were well received/requested by students. Bailey and Card (2009) preferred the advice of experienced award-winning online instructors who reported encouraging students to engage with the course content, peers, and instructors while also demonstrating understanding and flexibility as they acknowledged the challenges students faced in the online environment.

Based on the findings of this study, where time management, engagement, and motivation were among the challenges noted, several practical implications are drawn for consideration by faculty assigned to teach online developmental education courses. Planning an online course that is manageable and engaging is extremely important. It is not possible to determine to what extent the courses taught by study participants were engaging. Designing and delivering engaged courses is crucial, especially when working with students who are underprepared. At a minimum, it is imperative to (a) provide clear instructions and communicate frequently with students by sending reminders about upcoming assignments and due dates, (b) e-mail about missed assignments, (c) provide a structured and organized course, and (d) offer synchronous and asynchronous spaces where students can ask questions and be engaged. When reporting advanced pass rates for students enrolled in online developmental education at Rasmussen College, Doherty (2016) emphasized the importance of mandatory synchronous sessions for students. Such sessions provide a space “in which online students can practice, make mistakes, receive encouragement, and collaborate with faculty and peers” (Doherty, 2016, p. 6).

Offering discussion board activities, frequent low stakes learning quizzes, and timely feedback

is also suggested for delivering engaged online courses. As many students might struggle with low self-efficacy and lack of motivation, being engaged in course material through various activities could help them become more self-regulated learners. It is worth repeating that frequent feedback and interactions with the instructor and peers are important components in an online course. Such components could potentially develop a sense of community and increase student motivation—factors that are important for being successful learners, “whether they be online or face-to-face students” (Wighting et al., 2008, p. 286).

Finally, in order to implement the instructional practices suggested above, it is imperative for institutions to provide training and professional development opportunities for faculty teaching online (Bailey & Card, 2009; Brants & Struyven, 2009; Coleman et al., 2017; Xu & Jaggars, 2011). These efforts should not only focus on the use of technology applications and pedagogy-related issues but should also consider challenges reported in this study and how those challenges could be mitigated through application of evidence-based instructional best practices. Kebritchi et al. (2017) suggested offering a “specific training on online pedagogical delivery to assure that they [faculty] understand how students learn” in an online environment (p. 20). Observation opportunities for instructors who are new to online teaching were also suggested (Kebritchi et al., 2017). As Lieberman (2019) noted, “meeting instructors where they are can be challenging” (para. 1), but it is something that should always be considered by administrators when increasing online course offerings.

Limitations and Recommendations for Future Research

This study had several limitations. First, the scope was limited only to faculty teaching developmental education courses online. Challenges reported might not be applicable for students enrolled in college-level online courses. Therefore, it is recommended to conduct a similar study that includes faculty teaching both developmental education and college-level courses online to explore the similarities and differences in challenges faced at both

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levels. Moreover, because this study was the first attempt in soliciting faculty feedback on online developmental education courses and at the time of the data collection, such courses were not as common as they have become due to the COVID-19 pandemic, the survey included all areas of developmental education. Future studies could focus on each area of developmental education (i.e., mathematics, integrated reading and writing) separately in order to identify subject-specific instructional best practices.

Second, nearly 90% of the participants of this study were faculty teaching developmental education courses in a community college setting. It is recommended that a similar study be conducted among faculty teaching developmental education courses online at 4-year institutions. Although students share common characteristics, some demographic variables might play a role when considering their level of underpreparedness and technology access/readiness for online classes.

Third, within this study, we collected only basic demographic information (i.e., teaching status, gender, institutional status) about faculty. No information on participants' online teaching experience was collected. Because it has been noted in the literature that more experienced instructors tend to be more understanding and flexible in acknowledging online student challenges and encouraging them to be engaged (Bailey & Card, 2009), it is recommended for future studies to obtain information about faculty members' experiences and expertise in online teaching. This information would add another important layer to the discussion on best instructional practices and how some of the challenges reported could be mitigated.

Fourth, the findings of this study were limited to the opinions of faculty regarding challenges and instructional activities. We recommend conducting similar studies among students enrolled in online developmental education courses. Garnering student perspectives will be helpful for both faculty and administrators as they continue making improvements in delivering developmental education courses online. Rouhani's (2017) recent study was such an attempt, and additional similar studies in the field are needed.

Finally, data collection for this study was limited to qualitative responses received through open-ended questions. When coding and interpreting responses, researchers controlled for bias and ensured that the discussion of themes and relevant codes were supported by participant quotes. Although findings presented and implications offered are intended to assist

practitioners and administrators when designing and delivering online developmental education courses, in no way should the findings be generalized. More research in the field is in order.

Conclusion

Online education will continue to grow in the years to come. At the time of this study, offering online developmental education courses was an emerging trend. However, due to the recent COVID-19 pandemic, institutions across the nation were forced to move from face-to-face to entirely remote instruction. This has created multifaceted challenges, especially for institutions and faculty less experienced in delivering online instruction. Moreover, as noted by Mangan (2020), educators are concerned about the impact of the current crisis on "already disadvantaged students" (para. 8), and it is predicted that more students will start college underprepared. Meeting the needs of these students in an online learning environment will remain a challenge. The findings of this study could benefit faculty in mitigating some of the common challenges faced when teaching developmental education courses online. Before offering online courses, administrators and advisors are encouraged to consider some of the implications offered in this study. On the other hand, faculty assigned to teach developmental education courses online are encouraged to consider the instructional activities reported in this study when designing their courses. Ongoing professional development, sharing evidence-based instructional practices with fellow colleagues, and implementing support services designed specifically for online students enrolled in developmental education courses must be an institutional priority.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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Active Learning, Students Who Are Academically At-Risk, and Institutional Classification

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<https://doi.org/10.36896/4.1fa2>

ABSTRACT

In this study, self-reported survey results from the National Survey of Student Engagement (NSSE) 2017 and 2018 are examined to understand the extent to which students who were academically at-risk and academically prepared engaged in active learning versus traditional learning methods across bachelor's, master's, and doctoral degree-granting institutions. The NSSE Report Builder Public (2018) was utilized to create a data set from first year student responses selecting for teaching methodologies, Carnegie Institutional Categories, and student academic level as determined by course grades. Researchers used chi-square analyses to establish associations between the variables; all chi-square results were statistically significant except for one; there was no association found between students who were academically at-risk and coursework that emphasized evaluative learning activities. Next, researchers analyzed the frequencies of types of learning activities reported by students. Students who were academically at-risk reported lower frequencies of using active learning techniques and tended to engage in study for fewer hours across all institution types. From this analysis, suggestions for improving the instruction for students who are academically at-risk include increased use of active learning teaching strategies for the various types of degree-granting institutions.

Keywords: students who are academically at-risk, active learning, Carnegie Institutional Categories

In higher education, institutions at all levels are challenged to meet students' academic, social, and personal needs. Whether the institution grants bachelor's, master's, or doctoral degrees, more and more students enroll with academic needs. Brothen and Wambach (2012) stated, "Policy makers can argue over which institutions should provide access to nontraditional students, but the reality is that most institutions will serve at least some students who are underprepared relative to their peers" (p. 38). Brothen and Wambach further suggested it is not important to worry about whether an institution will serve students who are underprepared but rather how are they going to reach the students and bring them up to college readiness. With students who are underprepared needing assistance to reach college-level readiness, teaching students *active learning* strategies may be a way to reduce academic barriers and to increase overall student success. Indeed, when compared to traditional teaching methods, active learning techniques

were found to enhance student performance (McCarthy & Anderson, 2020).

With the nation's focus on preparing a better workforce, redesigning first year and developmental coursework by embedding active learning strategies will help students get a better start on their college educations (Lumnia Foundation, n.d.). The purpose of this study is to consider what types of instruction and learning activities are reported by students who are academically successful and academically at-risk in the first year of studies at degree-granting higher education institutions in the United States, specifically at bachelor's-, master's-, or doctoral- degree granting institutions. By considering types of instruction, namely active learning and traditional modes of learning, the

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researchers provide implications for instruction for students who are academically at-risk during the first year of higher education. Namely, if the appropriate instructional methods are utilized, then students who are academically at-risk may have a better chance of success in completing their freshman level coursework and be better equipped for their next academic steps.

Operational Definitions

The following are definitions of terms and phases specific to the current study.

Students who are academically at-risk are those who reported final grades of C or lower in first year courses. This grade benchmark corresponds to the National Survey of Student Engagement (NSSE) division of grades into “A & B” or “C or lower” (NSSE Report Builder-Public, 2018, Grades section).

Students who are academically prepared are students who reported A or B in first year courses. This grade benchmark corresponds to the NSSE division of grades into “A & B” or “C or lower” (NSSE Report Builder-Public, 2018, Grades section).

Carnegie Classifications is a modified version of the Basic Classification of the Carnegie Classification of Higher Education Institutions (CCHEI) used by the researchers for this study. Rather than the nine types of institutions of higher education in the Basic Classification, this study uses three institutional types: bachelor’s, master’s, and doctoral degree-granting institutions.

Active learning is an ambiguous concept (Lombardi & Shipley, 2021) that may be defined as any instructional tool that involves students during their educational development (Prince, 2004). As Lombardi and Shipley (2021) indicated active learning may be viewed “as a generalized instructional process (a) for constructing knowledge and (b) for deepening engagement” or “as (a) antithetical to passive learning and (b) antithetical to lecture” (p. 10). For this study, “Applying facts, theories, or methods to practical problems or new situations... Analyzing an idea, experience, or line of reasoning in depth by examining its parts...[and] Evaluating a point of view, decision, or information source” (NSSE, 2015, p. 1) are considered active learning strategies because students are actively engaging with the content.

Also, the number of hours spent in learning activities is taken to be a measure of active engagement with the class. While some fields require more out-of-class activities, weekly self-reported study time that is less than the same number of enrolled credit hours may not be enough course engagement to be successful. Therefore, hours of study is viewed as an indicator of engagement with the coursework.

In *traditional learning*, the teacher is the primary giver of all information learned in these types of courses. Lessons are usually taught through lectures and memorization. Lecture-based teaching does not promote active learning (Lombardi & Shipley, 2021). For this study, “memorizing course material” is considered traditional learning (NSSE, 2015, p. 1).

Literature Review

In this literature review, we will consider active learning teaching strategies; active learning and its relationships to Bloom’s Revised Taxonomy; and how institutional type is defined by the Carnegie Classification. This relevant literature frames our study and identifies current research gaps.

Active Learning Teaching Strategies

Learning strategies are procedures and practices used by faculty to increase student learning (Rachal et al., 2007). Traditional lectures and memorization are still a leading form of undergraduate instruction. The traditional method of teaching, sometimes called lecture-based teaching, is viewed as a classroom where students are listening to the teacher lecture, copying notes, memorizing facts, and working independently (Shi et al., 2018). This traditional approach for teaching involves memorization and limited student classroom engagement. Lecture-based teaching (traditional) is also when the teacher is the primary giver of all information learned (Shi et al., 2018).

Different learning strategies may have differing success with various student populations. For example, one study indicated that high course withdrawals and failure rates may be the result of student boredom with classes in which skill and drill activities have little to do with their college-level courses (Grubb & Associates, 1999). Students tend to be more involved and have self-efficacy when they are in an engaging learning environment (Churach & Fisher,

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2001). Student engagement is defined as having students actively involved and contributing to the lesson by using resources and persistence in learning (Rachal et al., 2007). One approach to an engaging learning environment is utilizing active teaching strategies in order to engage students in active learning. Meyers and Jones (1993) stated that active learning originated from the two basic expectations that “learning is by nature an active endeavor and that different people learn in different ways” (Meyers & Jones, 1993, p. xi). Taken together, it is imperative to have multiple strategies to use in the classroom to keep students engaged and motivated to learn.

There are a variety of active learning teaching strategies. Some examples include learning communities (Boylan et al., 2005), cooperative groups (Opdecam et al., 2014), the flipped classroom model (Zamora-Polo et al., 2019), High-impact Practices (HIPs) (Kuh et al., 2017), and gamification (Fulks & Lord, 2016). Boylan et al. (2005) proposed using learning communities, also called cohorts, in developmental education, and further suggested that learning communities, which involve students taking coursework together or living as a group, allowed students to feel more comfortable and encouraged to participate in the classroom. Cooperative groups are also another way to involve students actively during the course and are one of the most commonly used methods. In cooperative learning, students are arranged into small clusters to finish an assignment, find solutions, or examine a situation (Opdecam et al., 2014). A flipped classroom (Zamora-Polo et al., 2019) involves students preparing for work outside of class and finishing practicing inside the classroom. This strategy encourages students to be self-reliant. High-impact practices use a variety of tools, such as internship and global learning (study abroad), to engage the learner in the academic process, and many are measurable (Kuh et al., 2017). Gamification is using gaming strategies to teach content or to evaluate mastery (Fulks & Lord, 2016). Numerous other forms of active learning teaching strategies exist.

Nolting reported in an interview with Boylan (2011) that students in developmental courses, and students in developmental mathematics in particular, “need a multimodality instructional approach which means integrating the lecture with manipulatives, math study skills, and group work” (p. 22). Therefore, students who are academically at-risk and students in developmental programs may especially benefit from active learning teaching strategies. A classroom with active learning allows further

student involvement with richer knowledge and better skills to explain problems and think analytically (Smart & Csapo, 2007). Furthermore, use of active learning teaching strategies may result in an increase in student motivation and positive self-efficacy (Wadsworth et al., 2007).

Active Learning and Bloom’s Revised Taxonomy

Bloom’s revised taxonomy is a model that provides a theoretical construct for defining and better classifying active learning. The cognitive domain of the Bloom’s revised taxonomy ranges from the lowest level, remembering, to the highest level, creating (Anderson & Krathwohl, 2001). Tabrizi and Rideout (2017) define active learning as a system for engaging students in Bloom’s revised taxonomy’s higher-order thinking skills through the use of various activities (Tabrizi & Rideout, 2017). It is hoped that as students are exposed to more active learning teaching strategies, they will begin to progress through Bloom’s revised taxonomy and be able to apply those skills learned in other courses. Most educators develop questions for the higher levels of Bloom’s revised taxonomy to improve and to gauge students’ critical thinking skills (Fowler, 2006). Interactive teaching strategies like the ones used to engage students in active learning are believed to involve higher-level thinking skills, while traditional techniques are thought to elicit lower-level thinking skills. For example, students taking a large enrollment STEM course who were identified as under-represented or not under-represented were equally successful when active learning teaching strategies that targeted higher-order thinking skills were employed (Kressler & Kressler, 2020).

Institutional Type and the Carnegie Classifications

Institutional type has been used in a variety of research studies. From studies on moral reasoning (Mayhew, 2012) to capstone courses (Grahe & Hauhart, 2013) to teaching undergraduate economics (Becker & Watts, 1996), institutional type has been considered as a possible influencing factor. Numerous systems exist to categorize institutional type, and one commonly used system is the Carnegie Classification of Higher Education Institutions (CCEI). Developed by the Carnegie Commission in 1970, the Basic Classification was first available for everyone to use in 1973. Under the Basic Classification there are nine categories of different universities and colleges (CCEI, n.d.). This study considers institutional type using a modified version of the CCEI. Specifically, this study only considers students in their first year at bachelor’s degree-, master’s degree-, and doctoral degree-granting institutions.

Based on the literature reviewed, this study attempts to close a gap in the relevant literature. We were not able to identify any studies that simultaneously addressed institutional type, active learning and traditional teaching methodologies, and classification of students who are academically at-risk and academically prepared.

Methodology

National Survey of Student Engagement (NSSE)

According to Price and Baker (2012), the “NSSE is predicated on the assumption that certain student behaviors are indicators of students’ engagement in the learning process” (p. 21). The NSSE Report Builder-Public 2017 and 2018 data was chosen for this study as it is from an international survey (NSSE, 2018) that included students at a variety of types of institutions, including both public and private institutions (Gonyea & Kinzie, 2015) and numerous students across the country. Specifically, the NSSE Report Builder-Public 2017 and 2018 data set was utilized as it was the most current data set available. According to the National Survey of Student Engagement (2018), even though institutions must pay for participation, nearly 325,485 first-year students from the United States and Canada participated in the survey; around 1,020 institutions in total participated, with 8% of the institutions being Canadian. However, only results from 4-year or higher institutions in the United States were considered in this study due to possible differences in academic systems. Results from the survey give an approximation about the time undergraduates spent on schoolwork and what they got out of attending a higher education institution (NSSE, 2019).

Researchers used chi-square analyses to establish associations between the variables. The first chi-square test of proportions was performed to determine if the proportions differed by Carnegie Classification for the populations who were academically prepared and who were academically at-risk. Next, chi-square tests of independence were performed to determine if there were statistically significant associations between student academic levels (academically prepared or academically at-risk), course emphasis on learning activities (traditional or active),

and Carnegie Classifications (doctoral-, master-, or bachelor-degree awarding institutions).

NSSE Variables and Characteristics

A report was generated from the NSSE Report Builder-Public 2017 and 2018 (2018) considering first-year students and institution type (Carnegie Classification), academically prepared versus academically at-risk status (self-reported grades), and traditional-learning versus active learning classroom type (types of activities required in the courses and hours spent studying). Grouped descriptive statistics were employed as individual responses to survey questions, and student background characteristics were not available in the NSSE Report Builder-Public 2017 and 2018 data set.

First Year

For the purposes of this study, only students who were “First Year” in the United States were considered (NSSE, 2015, p. 3). Responses from students who were considered “First Year” were utilized because they represent all beginning students, those who were academically prepared and those who were academically at-risk (NSSE, 2015, p. 3). Using responses from those who have progressed further in their academic careers, such as a student classified as a “Senior,” would self-select for students who were successful enough to progress (NSSE, 2015, p. 3).

Carnegie System

This study only considers first-year students at bachelor’s degree-, master’s degree-, and doctoral degree-granting institutions. Therefore, to better compare overall institutional types, the Carnegie Classification categories were coalesced in the NSSE Report Builder-Public 2017 and 2018 data to three institutional categories: bachelor’s, master’s, and doctoral degree-granting institutions.

Academically Prepared and Academically At-Risk

For the purposes of this study, students in the first year who in the NSSE Report Builder-Public 2017 and 2018 data had a self-reported average of “A” or “B” were considered academically prepared, and students in the first year who had a self-reported average of “C” or lower were considered academically underprepared and were believed to be academically at-risk. The NSSE Report Builder-Public 2017 and

Interactive teaching strategies like the ones used to engage students in active learning are believed to involve higher-level thinking skills, while traditional techniques are thought to elicit lower-level thinking skills.

2018 data does not record student background characteristics, such as high school grade point average, ACT scores, or SAT scores. Therefore, the NSSE Report Builder-Public 2017 and 2018 data was then grouped by the grade categories of “A and B” and “C” or lower to consider academic preparedness (academically prepared or academically at-risk).

Traditional Learning or Active Learning

In order to capture data on instructional methodologies, responses for two questions from the NSSE survey were collected. The first question, “During the current school year, how much has your coursework emphasized the following?” (NSSE, 2015, p. 1), asked students to indicate the frequency that their coursework emphasized various types of learning strategies. For this study, the first type, “Memorizing course materials” (NSSE, 2015, p. 1) is considered a traditional learning technique. The three types of learning strategies considered as active learning techniques are: “Applying facts, theories, or methods to practical problems or new situations... Analyzing an idea, experience, or line of reasoning in depth by examining its parts...[and] Evaluating a point of view, decision, or information source” (NSSE, 2015, p. 1). “About how many hours do you spend in a typical 7-day week doing the following?”(NSSE, 2015, p. 1) was the second survey question with responses collected from the NSSE survey data. For the analysis, researchers assumed that a greater number of hours spent in learning activities to be equated with meaningful, active engagement with the content.

Limitations

The first limitation is if the questions in the NSSE Report Builder-Public 2017 and 2018 data actually reflect the variables being studied: (a) Are self-reported grades a true measure of being academically at-risk? and (b) Do the self-reported learning activities correspond to the actual teaching methods utilized in the courses the students are taking? The second limitation is due to the nature of the survey instrument, as it “is a self-selected and voluntary survey” (Rabourn et al., 2018, p. 29) at both the individual response and institutional levels. Next, even though the NSSE Report Builder-Public displayed responses from students across the United States (NSSE, 2018), the responses will not be generalizable to a particular institution. Further, student background characteristics that were not assessed by the NSSE Report Builder-Public 2017 and 2018 data could compound or impact these results. Various causalities and correlational factors may

influence self-reported grades other than academic preparedness, such as motivation, student age status, or hours of employment.

Results

Out of the 188,836 first year students surveyed in the National Survey of Student Engagement 2017 & 2018, 173,579 were classified as academically prepared and 15,257 as academically at-risk (NSSE Report Builder-Public, 2018). See Table 1 for descriptive statistics regarding the numbers of students that were academically prepared and academically at-risk at the bachelor, master, and doctoral levels.

Table 1
Number and Percentage of Students by Academic Level and Carnegie Classification

Academic Level	Doctoral		Master		Bachelor		Total	
	n	%	n	%	n	%	n	%
Academically prepared	72,007	92.34	75,047	91.39	26,525	92.16	173,579	91.92
Academically at-risk	5,934	7.66	7,066	8.61	2,257	7.84	15,257	8.08

Chi-Square Analyses

Researchers used numerical data available in the Appendix to perform all chi-square testing. First, a chi-squared test of proportions was used to determine if the distributions of students by academic level differed significantly across the Carnegie Classifications. There was a statistically significant association between student academic level and enrollment across bachelor’s, master’s, and doctoral degree-granting institutions, $\chi^2(2, N=188,836) = 55.543, p < 0.001$.

Researchers also conducted chi-square tests of independence for each type of learning activity reported by students as well as student study hours to observe any differences in survey responses from students who were academically prepared and those who were academically at-risk. Table 2 displays these chi-square results. The resulting *p* values for students who were academically prepared were statistically significant (*p* < .001). For students who reported grades of C or lower, the null hypothesis was rejected for all of the questions at the .001 or .05 significance level except for the “Evaluating a point of view, decision, or information source” (NSSE, 2015, p. 1), which had a *p* value of 0.223. This indicated that no association could be established between students who were academically at-risk and their survey responses for learning activities involving evaluation.

Table 2
Chi-Square Results for Learning Activities Reported by Student Academic Levels

Learning Activity Type	Academically Prepared				Academically At-Risk			
	<i>X</i> ²	<i>df</i>	<i>n</i>	<i>p</i>	<i>X</i> ²	<i>df</i>	<i>n</i>	<i>p</i>
Question 1: During the current school year, how much has your coursework emphasized the following?								
Memorizing course material	577.18	6	174,227	<.001	49.01	6	15,313	<.001
Applying facts, theories, or methods to practical problems or new situations	254.64	6	174,127	<.001	36.08	6	15,300	<.001
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	168.88	6	173,987	<.001	17.99	6	15,290	.006
Evaluating a point of view, decision, or information source	357.65	6	173,995	<.001	8.21	6	15,276	.223
Question 2: About how many hours do you spend in a typical 7-day week doing the following?								
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	1055.13	14	173,579	<.001	65.87	14	15,257	<.001

Table 3
Learning Activity Responses Per Academic Level Per Carnegie Classification (N = 188,836)

Learning Activity Type	Academically Prepared				Academically At-Risk			
	Responses	DOC ^a	MAS ^b	BAC ^c	Responses	DOC ^a	MAS ^b	BAC ^c
Question 1: During the current school year, how much has your coursework emphasized the following?								
Memorizing course material	Very little	3.1	3.1	4.3	Very little	4.6	5.1	5.4
	Some	24.8	24.9	29.7	Some	27.5	30.4	29.9
	Quite a bit	46.2	47.0	45.6	Quite a bit	42.5	43.5	44.8
	Very much	25.9	25.0	20.3	Very much	25.3	21.0	19.9
Applying facts, theories, or methods to practical problems or new situations	Very little	2.7	3.2	2.7	Very little	6.3	6.8	5.4
	Some	22.9	24.8	22.5	Some	30.6	34.3	32.3
	Quite a bit	47.7	48.5	49.4	Quite a bit	43.7	42.4	44.8
	Very much	26.6	23.5	25.3	Very much	19.3	16.5	17.4
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	Very little	3.2	3.2	2.5	Very little	6.1	6.6	5.0
	Some	24.8	25.8	23.1	Some	32.2	33.9	32.9
	Quite a bit	45.7	46.1	46.5	Quite a bit	42.3	42.2	43.0
	Very much	26.1	24.7	27.7	Very much	19.3	17.2	18.7
Evaluating a point of view, decision, or information source	Very little	4.2	3.2	2.7	Very little	5.8	5.6	4.5
	Some	26.4	25.1	23.0	Some	31.1	31.6	31.1
	Quite a bit	45.1	47.3	47.4	Quite a bit	43.9	44.6	45.0
	Very much	24.1	24.3	26.8	Very much	19.1	18.1	19.0
Question 2: About how many hours do you spend in a typical 7-day week doing the following?								
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	0 hrs	0.3	0.3	0.2	0 hrs	1.2	1.4	1.3
	1-5 hrs	9.3	12.1	8.5	1-5 hrs	20.7	23.5	18.8
	6-10 hrs	20.7	23.1	18.9	6-10 hrs	25.5	25.4	24.2
	11-15 hrs	22.3	22.2	21.3	11-15 hrs	21.0	21.5	21.0
	16-20 hrs	20.6	19.5	21.4	16-20 hrs	15.1	14.7	16.5
	21-25 hrs	12.9	11.3	14.5	21-25 hrs	8.4	6.9	8.0
	26-30 hrs	6.4	5.5	7.7	26-30 hrs	3.4	3.0	4.7
	> 30 hrs	6.5	5.2	7.0	> 30 hrs	4.3	3.5	5.1

Note. Values are expressed in percentages. For numerical values, see the Appendix.

^a Doctoral degree-awarding institution. ^b Master degree-awarding institution. ^c Bachelor degree-awarding institution.

Analysis of Student Groups and Carnegie Classification

Because the chi-square test results confirmed that there were statistically significant association between all but one interaction, further examination of the NSSE data was warranted. Table 3 shows a comparison by Carnegie Classification of traditional learning versus active learning for students who were academically prepared as compared to students who were academically at-risk. For ease of comparison, percentages are displayed for the number of first-year students responding for each of the composite Carnegie Classifications. The results from Table 3 are discussed from three main aspects: traditional learning, active learning, and hours spent studying.

Traditional Learning (Memorization)

Students who were academically at-risk at doctoral degree-granting institutions reported memorizing course content *very much* (NSSE, 2015, p. 1) more frequently (25%) than at either master's (21%) or bachelor's degree-granting (20%) institutions. Students who were academically prepared at doctoral degree-granting institutions reported memorizing course content *very much* (NSSE, 2015, p. 1) more frequently (26%) than at bachelor's degree-granting (20%) institutions but similarly to master's degree-granting (25%) institutions (NSSE Report Builder-Public, 2018).

Students who were academically prepared and academically at-risk reported similar frequencies for the three active learning categories of applying, analyzing, and evaluating across all institution types. However, students who were academically at-risk reported lower *very much* use of active learning techniques across all instructional types. For example, at all institutional types, 24% to 27% of students who were academically prepared reported *very much* as their frequency of "Applying facts, theories, or methods to practical problems or new situations" (NSSE, 2015, p. 1), whereas only 17% to 19% of students who were academically at-risk reported *very much* as their frequency of "Applying facts, theories, or methods to practical problems or new situations" (NSSE, 2015, p. 1).

Hours Spent Studying

In terms of self-reported hours spent studying, at all institutional types, there is a considerable shift from the more limited hours spent studying by students who were academically at-

risk to the increased hours spent studying by the students who were academically prepared. For example, at all institutional types, 20% to 22% of students who were academically prepared reported spending 16–20 hours studying, whereas only 15% to 17% of students who were academically at-risk reported spending 16–20 hours studying (NSSE Report Builder-Public, 2018). When stepping away from the Carnegie Classifications and only looking at the hours spent studying for the academically prepared versus the academically at-risk groups, the percentage of students spending 0–10 hours was 32% for the academically prepared and 48% for the academically at-risk. However, when looking at more than 10 hours per week studying, the percentages for students who were academically prepared was 68%, whereas the percentage for students who were academically at-risk was 52%.

Active learning teaching strategies do not imply that there is only one way to get students actively involved, but the use of a variety of teaching methods can enhance learning.

Discussion

As discussed previously, active learning teaching strategies engage the student, encourage greater involvement in the learning process, and encourage increased use of higher-level thinking skills. While our results indicated that students who were academically at-risk reported using traditional methods *very much* at similar rates to their peers who were academically prepared, students who were academically at-risk consistently reported *very much* using active learning strategies at much lower rates than their peers who were academically prepared. In addition, a lower percentage of students who were academically at-risk reported studying 16 or more hours a week than their peers who were academically prepared. Therefore, active learning strategies should be targeted for students who are academically at-risk to increase their engagement, study time, and performance. This is a general suggestion, as outside responsibilities, such as work and family, will vary for students and is not captured in this study; students who work more hours will likely have fewer hours to devote to study.

People learn in different ways, and learning is an active venture (Meyers & Jones, 1993). Active learning teaching strategies do not imply that there is only one way to get students actively involved, but the use of a variety of teaching methods can enhance learning. Using multiple active learning strategies increases the student's ability to comprehend the course material and move on

to their college-level courses (Fowler & Boylan, 2010). Possible suggestions and tips to help students be successful in those first-year courses are below:

1. Include at least one active learning activity in your course to increase student participation.
2. Have students complete a collaborative project (Kuh & AAC&U, 2008).
3. Have students make connections from your course to other courses.
4. Use real world and/or problem-based teaching strategies.
5. Use gaming strategies to engage students in the classroom (Fulks & Lord, 2016).
6. Implement High-impact Practices (Kuh et al., 2017).
7. Utilize a flipped classroom (Zamora-Polo et al., 2019).

Further, many students who are not college-ready require assistance in mathematics. Although the NSSE Report Builder-Public 2017 and 2018 does not allow for the segregation of data based on initial academic testing or specific content needs, one can assume that students earning grades of “C” or lower in college may have some academic needs in mathematics. Mathematics is a course that many students need in college, and successful completion is a major goal for many students to graduate. Indeed, the enrollment in developmental mathematics courses at institutions of higher education is steadily increasing; therefore, educators are becoming accustomed to instructing students who are unprepared (Mireles et al., 2011). Students who take developmental mathematics courses are less likely to graduate, and most students are likely to repeat the course (Mireles et al., 2011). With the focus on getting students who are underprepared up to college level, mathematics will be a factor that will persist. This study suggests that students who are academically at-risk need to increase their study time and that instructors need to incorporate active learning teaching strategies to boost collegiate success rates.

Implications

Creating and providing quality instruction has become a major goal for many colleges and universities (Hall & Ponton, 2005); and many institutions have devoted resources to create and to enhance programs targeted at students who are academically underprepared (Hall & Ponton, 2005). One example of a potential enhancement, for institutions that provide admission to students who are academically at-risk, could be within departments that teach any freshman-level courses. The results of this

study may help educators of all freshman-level courses more effectively prepare students who are academically at-risk by utilizing differentiated teaching strategies and helping faculty members to compare teaching methods. Additionally, the study may help educators of students in their first year to consider what teaching methods (i.e., active learning and/or traditional learning) may increase their students’ performance, retention, and passing rates. In turn, students’ academic performance may then be enhanced based on changes that faculty members may make to their instruction.

Conclusions

Results from the National Survey of Student Engagement 2017 and 2018 indicate that students who were academically at-risk report spending less time using the higher-order thinking skills associated with active learning (applying, analyzing, and evaluating) than their peers who were academically prepared. Not surprisingly, students who were academically at-risk reported fewer hours spent studying than their peers who were academically prepared (NSSE Report Builder-Public, 2018). These results could indicate that students who were academically at-risk had poorer study habits, did not come to the institution with quality study strategies, or presented with more interferences to outside studying. Students who were academically at-risk may have reported fewer active learning strategies because they were not fully completing assignments, or they may have had instructors who were not utilizing active learning strategies.

More research is needed to consider whether instructors at all types of institutions are utilizing active learning or if students who are academically at-risk are not participating in the required class activities. Further, other studies controlling for student background characteristics, especially outside responsibilities such as employment and hours spent caring for family, are needed to delineate the effects of active learning on students who are academically at-risk.

Future Research

Generally, more research on active learning teaching strategies versus traditional instructional methods needs to be conducted to address additional teaching strategies, such as collaborative learning, high-impact practices, and gamification. Future research should include using data from the most current NSSE as it becomes available, especially as the COVID-19 pandemic could have created differences in institutional types, instructional strategies, and student characteris-

tics. Future studies should also control for student background characteristics that were not assessed by the NSSE Report Builder-Public 2017 and 2018. Finally, other causalities and correlational factors that could influence self-reported grades, such as motivation, student age status, employment hours, and family responsibilities, should also be considered in additional research.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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Appendix
NSSE 2017 & 2018 First Year Students Frequency Data for Learning Activity
by Academic Level and Carnegie Classification

Question and Learning Activity	Academically Prepared (A and B)					Academically At-Risk (C or Lower)				
	Response	DOC ^a	MAS ^b	BAC ^c	Total	Response	DOC ^a	MAS ^b	BAC ^c	Total
During the current school year, how much has your coursework emphasized the following?										
Memorizing course material	Very little	2,244	2,313	1,143	5,700	Very little	276	364	122	762
	Some	17,900	18,737	7,933	44,570	Some	1,641	2,154	678	4,473
	Quite a bit	33,394	35,404	12,171	80,969	Quite a bit	2,533	3,083	1,016	6,632
	Very much	18,751	18,815	5,422	42,988	Very much	1,508	1,486	452	3,466
	Total	72,289	75,269	26,669	174,227	Total	5,958	7,087	2,268	15,313
Applying facts, theories, or methods to practical problems or new situations	Very little	1,987	2,387	725	5,099	Very little	373	480	122	975
	Some	16,536	18,634	5,995	41,165	Some	1,824	2,428	732	4,984
	Quite a bit	34,500	36,520	13,186	84,206	Quite a bit	2,604	3,006	1,015	6,625
	Very much	19,228	17,689	6,740	43,657	Very much	1,152	1,170	394	2,716
	Total	72,251	75,230	26,646	174,127	Total	5,953	7,084	2,263	15,300
Analyzing an idea, experience, or line of reasoning in depth by examining its parts	Very little	2,306	2,434	677	5,417	Very little	365	465	114	944
	Some	17,943	19,443	6,164	43,550	Some	1,917	2,403	746	5,066
	Quite a bit	33,055	34,687	12,393	80,135	Quite a bit	2,520	2,993	975	6,488
	Very much	18,890	18,612	7,383	44,885	Very much	1,149	1,218	425	2,792
	Total	72,194	75,176	26,617	173,987	Total	5,951	7,079	2,260	15,290
Evaluating a point of view, decision, or information source	Very little	3,013	2,444	715	6,172	Very little	343	395	101	839
	Some	19,112	18,925	6,121	44,158	Some	1,853	2,236	705	4,794
	Quite a bit	32,615	35,569	12,638	80,822	Quite a bit	2,614	3,161	1,020	6,795
	Very much	17,434	18,253	7,156	42,843	Very much	1,136	1,280	432	2,848
	Total	72,174	75,191	26,630	173,995	Total	5,946	7,072	2,258	15,276
About how many hours do you spend in a typical 7-day week doing the following?										
Preparing for class (studying, reading, writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities)	0 hrs	209	216	61	486	0 hrs	72	96	29	197
	1–5 hrs	7,181	9,089	2,259	18,529	1–5 hrs	1,231	1,662	426	3,319
	6–10 hrs	14,967	17,392	5,024	37,383	6–10 hrs	1,517	1,801	548	3,866
	11–15 hrs	16,094	17,098	5,678	38,870	11–15 hrs	1,253	1,523	477	3,253
	16–20 hrs	14,880	14,665	5,712	35,257	16–20 hrs	898	1,039	374	2,311
	21–25 hrs	9,351	8,539	3,857	21,747	21–25 hrs	500	486	181	1,167
	26–30 hrs	4,647	4,123	2,056	10,826	26–30 hrs	205	209	107	521
	> 30 hrs	4,678	3,925	1,878	10,481	> 30 hrs	258	250	115	623
	Total	72,007	75,047	26,525	173,579	Total	5,934	7,066	2,257	15,257



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FEATURE ARTICLE

Helping Students From the McNair Scholars Program Enroll in Graduate School: A Multilevel Modeling Examination

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<https://doi.org/10.36896/4.1fa3>

ABSTRACT

Due to structural educational inequity, students who are first-generation, low-income, and certain students of color have lower graduate degree attainment compared to their peers. One national program, the Ronald E. McNair Post-Baccalaureate Achievement Program, serves students from these groups to increase the number of students from these backgrounds who enroll in graduate school and obtain a doctoral degree. This study utilized federal data to examine graduate school enrollment rates for students from this program and understand variation among programs in students enrolling in graduate school. Results indicate that program funding and length of time funded do not statistically and significantly relate to graduate enrollment rates. Additionally, the program works better to help students who were able to graduate with an undergraduate degree. The article concludes with practical implications for those in higher education and limitations of the study.

Keywords: graduate education, enrollment, McNair Scholars Program, multilevel model

In the United States, increasing levels of education have been found to relate to important life outcomes such as employment, higher earnings, and intellectual fulfillment (Chamorro-Premuzic, 2020; Rosenberg, 2020). However, due to structural inequality such as classism and racism, multiple groups of students do not have the same opportunities to obtain these advanced levels of education. “First-generation students”, students whose parents “had not attended college,” are half as likely as their counterparts to enroll in doctoral programs (Cataldi et al., 2018, p. 1). Students from low-income households are also less likely to enroll in graduate school compared to students from high-income households (Baum & Steele, 2017). Graduate enrollment rates also differ by race and ethnicity. White and Asian students who have completed their bachelor’s degrees are more likely to enroll and complete an advanced degree than students of color from other racial/ethnic groups (e.g., Black, Hispanic) (Baum &

Steele, 2017). Given the current inequalities among groups of students, examining programs that work to decrease these gaps in graduate school education remains important.

One program that works to help students from marginalized and underrepresented groups enroll in graduate school and attain doctoral degrees is the Ronald E. McNair Postbaccalaureate Achievement Program, also called the McNair Scholars Program (MSP). This program is a federally funded grant awarded to institutions of postsecondary education to work with students who are highly motivated and come from underserved groups to attain their PhDs (United States Department of Education [USDOE], 2021). Each program selects a cohort of students from first-generation, low-income,

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and/or racially minoritized backgrounds and provides selective programming to help students prepare for and attend graduate school. As of the 2015 fiscal year, 151 institutions were serving 4,293 students at a cost of over \$50 million in spending by the federal government (USDOE, 2021, Awards section); for this reason, the program is important for study. As such, this report examines the likelihood of graduate school enrollment of students from the MSP to determine how well this program works to serve these marginalized students.

Literature Review

MSP Background

The United States federal government began fighting the “war on poverty” in the 1960s (p. 573, Bowden & Belfield, 2015). From the inception of the Higher Education Act (HEA) of 1965, institutions could financially assist full-time students with “exceptional financial need” who “show[ed] evidence of academic or creative promise” and would not be able to attend the institution without the funds. This resulted in the creation of the first TRIO program for this purpose. Each reauthorization of the HEA has allowed lawmakers to adapt the legislation to meet new national demands (Wolanin, 2002). For instance, within the next decade, TRIO programs served special populations, such as returning adults, veterans, or students who were “disadvantaged” (students from low-income households), or focused on specific needs, such as helping students prepare for college entrance, apply for and obtain federal financial aid, or complete their college degree (USDOE, 2014, para 1). A later HEA reauthorization included a change to not only support these groups of students into undergraduate education but also into graduate education. This change led to the birth of the MSP as an extension of existing TRIO programs. The MSP formally began in 1986 and was then named to honor Ronald E. McNair, an African American astronaut who believed in supporting students from underrepresented backgrounds but who tragically died in the Challenger explosion that year (Dervarics, 1994). Since then, the MSP has been available as a federal grant for which institutions can apply in order to support students from first generation, low-income, and racially or ethnically marginalized communities (e.g., Black, Latinx) obtain a doctoral degree. As such, TRIO programs provide student assistance into and through undergraduate and graduate education.

Students

MSPs recruit rising junior or senior undergraduates, so scholars typically join the program for 1–2 years. To be admitted, students must come from a disadvantaged background, demonstrate high achievement (e.g., have good college grades), and exhibit the desire and motivation to obtain a doctoral degree (Renbarger & Beaujean, 2020). *Disadvantaged background* is defined as (a) coming from a low-income family (i.e., family income \leq 150% of the federal poverty level), (b) being a first-generation college attendee, or (c) belonging to a racial/ethnic minority group (Seburn et al., 2005). Two-thirds of each MSP cohort must have first-generation and low-income status; the remaining one-third can be from an underrepresented group (USDOE, 2021, Eligibility section). More recent funding cycles have prioritized grants from institutions that will specifically target students in science, technology, engineering, and mathematics (STEM) areas to alignment with priorities to improve STEM representation nationwide (USDOE, 2020). This underrepresentation in STEM must be documented using national statistics and approved by the federal government but may include students from Black/African American, Hispanic/Latinx, Native American, or Pacific Islander groups.

These groups are targeted because they are at a particular disadvantage for attending graduate school. Students who identify as first-generation often do not have the support or academic preparation necessary for postsecondary education (Engle & Tinto, 2008; Thayer, 2000). Consequently, they are less likely to attend and graduate from college and to enroll in graduate school. Likewise, students from low-income backgrounds are also less likely to graduate from college or attend graduate school, even when accounting for academic ability (Thayer, 2000). While students from the aforementioned racial/ethnic groups have had an increase in graduate degrees in recent decades, they have not completed doctorate degrees at the same rate as their non-racial/ethnic minority peers (Sowell et al., 2015). Thus, providing access to graduate school for marginalized students “represents a critical component in the development of the intellectual capital of the nation” (Gallardo, 2009, p. 64) and is a core goal for MSPs.

Program Activities

MSPs provide activities for their students related to making them competitive for graduate-level research programs. These include providing

opportunities for research, internships, tutors, academic counseling, and faculty mentorship, along with preparing graduate school applications (USDOE, 2021). Programs may also provide other educational and cultural seminars to help students gain a better understanding of what is required to succeed in graduate school. However, there are distinct differences in how programs implement the basic requirements. For example, some programs implement intense summer research opportunities while others allow students to research over the course of the year, providing variability within the overall MSP.

While MSP curriculum was designed prior to the majority of research on what works for marginalized student success, MSP program components have been found to be instrumental for success for what researchers have labeled “underrepresented minority” students in science (Chemers et al., 2011, p. 469). In 2011, Chemers et al. identified “support components” such as research experience, mentoring, and being involved in a community that help lead to improved “psychological processes” (e.g., identity, self-efficacy) that ultimately help students succeed in their future careers (p. 471). Both academic and non-academic factors have been found to be important specifically within other TRIO programs as well (Chaney et al., 1998). Thus, while this study examines only one program dedicated to serving students from marginalized groups, there are implications for other programs that serve this population using these research-based practices.

MSPs and Graduate Enrollment

More extensive reports of MSPs achieving their graduate enrollment goals come from federal reports of the program. These governmental findings were positive concerning student graduate enrollment. From the federal report that used data from 1999–2000 year, 21% of participants were enrolled in a graduate program (Humphrey et al., 2002); however, these authors did not indicate whether this number was significant or abnormally large. Findings from the 2008 federal report, which examined the data from 1989–2000, indicated that McNair participants with their bachelor’s degrees were more likely to attend graduate school (McCoy et al., 2008)

compared to the average enrollment for students from underrepresented backgrounds. Data from 1997–2002 indicated that “the percentage of McNair participants enrolling in graduate school is promising” (Seburn et al., 2005, p. 24). However, these reports do not provide strong conclusions about the program’s effectiveness due to concerns surrounding data quality and the use of a descriptive rather than inferential method. Collectively, these studies seem to suggest that MSPs work, but they do not examine more current longitudinal evidence regarding the program’s goals of graduate enrollment or discuss the variability among students and programs.

The large majority of data on the utility of the MSP come from qualitative studies. In a review of the qualitative literature on the MSP, Renbarger (2020) found that research on the program was almost exclusively positive. In line with the theoretical model by Chemers et al. (2011), students felt efficacious in doing research and found a community of scholars who were like them to whom they could turn to for support. Besides providing social and psychological benefits, the students believed the program also prepared them academically by helping students create graduate application materials and study for entrance exams. Yet without examining graduate enrollment numbers, it remains unclear whether the MSP achieves its goal of increasing graduate enrollment for marginalized populations. By examining the few quantitative studies in a meta-analysis, Renbarger and Beaujean (2020) found that the MSP participants were six times more likely to enroll in graduate school compared to demographically similar peers. Given the researchers could only find a handful of quantitative studies and that few utilized large, representative samples, they stated that more quantitative work is warranted to understand the success (or lack of) for the overall program.

Because students can apply for MSPs during their sophomore or junior year, there are presumed risks that students enroll in the MSP but do not finish their bachelor’s degrees. Compared to students whose parents did attend college and those from affluent households, first-generation students and students from lower socioeconomic groups are less likely to persist and complete their

MSPs provide activities for their students related to making them competitive for graduate-level research programs.

bachelor’s degrees (Cataldi et al., 2018). Due to federal reporting requirements, MSPs must report all participant outcomes. Thus, students can be reported as MSP participants even though they did not complete their bachelor’s degree, potentially lowering the success rate of the program because these students will not be enrolling in graduate school without this undergraduate degree. Comparing the outcomes of the overall MSP group may not be accurate if including a subset of participants with unique circumstances and are important to examine separately. Finally, because programs can begin serving students or lose funding with each year (through institutional changes) or program cycles (every 5 years), MSPs vary in terms of important aspects such as established directors and programming. They also apply for, and thus receive, different amounts of funding due to factors such as the number of enrolled students and amount of support from the institution where each MSP is located. It is possible that there could be differences in MSPs’ ability to serve students and help them enroll in graduate school but examining MSP tenure and funding has not yet been investigated.

Therefore, the purpose of this study was to utilize multilevel modeling to first determine how well the MSPs help underrepresented students enroll in graduate school and then examine enrollment only for students who were able to persist through their undergraduate degrees. This extends what is known about sub-populations of the MSP program (undergraduate completers) and the overall program in terms of graduate school enrollment. Specifically, the research questions were:

1. What are the odds that McNair participants enroll in graduate school?
2. What are the odds that McNair participants enroll in graduate school when only considering students who attain a bachelor’s degree?

Method

Data

Each year, the USDOE posts data files from funded MSPs. We merged all available MSP grantee files and their associated performance files by institution. This resulted in data for the 2003–2010 cohorts. The data files included individual program data on MSP student graduate enrollment and persistence within graduate programs, along with aggregate data for all programs. Information included in these performance reports can be found in Figure 1. To understand graduate enrollment overall, we utilized the number of students within each MSP

who enrolled in graduate school. To extend this analysis and examine different sub-populations of MSP participants, we then compared students who did and did not graduate with their bachelor’s degrees. Creating this distinction between the two student groups allowed us to see what graduate enrollment was like for students who were prepared for the experience and decrease the amount of noise by assuming the two groups of students were alike.

Figure 1
Cohort Information Provided in Federal Performance Reports

Award number
Institution name
Institution state
Number of bachelor’s degree recipients
Number of bachelor’s degree recipients enrolling in graduate school
Enrollment rate
Number of bachelor’s degree recipients enrolling in graduate school after 2 years
Number of bachelor’s degree recipients enrolling in graduate school after 3 years
Cumulative graduate school enrollment rate
Number of graduate students in cohort
Number of graduate students persisting
Graduate school persistence rate

Note. Notes were rarely provided and do not exist in all reports.

To capture variability among programs, we also included program funding characteristics to examine the degree to which (if any) these related to graduate enrollment rates. Variables were created to indicate the year the institution first received funding and the total number of years of funding that each institution received. The length of time variable for this study was created from these variables to indicate the consecutive number of years the program was federally funded. Institutions are more likely to receive funding for an MSP if an MSP already exists on the campus and has met federal requirements for reporting in the past. As such, programs that have longer lengths of funding likely reflect prior institutional stability that could increase the likelihood of student success. No information was available on student (e.g., race, field), program (e.g., number of staff), or institutional (e.g., public/private) characteristics.

The analytic data set consisted of 223 universities with varying lengths of funding. These represent both private and public

universities from all states. The most frequent length of funding was 8 years (n = 154) followed by 4 years (n = 46) and 2 years (n = 14). Across the 8 years, the average annual award was \$236,784.

Analysis

Based on the purpose of the study, secondary data were analyzed using multilevel modeling in order to appropriately model the longitudinal data structure. MSP participants were nested within institutions to account for the similarity between participants within the same MSP. A multilevel model was fit to each of the outcome variables of graduate enrollment within three years using year and amount of funding awarded as predictor variables. The number of students who enrolled in graduate school differed by university because there were different numbers of students at each university in any given year. Thus, in order to create a comparable metric for a graduate enrollment outcome variable, we transformed the outcome variable to odds of enrolling in graduate school for each year at each university. For Model 1 the odds were based on number of students in the program, and for Model 2, the odds were based on the number of students who had graduated. For example, the odds for Model 2 were computed as:

$$\frac{\text{Students enrolled within 3 years of year } t}{\text{Students who graduated in year } t} \bigg/ 1 - \left(\frac{\text{Students enrolled within 3 years of year } t}{\text{Students who graduated in year } t} \right)$$

It should be noted that the amount of funding is a time-varying covariate, given that it changes across time. For instance, a university may not receive as much funding for years when fewer students were in the program. The intercepts, time, and amount of funding were treated as random effects, and the covariance matrix of random effects was unstructured. The estimated model can be expressed:

Level 1 Model: $Y_{ti} = \pi_{0i} + \pi_{1i}a_{ti} + e_{ti}, e_{ti} \sim N(0, \sigma^2)$

Level 2 Model: $\pi_{0i} = \beta_{00} + r_{0i}, r_{0i} \sim N(0, \tau_{00})$
 $\pi_{1i} = \beta_{10} + \beta_{11}X_i + r_{1i}, r_{1i} \sim N(0, \tau_{10})$

Mixed Model: $Y_{ti} = \beta_{00} + r_{0i} + \beta_{10}a_{ti} + \beta_{11}a_{ti}X_i + r_{1i}a_{ti} + e_{ti}$

where Y_{ti} is the odds of enrolling in graduate school within 3 years of year t from university i , a_{ti} is the indicator for year t , and X_i is the amount of funding

for university i . Models were fit using the SAS PROC MIXED command using restricted maximum likelihood estimation (SAS, 2003).

Results

Model 1 – Odds of Enrolling in Graduate School

Table 1 presents the model parameters for predicting the odds of enrolling in graduate school. The intercept of the model ($\hat{\beta}_{00}=0.8$ [SE = 0.39]) indicates that in the first year of funding for a random institution, the odds of students enrolling in a graduate program was 0.8. In other words, on average, participants were slightly less likely to enroll in graduate school than not. The fixed effects of time and amount of funding were not statistically different from zero, which suggests the odds of enrolling in graduate school were not strongly impacted by changes in time or funding amount. That said, the variance of time was considerable ($\hat{\tau}_{10}=0.62$). This indicates that there was fluctuation in the strength of the relationship between time and odds of enrolling in graduate school. The variance in the intercepts ($\hat{\tau}_{00}$) was 9.5, and the residual variance of time ($\hat{\sigma}^2$) was 4.9. Thus, there was considerable variability between institutions.

More extensive reports of MSPs achieving their graduate enrollment goals come from federal reports of the program.

Model 2 – Odds of Enrolling in Graduate School Conditioned on Undergraduate Completion

Table 1 includes the model parameters for predicting the odds of enrolling in graduate school among students who completed undergraduate degrees. The model intercept ($\hat{\beta}_{00}=12.2$ [SE = 2.48]) indicates that in the first year of funding for a randomly chosen institution, the probability of students enrolling in a graduate program among students who completed undergraduate degrees was much higher than the probability of not enrolling. The fixed effects of time indicated that the odds of enrolling increased slightly but was not statistically different from zero. The relationship with the amount of funding was -0.00003 ($\hat{\beta}_{11}$, SE = 0.00001), which is the expected change in odds of enrolling in graduate school for a one-dollar difference in funding. This coefficient is more meaningful when multiplied by \$10,000 (-0.3), given that award amounts ranged from \$140,000 to \$367,750. Regardless of amount, the coefficient shows that funding

may be slightly negatively associated with odds of enrolling in graduate school. The variance of time ($\hat{\sigma}_{10}^2=0.26$) was less than that in the first model and indicated that there was some fluctuation in the strength of the relationship between time and odds of enrolling in graduate school.

Table 1
Parameter Estimates From Multilevel Regression Models

Model 1					
Effect	Estimate	SE	df	CI95 Lower	CI95 Upper
Fixed effects					
Intercept	0.80	0.39	222	0.04	1.56
Time	-0.03	0.06	1127	-0.15	0.09
Award	0.00	0.00	1127	0.00	0.00
Random effects					
Intercept		9.47			
Time		0.62			
Covariance		-2.49			
Residual		4.90			
Model 2					
Effect	Estimate	SE	df	CI95 Lower	CI95 Upper
Fixed effect					
Intercept	12.18	2.48	222	7.32	17.04
Time	0.08	0.09	1105	-0.10	0.26
Award	-0.00	0.00	1105	0.00	0.00
Random effects					
Intercept		11.84			
Time		0.26			
Covariance		-1.48			
Residual		38.73			

Discussion

The McNair Scholars Program (MSP), a federal TRIO program, is designed to increase graduate school enrollment of populations who are marginalized. However, despite being decades old and costing millions of dollars each year, little research has been done to evaluate the effectiveness of TRIO programs (Bowden & Belfield, 2015). To fill this gap, this study examined the likelihood of graduate school enrollment over time of MSP participants who belonged to populations who are marginalized.

This study provides evidence that participants in the McNair Scholars program have high odds of enrolling in graduate school, yet this effect varies by institution. These results are consistent with other TRIO studies that found that campuses implement programs for marginalized students in different ways to adapt to their own contexts (Bowden & Belfield, 2015) as well as the most recent MSP research (e.g., Renbarger, 2019; Renbarger & Beaujean, 2020) that indicates MSPs benefit participants yet add nuance to the field regarding programmatic factors that relate to student success.

Time does seem to impact a program’s ability to help students enroll in graduate school. Some universities in this sample had 8 years of funding, whereas some only had 2 years of funding. Those with a foundation to build upon appear to do better than newer programs, suggesting that evaluations of programs should continue to consider program experience when making continuation or elimination decisions. Little research of this phenomenon, specifically at the institutional level, was found in the literature. Nonetheless, results here do align with recent research that suggests that faculty members in science who had previously won funding were likely to have twice as much funding 8 years later compared to those who did not win initial funding (Bol et al., 2018). The study researchers found that this could be because those who were not initially funded do not continue to apply for grants; therefore, initial funders continue to win funding because they are more likely to attempt in later funding cycles. Countering the Bol et al. (2018), a more recent study found the opposite: that funding did not predict success for faculty members (Prasad et al., 2020). In studying the long-term success for NIH awardees, their study found that awardees were likely to regress to the funding mean, illustrating that prior funding performance did not then relate to later funding success, and thus institutional support (e.g., mentoring) must be considered in determining later faculty success. While their study examined faculty members and not programs, they emphasized that institutional programming is important and that funding does not automatically beget more funding.

According to Prasad et al. (2020), for universities who apply for an MSP for their campus, the grant writers must detail how the MSP exists within the current university structures and will be supported by them. Thus, even though not directly evident in the data, the

length of funding may speak to the grant writers' participation and desire to see the program or the institution's support of the program and thus may contribute to its success. Future researchers should study these potential links as determinants of MSP success.

Unsurprisingly, this effect does seem to be limited to MSP students who graduate with a bachelor's degree. By explicitly taking out students who would not be able to enroll in graduate study, this study provides a clearer picture of MSP success. As previously mentioned, students from these marginalized groups are less likely to persist and graduate with their undergraduate degree (Cataldi et al., 2018), thanks to factors such as the cost of higher education (Banerjee, 2018). As such, lower graduation rates are not a surprise. However, the purpose of MSPs is to help students prepare for *graduate* school, not undergraduate degree attainment. Because it is mandatory that a student graduates with a bachelor's degree before being admitted to graduate school, universities must make it a priority to serving students beyond just increasing their access to the institution (Budd, 2016); the program may need to address additional institutional and structural barriers that these students face (i.e., financial concerns, lack of college preparation) (Remenick, 2019). Other TRIO programs, such as the Student Support Services, help retain students disadvantaged by their previous educational experiences within the institution and could be integrated for eligible students to provide graduation supports outside of MSPs that focus on graduate school (Chaney et al., 1998).

Limitations

There were limitations related to program data and inconsistencies in funding. The data from the Department of Education website included limited information about each institutional program. For instance, there is no information regarding student characteristics that relate to the objectives of the program (i.e., race/ethnicity, first-generation status) nor to characteristics that are known to predict success in postsecondary education, such as grade point average or financial support. Besides student

information, there was little information about programs such as MSP director experience, length of program, program activities, or university support for the program. This limited our ability to provide a more nuanced examination of how and why the program might help certain student groups succeed or why increased funding was not significantly meaningful statistically. The data also included many typographical errors with institutional names and affiliations, making it difficult to clean or incorporate other data sources. Finally, many programs gained and lost federal program funding during the time period from this data. No notes indicated why programs lost funding; this could be due to the performance of the program or to something unrelated, such as a university mandate.

Instruction and
teacher-student
interaction
filtered through
time and
technology is
replete with
challenges.

Implications

These results have implications for governmental stakeholders and university program leaders. Examining data from such a long period of time and finding positive results about participants' entry into graduate school is promising. However, policymakers should not use results to simply fund the program. As seen here, more money does not necessarily result in higher graduate enrollment, but this may be because institutions that receive more money typically serve more students and therefore may have less time to dedicate to each student. Whether program directors admit students who may need to focus on graduating with their bachelor's degree or students do not receive enough support in the program is unclear. Therefore,

when policymakers fund the program, they should ensure that MSP directors continue to prioritize funding programs with potential for quality rather than quantity. Given that time does predict greater graduate enrollment numbers (to a small degree), funders should balance funding new programs with supporting existing programs, even if existing programs may not currently perform at high levels. Finally, policymakers can support these students by funding MSP office staff to allow program officials to clean, de-identify, and release data for additional evaluations of program success.

Results from both models have implications for MSP directors as well as leaders of programs similar to the MSP. Since


some participants do not graduate with their bachelor's degree as seniors in the program, as seen in the differences between models one (with non-completers) and two (with completers only), directors can consider likelihood of degree completion when admitting new students. For eligible sophomores who may have difficulty graduating with an increased MSP load, directors may encourage students to focus on coursework and apply again in their junior year. For students already within the program, directors may need to incorporate supports during the program to help students succeed within the MSP and graduate. Alternatively, program directors could seek out tailored supports that already exist at that university for marginalized groups (Banerjee, 2018) and make formal connections with those programs to avoid overextending program staff or diluting program offerings dedicated specifically to graduate school success.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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Dr. Uri Treisman: Five Decades of Postsecondary Innovation

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ABOUT DR. PHILIP URI TREISMAN



Philip Uri Treisman is a University Distinguished Teaching Professor, professor of mathematics, and professor of public affairs at The University of Texas at Austin. He is the founder and executive director of the Charles A. Dana Center, an organized research unit in the College of Natural Sciences that works to ensure that all students, regardless of their life circumstances, can access—and succeed—in rigorous mathematics and science education. Dr. Treisman is active in numerous organizations working to improve American mathematics education. He is a founder and member of the governing board of Transforming Post-Secondary Education in Mathematics (also known as TPSE-Math). He is a representative of the American Mathematical Society to the American Association for the Advancement of Science (Education, Section Q) and is a senior advisor to the Conference Board of the Mathematical Sciences Research Advisory Group. In addition, he is a member of the Roundtable on Data Science Postsecondary Education with the National Academies of Sciences, Engineering, and Medicine.

Dr. Treisman has served as a Distinguished Senior Fellow at the Education Commission of the States since 2013. He is also chairman of the Strong Start to Finish Campaign (and its expert advisory board), a joint initiative of the Bill & Melinda Gates Foundation, The Kresge Foundation, and Ascendium Education Group that works nationally to ensure that all students get a strong start in their first year of college and finish with the skills they need to thrive. Treisman has served on the STEM working group of the President's Council of Advisors on Science and Technology, the 21st-Century Commission on the Future of Community Colleges of the American Association of Community Colleges, and the Commission on Mathematics and Science Education of the Carnegie Corporation of New York and the Institute for Advanced Study. Treisman's research and professional interests span mathematics and science education, education policy, social and developmental psychology, community service, and volunteerism.

J-CASP: Can you begin by talking about how students in a 1975 UC Berkeley undergraduate calculus course inspired you to create the Emerging Scholars Program?

Uri Treisman (U.T.): I noticed that students who fell behind, or who fail, almost never got back on track. And what struck me was that, in an elite institution, high achievement programs all focused on the student's supposed weaknesses. The assumption was that students of color would automatically need help. But these students were the best from their high schools, and they were exceptional in many ways.

There was a mismatch between the way students of color were understood and supported and the way that students in general were supported. I knew from my background in social theory that whenever you may have a mismatch of

this type, it reflects deep societal issues. Essentially, it was structural racism.

I also saw that African American and Latino students were being forced to deal with difficult questions of identity right away, which distracted them from their academic work. Many stated in interviews that in high school, they had separated their academic lives from their social lives. Looking back, these students still believed that this separation was the only way they were able to get into college. Although this type of individualistic self-reliance worked for them in the K–12 setting, in higher education, it worked against them.

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Because they had no way of figuring out what their peers really knew, it struck me then that whatever program my colleagues and I developed, students would need to be in a learning environment that encouraged them to check their work and their understanding with that of their peers. I wanted to develop a culturally respectful model—which was originally known as the mathematics workshop model, and then by a myriad of other locally determined names, including, prominently, the Emerging Scholars Program. This program model would also create opportunities for students to pursue leadership roles within and across their communities. I also needed to ensure that the program, while still supporting the institution's mission, would leverage student strengths and not their weaknesses.

J-CASP: From your work at UC Berkeley and then with the Emerging Scholars program, you then founded the Charles A. Dana Center. Can you tell us more about the establishment of the center, its history, and its current mission?

U.T.: When I moved to Austin in 1991, the plan was for the Charles A. Dana Center, based in the College of Natural Sciences, to be a center for the dissemination of programs like Emerging Scholars, which we did for two or three years. We shifted our primary focus to K–12, however, for about a decade before extending our focus to include the transition to and through higher education, with work like the New Mathways Project (now the Dana Center Mathematics Pathways) and, more recently, the Launch Years initiative.

At that time, what we observed in higher education was that despite the dedication and skill of individual practitioners and departments, developmental education (DE) writ large was not meeting its highest aspirations. We began working with the Carnegie Foundation for the Advancement of Teaching to develop a new approach to remediation, not just in elite institutions, but also in community colleges and comprehensive regional institutions.

What we saw throughout higher education was the same kinds of remedial programs, with very low success rates. The instructors deeply cared about student success, but they knew that they were getting only 20% of their students through DE. It was the failure of a model, and the instructors who worked their hearts out for students knew it. We knew it, and we really worked hard to make clear to instructors that it was not a failure of individuals.

J-CASP: One of the ways you took action from that focus was through creating new math pathways. The Dana Center Mathematics Pathways (DCMP) provides equitable secondary and postsecondary math education. The pathways align students' goals with college-level math requirements, accelerate students' progress by having them complete their first college-level math requirement within the first year of college, integrate learning support, and use rigorous, evidence-based curriculum and pedagogy.

Can you speak to the ease or difficulty in convincing faculty members from postsecondary institutions across the United States to support pathway-specific mathematics courses to replace college algebra as the standard for degree completion? I imagine that was a difficult mission for a lot of places you visited.

U.T.: People were committed to the programs they already had, and that's understandable. There were people wedded to the existing methods who had labored all their lives trying to make them work. There are good ideas—great ideas—that don't get implemented because the time simply isn't right. With the New Mathways Project, however, the time was right; higher education began to prioritize *outcomes* rather than just access, and *completion* rather than just admission.

It took national research to make it work. The CCRC [Community College Resource Center] played a significant role in this, as well as CAPR [the Center for the Analysis of Postsecondary Readiness]. Then several major foundations—Gates, Kresge, Lumina, and others—chose math pathways as a focus, and that helped.

Eventually, the data became overwhelming, and leaders in the field of developmental education began to acknowledge that existing DE programs were not helping enough of the students that they were supposed to be serving. Frankly, I believe that leadership in elite institutions ultimately pushed the field towards acceptance of the math pathways model. Now we clearly see the math pathways model spreading very quickly. It's amazing.

J-CASP: The partnerships the Dana Center has with various foundations and organizations are certainly invaluable. How does the Dana Center select collaborators?

U.T.: So, the Dana Center is unusual in that it relies on faculty members taking advantage of what you can do as a professor in many university settings.

As long as you bring in money and enhance the reputation of an institution, you are typically given more or less free rein to experiment and innovate. On the other hand, when you work at scale—the Dana Center works on its issues at scale—you have to ask yourself, “Who are the people who should be doing this, and who will support what you do if you’re successful?” We always work with organizations that have a broader reach and standing than we do.

We’re also always looking into who has standing in a given field, who has broad reach, and which institutions and organizations we’d like to join or endorse a project. Then we work together to ensure that the math pathways model becomes an essential piece of the discipline’s responsible practices and standards. Whatever constituencies need to be involved to get something done, that’s who we work with. That’s how we choose partners.

J-CASP: Texas House Bill 2223 introduced the use of corequisite models of instruction into developmental education back in 2017. Now, according to TEX. EDUC. CODE ANN. § 4.62 (2012/2020), by the 2021–2022 academic year, all non-exempt students needing to enroll in developmental math, as well as other developmental courses, must be placed into corequisite models of instruction. What are your thoughts on corequisite instruction and other recent developments or education reforms?

U.T.: So, I support the general direction. The idea of a corequisite is that the first order of business in the corequisite model is to do what you can to make sure students never fall behind. Don’t slow them down. Don’t put them in preparatory courses. If there was any way they can succeed in the regular course, provide the support to make that happen. That’s what corequisites should be about.

And I think that we’ve seen about two-thirds of the students placed in D.E. corequisite models have a shot at succeeding if the supports and time are provided to help them succeed in the actual course. It’s clear that not all students can do this, and I am worried that corequisite education will take the focus off the students who are not able to succeed using a corequisite model.

We need to work to identify these students better. We do not need to go back to the old models because those were already terrible for that one-third of students. Instead, we need to continue the development of new models to serve students who may not succeed with corequisites.

J-CASP: The bill also allows for you to use learning support as your corequisite, for example, pairing a course with tutoring rather than paired coursework. This probably seems more ideal for that one-third of students that might not succeed in corequisite. Have you been seeing a push towards that alternative type of corequisite at all?

U.T.: When the Dana Center was developing math pathways with our colleagues at Carnegie [Foundation for the Advancement of Teaching], we did a lot of field interviews and spent time on campuses. If you are working with a first-generation student who is having trouble in math, it may take two or three weeks for the student to figure out that they are in trouble and another week or two for them to find the tutoring center. If you are four weeks behind in math, then you need a faith healer, not a tutor.

In some states, like Georgia, the core idea of corequisites is to narrow the distance between student supports and student instruction. We’re seeing increased student success in places that provide tutors the first few weeks in the classes and make the class

the locus for student support. What we’ve learned by working more closely with faculty and advisors is which crises occur during which weeks. We need to know what it takes to help students pass a course and how we can redeploy personnel to keep students progressing on time and on track.

When advisors and faculty work together, students do better. That is the big principle, not the technique. The technique is going to depend on the local particulars of the institution, the students, the traditions. The mission is to reduce the gap—the distance between students and supports. The more salient and connected the supports are, the better for the students who struggle.

Much of the equity work that people do is trying to retrofit solutions to systems that were not designed for equity.

We must understand, though, that some students enter postsecondary education needing more academic skills support than corequisites can provide. We need to develop new models that will better serve those students.

J-CASP: What I hear you saying is that what seems to be the future of the corequisite model is active and conscious interaction and intervention by proactively anticipating points where there may be trouble and then providing focused student supports at those points. Is that correct?

U.T.: Yes. It's about the optimum deployment of student support resources and how students can immediately take advantage of them. Also imperative is a shift from a deficit-based focus to an asset-based focus.

You cannot help students unless you know their strengths. You have to focus on their hopes and strengths. The early models—many of the early mastery learning models—focused on addressing student weaknesses, and they rarely got students to be successful. Basically, students need both academic supports and cultural supports. Even though it's not part of the formal curriculum, non-academic supports are vital for student success. Successful corequisite programs always figure that out.

J-CASP: That makes it sound as though some programs are adept at recognizing equity issues and that institutions, on a macro level, are less adept at doing so. You've always fought for greater equity and access within developmental mathematics with more urgent calls to address systemic inequity in education and beyond. You are aware of the barriers that exists for students of color and other underserved populations. What else must be done to support the students who are underrepresented and underserved in STEM and non-STEM courses?

U.T.: I think right now we see that a lot of equity-focused organizations are supporting education on individuals' personal awareness of culture, respectfulness, and microaggressions. Of course, that is important, but it is more important to deal with structural racism rather than insensitivity or unawareness.

Higher education has its prejudices. The challenge of racism is not that people need more data. You don't need more data to understand racism. If you need more data, then you're totally disconnected. If you are in a classroom, you see it all around you. Much of the equity work that people do is trying to retrofit solutions

to systems that were not designed for equity. We need to learn from past failures to create structures that promote equity. We need to shift, to construct new systems that have equity accelerants in corequisite courses. That is where we can build in equity strategies.

For example, in many 4-year institutions, students get to register for new classes according to the number of units they have. Students with the most units go first. Seniors should get preference because they have to get first shot at the courses they need to graduate. That process got generalized, but now you see that students coming in with several AP credits get the best first-semester courses. Policies like that systematically work against newcomers to higher education. We must look at every institutional practice and forget about its intentions. Instead, we must ask, "Who, in fact, is the policy benefiting? And who is being left behind?"

J-CASP: Unfortunately, we are not in the classroom at the moment due to COVID-19. How has your research, your teaching, your policy work, and your advocacy work been affected by this large-scale shift to remote?

U.T.: I am teaching [Spring 2020 semester] 250 first-year students remotely, three-quarters of whom are ethnic minorities, and you can see the contrasts even on day one. The first week, before COVID-19, students try to diminish these contrasts, by, for example, wearing the same clothes. When you are teaching online, and students see each other, it accentuates the differences in students. This year, I was working with a group of six students, and three of them had two beds in their rooms. They were taking care of their younger brothers and sisters. I also have a student in Singapore whose personal maid brought him some tea during class. That's how vast the differences are online, and the students see it. It is hard for them to connect with each other, so you have to think of new strategies to build community and working groups—new strategies for dealing with massive deficiencies in resources. It is very hard work.

As a good teacher, a real teacher—and not just someone going through the motions of lecturing—you depend on being able to see your students thinking. Learning how to check in with students online is much more challenging. You can use clickers and polls, but it is not as powerful as looking over a student's shoulder to see them think through a problem. It is very hard. And I find myself learning every day.

You see students really struggling. You can see the downward mobility. Before the recession, you could inspire students through messages of hope with Martin Luther King Jr., or Barack Obama. Today, African American wealth and Latino wealth have been massively reduced. The students have to question the value of higher education. Some students say, “My dad has a community college degree, but he’s unemployed.”

A lot of my students are out of hope. Their parents have been laid off. We need a pedagogy that speaks to students who are downwardly mobile as well as to students who are upwardly mobile. It’s hard. It requires more than ever that you listen to your students talk about themselves and that you find ways to help them understand that in the long run, education will matter enormously for their circumstances. But it’s much more difficult than it was 13 years ago. I’m struggling with it.

J-CASP: I wanted to ask if there are any other suggestions for Texas developmental educators that you want to leave us with?

U.T.: I think this is the time to rethink the transition from high school to community college and from the workplace back to community college. We are seeing a dramatic reduction in the number of low-income students going into higher education, which is the exact opposite of what happens in most recessions. You have to ask questions such as, “How can students start higher education earlier? How can we develop different relationships with our major employers to smooth and plan our cycle of going in and out of the workplace?”

The Dana Center is working on exactly those kinds of issues. We’re asking questions like “How can we better shape our education system around the actual needs and lives of our students?” We are beginning to brainstorm, to meet with our partners, and to figure it out.

J-CASP: It sometimes seems overwhelming to try to better shape our system for our students. Do you have any advice for how educators can, I guess, become more involved in better and more efficient ways? It seems that most of the advice that the Dana Center has to offer is big scale options, and we need this systemic change. Do you have advice for how we, as educators and graduate students, can help push that along? I imagine there is a lot of work that we can do to help organizations like the Dana Center with that mission.

U.T.: This is my fifth decade of teaching first-year students in mathematics in some form or another. When I’m in the classroom, I’m confronted with the real issues. So as a teacher, I have learned how to do my best to control what happens in my classroom. But there can be things that forces outside my classroom shape—things that may negatively affect my students. So, as an individual teacher, you must first check what you can do in your classroom. Then you ask, “What can I do to influence what happens outside my classroom? For example, how might I influence policy in or through my professional organizations?”

For the directors of programs, there is a similar trajectory. What can you do at your institution with your staff? What are you doing to connect with other groups who also work with or influence your students? You have to ask, “How much, at this point in time, can we control?” Then you have to ask, “What’s next?” Working with partners can give you greater control. That’s how I look at it. I am always surprised how far away from home we have to go to address some of the core problems faced by my students.

J-CASP: Thank you so much for your time. It’s been extremely helpful.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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PROMISING PRACTICE

Leaning Into Difficulty: A Way of Building Knowledge in a Developmental Reading and Writing Course

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<https://doi.org/10.36896/4.1pp1>

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Barrie McGee is a PhD student in developmental education at Texas State University with a concentration in literacy. She holds an MA in rhetoric and composition and a BA in English (writing and rhetoric concentration). Her research interests include terminology/discourses referencing the field of developmental education and its effects on professional identity, pedagogy, and attitudes of practitioners in the field.

Disclosure Statement

No potential conflict of interest was reported by the author.

Recognition of the interconnectedness of the reading and writing processes is not a new concept. Indeed, the developmental nature of reading and writing is shown to have evolved over time (Nelson & Calfee, 1998) and has been the focus of empirical research grounded on three basic theoretical models: shared cognition (two buckets drawing water from a common well), sociocognitive (envisioned as a conversation), and combined-use model (tools that can be used together to build something) (Shanahan, 2016). I am particularly intrigued by the sociocognitive model of reading and writing as a conversation as both mirror closely the spirit of Rosenblatt's (2013) transactional view of the relationship among the text, the reader, and the author. The theory Rosenblatt promoted requires a paradigm shift that problematizes the dualistic notion of subject-object, individual-social, and stimulus-response that are insufficient to represent the recursive, "one process" that the knower, the knowing, and the known enact, each conditioning the other in linguistic activities (pp. 926–927). For example, when a student transacts with a text, they draw from linguistic and

experiential knowledge bases (reservoirs) to derive an interpretation. Difficulties can arise when knowledge bases are inadequate to form a clear understanding of a text, yet working through the difficulties results in structuring new meaning. The work involved in the struggle is generative (Bartholemae & Petrosky, 1986). Rather than an interaction that may close off the opportunity for students to build new knowledge, "meaning" happens during the transaction" (p. 929). Rosenblatt and others (i.e., Bakhtin, 1981; Gadamer, 1975; Iser, 1978) provided sound theories to justify designing fully integrated reading and writing (IRW) courses. To clarify, fully integrated as I use it here is distinct in that it references Rosenblatt's notion of the similar processes that reading and writing share as well as the ideal instruction in which neither reading nor writing are privileged in service to the other but are considered interconnected literacy practices in a dialogically centered classroom. Such instruction, however, is another matter.

As an instructor of the developmental reading and writing course at Texas State University, I am required per state mandate to design the course as an accelerated version of the IRW. Furthermore, I am uniquely positioned as a student enrolled in the program in developmental education to access literature on theory and research relevant to integrating reading and writing to help inform my instructional choices. For example, Bartholemae and Petrosky's (1986) seminal work, *Facts, Artifacts, and Counterfacts*, has done much to help me envision what such a course would look like including, assignments and reflections on student writing and insights of the difficulty underprepared students have imagining themselves as readers and writers. However, it is Salvatori's (1996) difficulty paper assignment, the topic discussed in her article, "Conversations with Texts: Reading in the Teaching of Composition," which resonates with me as paving a way for students to engage in conversation with the text and to prepare for class discussions by writing a one-page description of any difficulty they noted in a given reading. Drawing from Salvatori's (1996) article, I argue that the difficulty paper assignment provides a flexible framework for instruction in the IRW course that reflects the features of Rosenblatt's transactional theory of reading and writing and which perceives what I term *leaning into difficulty* as a way to build new knowledge. In the following, I begin broadly with a short discussion on the fundamentals of an IRW course according to Bartholemae and Petrosky

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(1986), and then move into a more specific focus on Salvatori's (1996) rationale for and particulars of the difficulty paper assignment. I expand this view of the difficulty paper by examining its use in Sweeney and McBride's (2015) study to further highlight the flexibility of the assignment to gain insight into student experiences with reading. Final thoughts conclude the essay.

To Begin at the Beginning: The Integrated Reading and Writing Course

Intentionally connecting reading and writing in an IRW course is "to reclaim reading and writing from those who choose to limit the activities to the retrieval of information" in favor of questioning the text through verbal or written responses (Bartholemae & Petrosky, 1986, p. 4). Through such methods of instruction (i.e., questioning the text), teachers offer ways for students to see what they have said, interrogate it, reflect upon it, and revise the representations of their discourse, thereby empowering students through the use of their voices (Freire, 1968) and the active participation in their reading, writing, and thinking processes. The dialectical nature of such a course invites the student to engage in discussions of ideas, which in itself requires a difficult paradigmatic shift in students perceiving themselves no longer as passive receivers of information but as problem-posing actors. Reimagining themselves as readers and writers via their textual performances in the context of college or university is one of the course's goals—and good instruction gets them there.

Specifically, Salvatori (1996) based her conceptualization of the connection between reading and writing as a conversation or dialogue; thus her argument for proposing the use of reading as a means of teaching writing for the composition classroom. Adapting Gadamer's (1975) notion of the dialectical nature of conversation in which "texts...have to be understood, and that means that one partner in the hermeneutical conversation, the text, is expressed only through the other partner, the interpreter" (p. 440), her teaching approach views the "act of reading" as interconnected to writing and, therefore, employs relevant introspective reading strategies that make this apparent to the student. While some of her strategies depend upon a specific context, I wish to focus on her more generally applicable strategy, the difficulty paper.

The Difficulty Paper: A Way to Start and Expand the Conversation

Salvatori (1996) prefaced the description of her difficulty paper assignment by referencing Bartholemae and Petrosky's (1986) series of assignments as perhaps an affirmation for privileging the challenging areas of readings that students encounter as a starting point for discussion. Before the collective discussion, Salvatori assigned the difficulty paper, which directed students to write a one-page description of any difficulty with the assigned reading that they had from which she chose a representative sample for distribution. Following, she attempted to guide discussion towards students' assessment of the text feature that deems the reading difficult. For example, are readers unable to recognize text clues, are the reading methods ill-matched for the text, do readers perceive the difficulty as due to being poor readers? The purpose underlying this assessment is to introduce a reflexive strategy that helps students recognize that what they first perceive as difficult is indeed a feature of the text that requires critical engagement. Salvatori finds that the approach often reveals that the students' descriptions of difficulties frequently identify an accurate assessment of the text's argument, such as stating irreconcilable differences with a position on an issue (hence the difficulty with the text).

Another focus Salvatori suggested is using the difficulty to bring students' attention to a possible reading of a text. In her example, students are asked to reflect upon the framing of the argument that the assignment invites, and contrary-wise, what kinds of arguments are then closed off, highlighting the difficulty of adequately representing the multiple perspectives of a complex text in response. The exercise can raise critical attention to the care necessary in reading others' positions and to one's representations of them.

Another use of the difficulty paper is to exercise recursive and self-monitoring reading practices that help to make thinking more visible to students. Should a student begin composing a reading of a text, the instructor may find that an additional, more attentive reading is advisable due to a rushed generalization or unexamined bias that affected her conclusion about the argument of the text. The purpose is not to glean a more correct reading of the text necessarily, but by conducting a review of the steps taken to compose the reading, for example, by marking the areas she

The journey begins with silence from the teacher as students learn to not only find their voice but also to realize they have a voice.

read deeply and areas she scanned can demonstrate for the student how easy it is for a text's argument to be erased due to inattentiveness to its construction.

Previously, I have used the difficulty paper as an assignment for the students enrolled in the developmental reading and writing course. Having only a cursory understanding of the assignment at the time and none of the theory and purpose as proposed by Salvatori, the assignment fell well short of its potential. However, following the Bartholemae/Petrosky and Salvatori models, I hope to work through the difficulty of learning how to implement instruction of the difficulty paper assignment and related exercises in the future. I may also recognize opportunities to adapt the assignment for other purposes. In the following section, I discuss how the difficulty paper was used to examine students' experiences when reading in the composition classroom as an exemplar of such an expansion of the assignment.

Expanding the Use of the Difficulty Paper

Sweeney and McBride's (2015) relied on a variation of Salvatori's (1996) difficulty paper to illuminate the struggles that basic writing students confront while reading for a reading course. The reading course was grouped with a composition course and an editing-for-style course which provided students with additional scaffolding in reading and writing and offered teachers a way to examine the relationship between reading and writing more fully. In preparation for the new course, Sweeney and McBride read both Salvatori and Donahue's (2005) *The Elements (and Pleasures) of Difficulty* and chose the difficulty paper as an assignment to help support students' reading. Based on discussions in the new course's focus groups, the authors decided to design a more formal inquiry into the students' reading experience using a corpus of 209 difficulty papers collected over 2 years. Sweeney and McBride used grounded theory to analyze the data, which helped them better understand what expectations the students brought to the reading class and the difficulty students experienced in the new context of college. The goal of the study was for the faculty to become better informed on how to respond to the ways students interacted with the critical reading curriculum. The findings of the study fell under the main category, mismatch between reader and writer expectations.

After examining the difficulty papers about the two reading assignments, the findings revealed that students' difficulty was explicitly based on a mismatch between how they were taught to write in the first-year composition course and how the texts were written. For example, the organization of *The New Yorker* piece moved from narration to exposition with no transitions except paragraph breaks. This reading assignment challenged one students' reading

expectation for coherence, unity, and directness, contradicting the instruction of writing with the reader in mind. Another example is the difficulty due to a lack of a clear thesis, another clear directive for beginning writers in a first-year composition class. The expectation for a thesis was framed by writing instruction rather than the reading experience. Finally, the third difficulty that the students had with the reading centered around the length of the article, which delayed locating the point. Sweeney and McBride (2015) noted the sense of frustration of comments in the difficulty paper such as, "there were an excess amount of quotes used from people who I really don't care about and were not of any importance so continuing to read became very tedious...no matter how interesting the subject; the length is something that could make anyone identify as difficult" (p. 600). Overall, a mismatch occurred between instruction—how students were taught to write with the reader in mind—and the writing style of the reading assignments and, therefore, the reading experience for the students.

The implications of the study showed that Salvatori's (1996) difficulty paper was a valuable resource in finding that what students identify as difficult in a rhetorical and critical reading course illuminated aspects of the reading process that typically go unseen: students struggle with a mismatch of expectations they bring to the reading (p. 607). For one, students had difficulty engaging with texts in which there were cultural disconnects and that text-to-self and text-to-world connections were compromised. Secondly, students expect the texts that they read to follow the same pattern as their writing assignments. In this case, Sweeney and McBride recommend telling students when a reading will act differently than their writing but is intended to extend their critical or rhetorical reading practices.

Through the difficulty paper research, Sweeney and McBride (2015) became more aware of how students attempt to assign purpose to the readings they encounter in their reading course, seek to connect the reading, composition, and editing-for-style courses, and how cultural mismatch causes difficulty. In the spirit of Salvatori, they discovered that bringing those connections to class discussions provided a way for students to make stronger reading and writing connections. I found key takeaways from Sweeney and McBride's (2015) difficulty paper research study relevant for the developmental reading and writing course I teach, which include scaffolding expectations for how to read an assignment, folding in instructor reading purpose, and providing class time to discuss the reading process as well as the difficulties. Locating the difficulties of reading assignments offers instructors a chance to make explicit reading and writing connections for students and to emphasize

the value of reading rhetorically and critically.

In their concluding statements, Sweeney and McBride (2015) stated that the study confirmed the benefits of integrating reading and writing while it also revealed ways that it also complicated student expectations but “not in ways that indicate the need for separation” (p. 611). Wisely choosing readings that best suit the purpose of the developmental IRW course remains a concern for me, so I take to heart their reminder to instructors and supervisors to examine the purpose of the readings and the strategies for teaching those readings in support of basic writing students in their reading endeavors.

Conclusion

I have attentively followed the political and policy movements in Texas that led to the mandated implementation of a corequisite model for pairing reading courses with a content-area course at 2- and 4-year institutions and the simultaneous invocation of an accelerated version of the IRW course. I have also observed the responses of instructors and their supervisors to adapt the IRW course at our institution to our legislature’s expectations. While I have been part of that transition for the last 2 years, I acknowledge that the mandate has done much to distract me from knowing where to put my energy in preparation for teaching. Learning on the run has been tough. However, I find that the history of IRW, its theoretical justifications, and the models for course design and assignments has brought the purpose back into focus. Bartholomae and Petrosky’s Pittsburg model, though the impetus of its conception came from concerns for underprepared students at the departmental level of their institution, explicates the possibilities of designing curriculum and instruction that demonstrates a “how-to” practical application of interconnecting reading and writing (and thinking) in the college context. The shift students make from bystander to participant in their learning process through conversing with reading and writing assignments relies heavily upon good instruction. The journey begins with silence from the teacher as students learn to not only find their voice but also to realize they have a voice. How to initiate the conversation, I learned, is possible through the difficulty paper, which Salvatori described as a way to get individual students talking about and recognizing their reading process and to start a dialogue as a community of learners to interrogate the difficulties, to revise them, and to build knowledge from the exercise. The flexibility of the assignment provides instructors with an outline to adapt for their unique dynamic of students, contexts, and purposes and gives instructors a way to encourage students to lean into difficulty as a means to make meaning from their reading, writing, and thinking practices.

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Supporting Student Success in the New Normal

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<https://doi.org/10.36896/4.1pp2>

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Disclosure Statement

No potential conflict of interest was reported by the authors.

The new *normal* in higher education can mean different things on varied campuses. The new normal, which occurred because of the COVID-19 pandemic, is the current atmosphere across the higher education landscape. This has meant more technology at many institutions of higher education (IHE) in numerous areas on campus. Other post-pandemic changes include a new financial reality, finding new ways to support student learning and campus community, and a new reality for many campus programs. This version of higher education looks hauntingly similar yet vastly different than the old vision of the higher education landscape. The COVID-19 pandemic caused many institutions of higher education to hit the fast forward button on implementing innovations and change. This change not only meant a move toward distance education using current methods in new ways but also activating plans for other innovation, such as streamlining paperwork, advocating for remote work, and offering traditional coursework in a new format. Campus leaders may need to redeploy human, financial, and physical capital in alignment with their new operating models (Teachers Insurance and Annuity Association of America [TIAA], 2020).

As institutions prepare for the 2021–22 academic year, higher education has entered its new normal. While these changes may be unsettling for many in the professorate, it gives administrators and educators a chance to change campus policy for the betterment of students. Quality technology has been embraced, not only in the classroom, but also in the integration of student support services. Distance learning promising practices have been supported as a method to help all instructors, both full-time and adjunct, adjust to the post-pandemic campus climate. The lessons from the pandemic have allowed institutions to offer students the best possible educational experience. Higher education has changed in many ways due to COVID-19 and those changes continue daily. Educators should use this push as a positive motivation for transformational campus and curricular change. As colleges integrated a mobile-first approach with their resources, the app became the campus. This is not going to change (Newton, 2020).

Colleges and universities across the globe were disrupted like never before during the pandemic. Over a weekend, faculty and staff moved instruction and support services entirely online. In many cases, institutions were well positioned to conduct remote instruction and work, while other institutions had no choice but to rapidly ramp up new digital

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services to support instructional and administrative functions. In both cases, higher education institutions learned that colleges and universities are far more agile and resilient than may have previously been believed (Ayersman et al., 2020). Remote learning may be challenging for students who are underprepared. During the pandemic, all face-to-face lessons were cancelled, causing many institutions to immediately transition from face-to-face, in-person learning to completely online lessons. The abrupt switch to fully online learning has been particularly stressful for instructors and students who prefer in-person instruction. Online learning is often stigmatized as a weaker option that provides a lower quality of education than in-person face-to-face learning (Hodges et al., 2020). Many student service professionals have adapted current methods to add an extra layer of support for students enrolled in distance education. Diverse student populations require different kinds of learning support. Some students just learn better in a traditional classroom setting.

Embracing the New Normal

In the new normal, the ways in which IHEs conduct business has changed to adapt to the needs of today's campus community. Tomorrow may be different; college and university leaders will need to identify new methods to adapt to the student populations in order to implement changes to their programs to reflect their refined focus (TIAA, 2020). COVID-19 changed life's milestones for many students. A survey of college-bound high school seniors conducted in March 2020 by the Art & Science Group, a consulting company, found that 17% of respondents were rethinking their plans to attend a four-year college full time. If that sort of student uncertainty translated into drops in enrollment, and thus tuition-revenue losses across the board, the consequences could be devastating (Gardner, 2020). This is type of deficit is a factor that many campuses are still recovering from today.

Classrooms became increasingly virtual due to the pandemic, and instructors made efforts to incorporate more technology. Now in the post-pandemic institution, this technical phenomenon has blossomed. It is important that this change in paradigm does not undermine a holistic approach to students. Social presence in classes, especially virtual classrooms, matters, and this definition needs to evolve as the increasing use of technology or the transition to more hybrid and online models of edu-

cation occur. With today's changes in available technology, videoconferencing must be considered as a part of this idea. Social presence is associated with the degree of participation and social interaction amongst the collaborative group members and, as such, is therefore considered a critical variable for learning (Kreijns, 2014, p. 5); essentially, this idea involves everything a student infers about appropriate engagement from the learning experience. This concept takes numerous forms in varied educational formats. Instructors are required to move from a model of being salient, there, and present, to a model that includes projecting oneself and fostering connection, community, and belonging (Lowenthal & Snelson, 2017). Self-efficacy influences how a person addresses goals, tasks, and challenges. A strong sense

of self-efficacy promotes goal attainment while a weak sense undermines it. People with high self-efficacy will engage more readily in a task, expend more effort on it, and persist longer in its completion even when they encounter difficulties (Chemers et al., 2001). Technology use can support this type of self-efficacy. Utilizing gamification, discussion boards, welcome letters, quick, timely, and personalized feedback, and frequent updates are all vital tools to help ensure that students understand that on the other side of a technology there is a faculty member who cares for them.

Even though the strategic integration of student support services has been a hot topic in higher education over the previous decade, in the post-pandemic landscape of higher education, this is more important than ever before. While it manifests uniquely at each campus, there are proven methods to migrate to integrated ser-

vices. Stakeholder input can be gathered and used to inform any change that effects multiple campus units. College administrators and department heads can be assembled to work together to find the campus champions who are willing to help make these connections. With the pandemic recovery occurring, new methods of completing campus procedures are necessary. The advent of technology, such as Formstack, Wufoo, and other programs, will help to build a bridge of communication between instructors, both full-time and adjunct, financial aid professionals, student advisors, student success center personnel, tutors, TRIO office staff, and other stakeholders. Individual campus needs will vary because of the community and population served. Stakeholders on all levels must work together.

While these changes may be unsettling for many in the professorate, it gives administrators and educators a chance to change campus policy for the betterment of students.

Technology and Teaching in the New Normal

Technology is the great equalizer in helping students to strengthen the skills that they need to be adequately prepared for the rigor of college-level work. Even pre-COVID-19, technology use on campus had expanded greatly. In higher education, technology has gone from being a global phenomenon (Hadadian et al., 2014) in the virtual classrooms of the pandemic to a necessity for today's digital natives. For those underprepared for college, supplemental software programs can be useful to grow their skills for completing college level work. However, this technology can only help to close the skills gap for those who have access to it. The CARES Act provided vital funding to maintain the financial health of higher education institutions. However, the CARES Act did not offer an opportunity for students to receive direct tuition or fee payment resources similar to the federal stimulus payments given to qualified citizens; instead, it focused on student loan borrowers and existing payments. The CARES Act and the financial relief for institutions to support students proved vital to student success during the rapid transition to online learning. Thirty-four percent of students received technology or technical services from their institutions (Cameron et. al., 2021, A2).

As the pandemic progressed it became clear that the way IHEs were teaching needed to shift to online, immediately. Based on federal data from over 4,700 colleges and universities, more than 6.3 million students or 56.1% of students in the U.S., most of whom were undergraduates, took at least one online course in fall 2016, a 5.6% increase from just a year before (Friedman, 2018, p. 1). While the number of students taking online courses was increasing, even pre-pandemic, this number has continued to skyrocket as different campuses have returned to teaching in various classroom and online formats. One lesson which college administrators learned from pandemic education was that distance education could work in a variety of subjects. While online courses have the societal benefit of providing greater access for all students to higher education, during the pandemic they provided the only access. This advent of more distance education had been on the horizon for years, but the pandemic forced many campuses to activate distance education plans sooner than planned.

As courses were moved into their new online versions, instructors had to focus on the needs of all their students. Addressing these needs required a multifaceted approach that had to take in to account the software updates and the rising presence of the software as a service model within the institution. Funding at the federal level was required to support the infrastructure of such changes. Within the CARES Act, eight funds were established with different competitive priorities, application procedures, and eligibility requirements. Of the eight funds, the Institutional Resilience

and Expanded Postsecondary Opportunity (IREPO) grant program competition most closely supported the institutional need to upgrade technology infrastructure by providing priority funding for institutions that "are committed to developing a more resilient instructional delivery model, such as learning, that make learning possible even when students cannot be physically present on campus for any reason" (U.S. Department of Education, 2021, para.1). Continued financial support will be required to create and maintain the technology infrastructure schools require to support post-COVID-19 instructional and learning shifts. The applications for IREPO funding closed in October 2020, prior to the widespread reopening of public institutions and with much of CARES funding already spent. Anthony and Navarro (2021) pointed out that of "\$13 billion that institutions applied for and received, almost \$10 billion, or 75 percent, has been spent" (para. 6.). Subtle changes have remained in other areas, like the campus cafeteria and Student Success Center as students and faculty have returned to campus. The move to technologies like Zoom and Microsoft Teams has changed the way classes are managed to enhance student support. These efforts are necessary to maintain compliance with both accessibility standards as well as implementing Universal Design for Learning and other updated teaching practices in service to students. Post-pandemic initiatives require both an administrative and faculty commitment to be successful. Administrators need to support financing for these technical projects, and faculty need to embrace the innovations for them to be successful in their execution as part of the campus curriculum. Stakeholder buy-in is vital for student success.

Keys to Student Success Today

Student success, retention, and persistence are measured using different metrics and by tracking certain analytics at various colleges and universities. One key to student success and retention for students who are underprepared for the rigor of college are targeted interventions. While it is vital to intervene when students are falling behind in their course work for one reason or another, the methods for assisting students varies by campus. Today, especially in higher education's post-pandemic new normal, this is being done through the advent of different technological programs as well as through traditional methods. Semester-long courses are being offered side-by-side with hybrid and online options.

Among the challenges of incorporating educational technology into classrooms are the cost, cognitive load strain for both the instructor and the student, and learning management system (LMS) compatibility. Alongside this is the ability of students to learn to operate various supplemental course software. Resources which offer instructional design support, such

as Open Educational Resource Commons textbooks, instructional activities, or presentation materials, will be referenced as universal design content that can be utilized to support multiple means of assessment, acquisition, and engagement.

Changes in Higher Education Funding

The pandemic had a significant financial impact on IHEs. A deficit in funding measures, which ranged from loss of tuition to fewer government funds for certain programs, caused this change. One result was larger class sizes. This was done in order to cut back on instructional costs. The hybrid model became more of the norm for many colleges. As the pandemic resurges across the country, the coronavirus has forced universities large and small to make deep and possibly lasting cuts to close widening budget shortfalls. By one estimate, the pandemic has cost colleges at least \$120 billion, with even Harvard University, despite its \$41.9 billion endowment, reporting a \$10 million deficit that has prompted belt tightening (Hubler, 2020). The pandemic event occurred at a time when student debt was already a major stakeholder concern. The third component is the growth of student indebtedness as a result of increased costs. More than six in ten (62%) college seniors who graduated from public and private nonprofit colleges in 2019 had student loan debt and owed an average of \$28,950 (Institute for College Access and Success, 2020). This problem concerns public policy makers at the local and national level as well as parents and students. These issues, along with a misunderstanding of what developmental education is, have coalesced into legislation at all levels that has serious implications for developmental education in many states (Boylan et al., 2017). Coupled with the economic issues due to COVID-19, a new financial reality of less sustainable revenue became apparent as legislators and administrators saw the need for fewer adjunct faculty due to a decrease in tuition profits from fewer on-campus students. In order to maintain quality instruction, institutions need to consider the overall financial implications with student retention, engagement, and instructor burnout. Though many colleges imposed stopgap measures such as hiring freezes and early retirements to save money in the spring, the persistence of the economic downturn is taking a devastating financial toll, pushing many to lay off or furlough employees, delay graduate admissions, and even cut or consolidate core programs like liberal arts departments (Hubler, 2020).

Distance education was here to stay prior to the pandemic, and the lessons and promising practices implemented from this time will help mold future campus policies.

Where Do We Go from Here?

With the possibility of the pandemic ending, there may be a light at the end of the tunnel. Some changes implemented during COVID-19 will remain in effect, whereas others will not. One lesson learned in higher education from this event was the need to be flexible. It is evident that communities across the globe have had to find as many ways as possible to connect in meaningful ways; this will continue, but things will be different than they were before the pandemic. Because teaching remained a one-size-fits-all model, rather than personalized and adapted to various students' learning needs, this is the time to personalize learning in varied formats (Mintz, 2018). Students desire social connection, digital connection, and a sense of community and belonging.

Numerous higher education systems have accepted this call to action by encouraging educators to do things differently, with greater intention and purposeful inclusion, in the construction of their virtual classrooms; these changes will span the years following the recovery from COVID-19. In the post-pandemic world, higher education will have the opportunity to reinvent itself. Universities have used technology in new ways and will continue to expand this growth. Some institutions of higher education emphasized promising innovations, such as co-requisite course designs, mastery and accelerated learning, along with the advent of new campus technologies. The ones that were successful will continue; others will not. The lessons learned at various IHEs in the spring of 2020 helped many college administrators and instructional designers to plan better for future academic years. Higher education will never be exactly like it was before the pandemic.

Distance education was here to stay prior to the pandemic, and the lessons and promising practices implemented from this time will help mold future campus policies. Financially, technologically, and culturally, the policies of President Biden's Department of Education will be tied directly to the future of higher education. Like President Franklin D. Roosevelt's New Deal policies helped to rebuild America following the Great Depression, President Biden's Department of Education's higher education policy will be directly tied to the ability of colleges and universities to survive the economic shortfalls. To better accommodate a changing college community, new educational technology measures should be funded at the federal, state, and local levels.

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EXPLORATORY PIECE

Close the Metacognitive Equity Gap: Teach All Students How to Learn

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<https://doi.org/10.36896/4.1ep1>

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Disclosure Statement

No potential conflict of interest was reported by the author.

Author Note

I would like to acknowledge Stephanie McGuire for her exceptional assistance with this article.

In his seminal book, *Toward Excellence with Equity: An Emerging Vision for Closing the Achievement Gap*, Ferguson (2008) persuasively argued that the achievement gap between students from different racial groups is not the result of a difference in ability, attitudes or work ethic between groups, but rather a difference in the academic skills acquired. Often, we in the academic community use the term educational equity when referring to closing the achievement gap between different groups of students, such as majority versus minoritized, lower socioeconomic versus higher socioeconomic, or students from well-resourced versus under-resourced schools. (Harris & Herrington, 2006). I have recently begun using a parallel term, *metacognitive equity*, to describe closing the gap between students who use metacognition (effective thinking and learning strategies) and those who do not. I posit that it is the gap in metacognitive strategies that contributes most to the persistent achievement gap and that all students must be taught how to learn.

Metacognition is a term coined by Flavell (1976) to indicate thinking about one's own thinking. Although this is an overly simplified definition of metacognition, it is one I use with students because

they can more easily grasp the meaning of the term than if I use a more involved definition. When I explain metacognition to students, I tell them, It's like you have a big brain outside of your brain, analyzing what your brain is doing. It's asking your brain questions to see if you really understand something or if you've just memorized it last night because the test is today. It's making sure you're using strategies to really understand what you're reading, rather than just looking at the words as you hear them in your head.

Metacognition involves planning, monitoring, controlling, and making adjustments to the way one attempts to learn something. Because there is overlap between cognitive and metacognitive strategies, and also between study skills and cognitive strategies based on the specific situation, I intentionally blur the distinctions in my book, *Teach Students How to Learn* (2015). This prevents students and faculty from getting mired in details that would lessen the impact of delivering the strategies. For purposes of this discussion, however, I distinguish the terms in the following way. Cognitive strategies are used to acquire and retain information. They include memorizing, problem solving, making mind maps, using mnemonics, etc. Metacognitive strategies involve determining which cognitive strategies should be used in a particular situation. The metacognitive strategies such as reflection, self-questioning, and analyzing one's strengths and weaknesses, allow an individual to more effectively use cognitive strategies. Study skills, on the other hand, involve activities such as note-taking, time management, and test preparation. Study skills can be combined to form cognitive strategies, and metacognitive strategies allow one to evaluate the effectiveness of different cognitive strategies and adjust them to increase success with learning tasks. In my view, the gap in cognitive and metacognitive strategies plays the biggest role in the achievement gap. For simplicity's sake, however, and also to emphasize the decisive role of metacognition, I refer to the metacognitive equity gap.

Although I am quite confident in teaching students these strategies today, I was not always. Before becoming the director of the Center for Academic Success at Louisiana State University, I was oblivious to the possibility that students could be transformed from academic failures to academic superstars within a matter of weeks.

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What precipitated my transformation from skeptic to enthusiast? At LSU, a talented learning professional taught me how to present effective learning strategies, and I began to marvel at their impact not only on the students but also on my own thinking and learning. Over the last 20 years, I have seen countless students transform their academic performance by using simple metacognitive learning strategies that show them *how* to learn. If metacognitive strategies could be delivered to all students at our institutions starting in the first year—if all students could be taught how to learn—then our institutions could achieve metacognitive equity. As educators, why are we not there already? I suggest several contributors to the metacognitive equity gap: (a) the commonly held notion that a student’s intelligence is essentially fixed by the time they enter school, (b) the lack of opportunity for high-level learning in K-12 schools, and (c) the invisibility of the metacognitive gap to students from under-resourced K-12 schools.

The first contributing factor is that not enough people know that it is possible to teach students how to learn. The idea of intelligence as fixed is still too widespread. In fact, one of the two students mentioned earlier recounted a meeting during her sophomore year with a professor with whom she wanted to do undergraduate research. The professor asked her why she even thought she would be able to major in neuroscience because she had a C average in the neuroscience course she was taking that semester. She told me that she went to her room and spent the rest of the afternoon crying, trying to decide what else she might pursue as a major. However, when she learned that she could improve her performance by implementing more effective strategies, she used them to raise her grades, earning all A’s during her senior year.

Many people have a fixed mindset because they have personal experience comparing themselves to other students while they were in school and may have labeled themselves as “good at reading but bad at math,” for example. To close the metacognitive equity gap, faculty and academic staff must constantly and emphatically communicate the fact that simple metacognitive learning strategies can be transformative. To make the deepest structural changes at any educational institution, metacognitive learning strategies should

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be introduced to all students as early as possible and continually reinforced as they move through the institution.

A second cause of the metacognitive equity gap is the lack of higher-level learning throughout K-12 education. This begins with the stratification of elementary or middle school students into different learning levels without first teaching them metacognitive strategies. Over time, this stratification widens the metacognitive equity gap because, too often, only students at higher learning levels are required to demonstrate higher-order thinking skills. To make matters worse, students who attend under-resourced schools may not even have access to courses like Advanced Placement or International Baccalaureate classes. Indeed, the U.S. Department of Education’s (2012) Office of Civil Rights collected data indicating that students from under-resourced schools are more likely to be less academically challenged.

I saw firsthand how sorting students into different learning levels can influence academic development when our younger daughter entered high school after our family relocated. As a 9th grader, she was placed in a mid-level math class but was moved to the honors class within a few weeks. The two classes had the same name and used the same textbook, so I was quite surprised to discover that they were as different as day and night. Homework for the mid-level class consisted exclusively of problems very similar to the worked examples presented in the chapter, whereas the honors students were expected to solve the most difficult problems offered by the textbook. The development of our daughter’s thinking skills would have taken a very different journey if she had remained in the mid-level class.

One additional contributor to metacognitive inequity is that students from under-resourced schools are largely unaware of the more advanced thinking and learning skills that students in other schools have been taught and regularly employ. When these students get much better grades than most of their peers, it is logical for them to mistakenly believe that they are prepared to compete at the highest levels at elite institutions. Moreover, as Putnam (2015) argued, students from economically disadvantaged backgrounds have less access to mentors (Sebenius, 2016). In addition to the insider knowledge and needed influence that mentorship provides, I argue that two of the

biggest contributions mentors make to students are that they model metacognitive thinking skills and encourage students to persist through challenges. Minoritized students and those from disadvantaged backgrounds often miss out on this avenue for absorbing metacognitive thinking habits and receiving encouragement to keep going after setbacks. Tutors, peer mentors, and coaches can model these skills while encouraging students to persist, even in the face of initial failure.

Fortunately, educators already have the tools to address the problem of metacognitive inequity. Metacognitive skills can be taught at any and every stage of a student's education. Considering the "whys, hows, and what ifs" instead of merely memorizing the "whats" can easily be deliberately modeled for elementary school children. In my 30-year speaking career, I have heard from many K-12 teachers and students successfully teaching and using metacognition in elementary, middle school, and high school classrooms. Even if students sit down in their first college class without sufficient learning strategies, educators can still equip them to excel. During my own 50-year teaching career, I have facilitated countless sessions with undergraduate, graduate, and professional school students whose academic performance was improved by using metacognitive learning strategies.

Often, whether or not a student possesses effective learning strategies—rather than any lack of innate ability or talent—makes the difference between academic success and discouraging failure. The heartening news is that metacognitive learning strategies can be taught, sometimes with immediate and substantial improvements in academic performance (Cook et al., 2013; McGuire, 2015, 2018). For example, in June 2021, two students from a highly selective university who used metacognitive strategies to improve their grades shared their thoughts about that process with me. One student, a recent neuroscience graduate, talked about the dismay she felt when she realized that her public school experience had not equipped her with the strategies for success that students from more elite schools used to their advantage. She told me that groups of students from public schools would regularly socialize and express their belief that they would never be able to earn the A's that the more prepared students were achieving. However, when she learned about metacognition, Bloom's taxonomy, and the importance of developing a growth mindset, she said that she saw her grades and her confidence steadily improve, culminating in a 4.0 GPA during her senior year. The second student, a public policy pre-med major, recounted how learning about metacognition enabled him to develop a deeper understanding of concepts, apply

information to new situations, and implement more sophisticated learning strategies for different types of courses. Both students told me that they had learned these strategies through a combination of talking with the director of the campus learning center, attending faculty-led sessions where students discussed learning strategies, and reading *Teach Yourself How to Learn*, a book I also authored in 2018.

In the example above, the university's academic support program provided the resources for these students to achieve metacognitive equity with their better prepared peers. Academic support programs are uniquely prepared to foster metacognitive equity. The academic coaches, tutors, Supplemental Instruction leaders, and academic peer mentors learn these strategies in their training and can teach them to students. Additionally, academic support staff are sometimes the primary sources for inspiring hope and confidence in students who have lost optimism after performing lower than they expected on course assessments. The myriad success stories that our centers have collected stand as proof that failure has nothing to do with how smart a student is but rather the strategies they use in their learning.

There is a growing body of literature investigating the impact of teaching metacognitive strategies, sometimes in conjunction with other pedagogical practices. Examples include Cook et al. (2013), Kaldor and Swanson (2018, 2019), Swanson et al. (2021), Muteti et al. (2021), Mutambuki et al. (2020), and Benko et al. (2019). A university student who used metacognition to improve academic performance recently published an account of her experience (Chen, 2020). Certainly, the role of metacognition in learning has been of interest since at least the 1970s when Flavell (1976) coined the term. There are plenty of additional examples in the literature, such as Rickey and Stacey (2000), which presciently argue for the widespread application of metacognition.

Teaching people metacognitive learning strategies is possible at any age. I look forward to a future in which the metacognitive equity gap has been closed, and every student is routinely exposed to thinking and learning strategies that inspire a deep love of independent learning. I envision a time when the idea that some students are smart, and some are not, has been completely replaced by the idea that some students have metacognitive learning strategies while others do not; and all faculty—preschool through graduate and professional school—will actively teach the necessary skills so that all students are operating on a level playing field.

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Antiracism Glossary for Education and Life

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<https://doi.org/10.36896/4.1sc1>

ABSTRACT

To create an antiracism glossary, a team of scholars from Colleagues of Color for Social Justice (CCSJ) identified and defined 48 terms relating to racism and antiracism based on careful review of existing race-related glossaries, scholarly articles, and widely-read books on the topic. This glossary of terms illustrates the daily and pervasive nature of racism that people of color experience and fills a demonstrable gap in resources of this type for college learning assistance centers and programs. The purpose is to recognize and explain terms related to attitudes, behaviors, and policies that impact people's lives, particularly within academia. The glossary lists the terms in alphabetical order with multiple definitions from various resources and easy to understand examples drawn from personal lives, communities, and professional experiences in educational settings.

Keywords: antiracism, antiracist, glossary, learning assistance, people of color, racism

This *Antiracism Glossary for Education and Life* was designed for a variety of readers. It may be useful for those working in the classroom, administrative roles, student service units, learning assistance, educational equity programs (such as academic bridge programs, GEAR UP, and TRIO), and other roles in education at the secondary and postsecondary level. For people of color (POC), the words, definitions, and examples may resonate with shared experience. For White people, the glossary serves to reveal the often day-to-day experience for POC and the challenge of living in America. This glossary, then, can serve not only as a resource for educators and practitioners, but also as a foundation on which future publications can expand.

An essential part of any glossary are the terms and examples being used. We believe the

contribution of this glossary is the extensive examples in personal and educational settings that illustrate the definitions. In the case of the antiracism glossary, the coauthors contributed many examples from personal experiences, providing readers with real-life representations of what these terms mean moving beyond neutral denotations. While some examples were obtained from other glossaries and publications, the majority of coauthors drew from their lived experiences as POC. The examples that accompany these glossary definitions are a sample of the types of occurrences many POC experience in their daily lives.

Readers and users of this antiracism glossary will (and should) notice a number of silences or absent voices in the examples that accompany the terms. We, the coauthors, recognize those silent spaces. We expect those silences to be filled by the lived experiences of other marginalized POC

We expect those silences to be filled
by the lived experiences of other
marginalized POC in future editions of
this glossary or others like it.

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in future editions of this glossary or others like it. Unlike historical U.S. publication practices which have frequently silenced POC, we acknowledge the silent spaces opened by the examples included in this glossary. We intentionally avoid the habit of appropriation by *not* attempting to fill those silent spaces with experiences from other peoples' lives. We know those silent spaces belong to others. We offer this edition as an invitation for other POC to fill those silences with their authentic, lived experiences. We understand this offer destines this edition of our glossary to continuous improvement and leaves our work open. While the concept of racism is universal, it can be expressed and experienced—for many reasons—in ways too varied and voluminous for a comprehensive listing in this glossary. Future CCSJ publications will explore their experiences in deeper detail.

Many coauthors of this glossary, in sharing their examples, remarked how revisiting these experiences served to trigger the dormant memories and unearth the trauma. Kendi (2019) calls the unending and repeated daily events of racism *abuse*. The daily onslaught of microaggressions and macroaggressions has a cumulative deleterious effect on the emotional and physical health of POC. This glossary is a resource, and users should be considerate in its application. It may be inadvisable for a White person to ask colleagues or friends who are people of color if these examples are true or if this has happened to them. These authentic examples may be triggers for their traumatic memories to resurface. Instead, watch a documentary on racism, study one or more of the widely recommended books (Diangelo, 2018; Kendi, 2019; Oluo, 2019; Perkins, 2018), and carefully listen to POC who initiates the conversation. It requires an investment of time and a sincere desire to engage actively in learning—and then to use the newly-acquired knowledge. Two recommended short readings include McCoy's (2020) "The Life of a Black Academic: Tired and Terrorized" and Robert's (2020) "White Academia: Do Better."

Keeping current with the rapid changes in the field of education is essential. The words we use to discuss the changes that are occurring and must occur can make a difference in the policy-making decision process and offer practical guidance to educators at all levels and in all job roles. This glossary is our response to the disenfranchisement of POC in education. We hope it can play a role in furthering the conversation and continuing the path to equity for all. We close with the final words shared by Kendi from *How to Be an Antiracist* (2019):

Racist power is not godly. Racist policies are not indestructible. Racial inequities are

not inevitable. Racist ideas are not natural to the human mind...But racism is one of the fastest spreading and most fatal cancers humanity has ever known... When we lose hope, we are guaranteed to lose. But if we ignore the odds and fight to create an antiracist world, then we give humanity a chance to one day survive, a chance to live in communion, a chance to be forever free. (p. 238)

Antiracism Glossary for Education and Life

Throughout the glossary, words which are capitalized indicate that they are defined elsewhere within the glossary document. *People of Color* is abbreviated as POC except in direct quotations throughout this document. The examples that accompany the glossary definitions are not an exhaustive list of lived experiences of African, Asian/Pacific Islanders, Hispanic, Indigenous, Latinx, and Multi-racial people.

acculturation (sometimes called *additive acculturation* or *bicultural acculturation*)

1. Definitions: (a) Immigrants to the United States are provided time for them to adjust to the new culture and the school system while maintaining connections to their heritage and country of origin or connections with the cultural communities of marginalized school children (Makarova & Birman, 2016); and (b) maintaining bilingual and bicultural heritage for school children.
2. Examples: (a) Maintaining country of origin heritage through class discussions, reading assignments, and class projects; and (b) honoring the writing style familiar to the students rather than standard written English.
3. Compare with ASSIMILATION (adjective and noun).

affirmative action

1. Definitions: (a) "Set of procedures designed to eliminate unlawful DISCRIMINATION among applicants, remedy the results of such prior DISCRIMINATION, and prevent such DISCRIMINATION in the future. Applicants may be seeking admission to an educational program or looking for professional employment. In modern American jurisprudence, it typically imposes remedies against DISCRIMINATION on the basis of, at the very least, RACE, creed, color, and national origin. While the concept of AFFIRMATIVE ACTION has existed in America since the 19th century, it first appeared in its current form in President Kennedy's

Executive Order 10925 issued in 1961. Employers who contract with the government or who otherwise receive federal funds are required to document their AFFIRMATIVE ACTION practices and metrics. It is also a remedy, under the Civil Rights Act of 1964, where a court finds that an employer has intentionally engaged in DISCRIMINATORY practices” (Legal Information Institute, n.d., para. 1–2); and (b) “remedy to address past practices of DISCRIMINATION. AFFIRMATIVE ACTION in the employment arena describes the efforts of an organization to recruit and advance qualified people of color, women, persons with disabilities, and covered veterans. Required of federal contractors and subcontractors, AFFIRMATIVE ACTION also is permissible voluntarily where it is based on documented underutilization of women and people of color. AFFIRMATIVE ACTION in education refers to admissions policies and practices that provide equal access to education for those groups that have been historically excluded or underrepresented” (Diversity Advisory Council, n.d., section A, para. 4).

2. Examples: (a) Hiring a larger percentage of students of color than is represented by the institution’s employees for staff and student paraprofessional positions if the college has historically been found to engage in DISCRIMINATION in hiring practices; (b) admitting a higher percent of historically-underrepresented students due to past DISCRIMINATORY admissions policies; (c) requiring a college to create a diversity hiring committee due to being found guilty of historically DISCRIMINATORY hiring practices; and (d) AFFIRMATIVE ACTION becoming a quota system for hiring Blacks or POCs in education. I (a Black woman) was hired as an Academic Advisor in a predominately White institution learning center because, according to the administrator, “We need a Black woman.” They had one position left and had already hired a Black male. To fulfill the quota or in the name of AFFIRMATIVE ACTION, they needed a Black woman to meet the quota. Please do not get me wrong; it was my start in higher education. I ignored the assertion because I was about to graduate with my master’s degree and needed a job to stay in the area. However, what started as a corrective program against discriminatory hiring practices within the state system of higher education schools, actually became a systemic and oppressive racial

quota system whereby if you are hired, it is because you are Black or a person of color. I experienced the same at two smaller and private predominantly White institutions, where, upon my hiring, I was told by the White hiring administrators that I would “diversify the campus.” Unfortunately, that is all they expected from me. Any display of intelligence or abilities to perform the job was marginalized.

ally

1. Definitions: (a) “A person who supports a group other than their own” (Berkner Boyt, 2020, para. 10) identities, such as gender, RACE, religion, sex; and (b) a person who acknowledges disadvantages and oppression of other groups and takes action to stand with them and oppose the oppression (W.K. Kellogg Foundation, n.d.-a).
2. Examples: (a) Speaking up on behalf of POC during conversations when others make disparaging comments, MICROAGGRESSION behaviors, jokes, or stereotypical statements whether POC are present or not; (b) participating in meetings hosted by POC that raise awareness about issues of identity (racial, sexual, etc.); (c) displaying posters that advocate for social justice on the learning center walls; (d) displaying a welcome poster on the learning center wall with the word “welcome” in languages spoken by members of the student body; (e) asking questions of POC “like ‘what do I need to know,’ ‘how can I help,’ and ‘what can we do together?’” (Ludema & Johnson, 2020, Don’t be paternalistic section); (f) taking time to read books and watch videos on racial topics (history, slavery, systemic racism, etc.) and avoid asking POC to explain complex racial issues to you; (g) marching in a Pride Parade to advocate for an “annual audit of pay equity” (Ludema & Johnson, 2020, Do take ally-like actions section); (h) taking actions that create an environment so that POC “speak for themselves” (Ludema & Johnson, 2020, Don’t speak for others section); (i) responding when the leader of the campus LGBTQ affinity group contacts you to offer support to the goals of the affinity group for Black employees; (j) using authority as the Resident Hall Assistant to confront students on the dorm floor who are dressed up as border patrol and migrants at the border and stop the activity, and using this incident as opportunity to inform all residents that this activity is not appropriate or acceptable;

and (k) as a South Asian woman marching at various Black Lives Matter protests while holding up a sign saying “South Asians for Black Lives;” and (l) attending campus and social activities hosted by POC.

3. Compare with ANTIRACISM (verb), EQUALITY, EQUITY, and SOCIAL JUSTICE.

antiracism

1. Definition: “The work of actively opposing racism by advocating for changes in political, economic, and social life. Anti-racism tends to be an individualized approach, and set up in opposition to individual racist behaviors and impacts” (Race Forward, 2015, p. 25).
2. Example: Report any acts of DISCRIMINATION to the institution Dean of Students or Title IX Officer.
3. Compare with ALLY, ANTIRACIST (noun), ETHNIC ANTIRACISM, SPACE ANTIRACISM, and SOCIAL JUSTICE.

antiracist (adjective)

1. Definition: Having qualities or features that promote or express an ANTIRACIST IDEA.
2. Examples: (a) Ensuring that employment opportunities are advertised to all faculty, staff, and students who may be interested, and (b) using an ANTIRACIST reading practice that “helps the reader identify the habits of language being used and inquire into where those habits come from in the larger world” in order to “understand better the language habits we participate in, and whether and how those habits participate in RACISM and White language supremacy” (Inoue, 2020, p. 135).
3. Compare with ANTIRACIST (noun) and BEHAVIORAL ANTIRACIST.

antiracist (noun)

1. Definitions: (a) “Supports an ANTIRACIST policy through their action or expressing an ANTIRACIST IDEA” (Kendi, 2019, p. 11); (b) “expresses the idea that racial groups are equals and none needs developing, and is supporting policy that reduces racial inequity” (Kendi, 2019, p. 24); (c) “conscious decision to make frequent, consistent, equitable choices daily. These choices require ongoing self-awareness and self-reflection as we move through life. In the absence of making ANTIRACIST choices, we (un)consciously uphold aspects of White supremacy, White-dominant culture, and unequal institutions and society. Being RACIST or ANTIRACIST is not about who you are; it is about what you do” (National Museum of African American History and Culture, n.d., para. 8).

2. Examples: See examples from BEHAVIORAL ANTIRACIST and CULTURAL ANTIRACIST.
3. Compare with ANTIRACIST (adjective) and BEHAVIORAL ANTIRACIST.

antiracist discrimination

1. Definition: “The defining question is whether the DISCRIMINATION is creating EQUITY or inequity. If DISCRIMINATION is creating EQUITY, then it is ANTIRACIST. If DISCRIMINATION is creating inequity, then it is RACIST. Someone reproducing inequity through permanently assisting an over-represented RACIAL group into wealth and power is entirely different than someone challenging that inequity by temporarily assisting an underrepresented RACIAL group into relative wealth and power until EQUITY is reached. The only remedy to RACIST DISCRIMINATION is ANTIRACIST DISCRIMINATION” (Kendi, 2019, p. 19).
2. Examples: (a) Establishing minimum requirements for a part-time or full-time position, use minimum criteria for selecting the initial candidate pool for hiring tutors, study group leaders, mentors, and professional staff (i.e., screening candidates into the interview pool and not screening candidates out); (b) not excluding job candidates due to a lack of some qualifications if those could be addressed through professional development; and (c) ensuring that the teaching staff, professional staff, and the student paraprofessionals (tutors, study group leaders, coaches, etc.) display demographic diversity that equals or exceeds the diversity of the general student body.
3. Compare with AFFIRMATIVE ACTION, ANTIRACISM, DISCRIMINATION, EQUALITY, and EQUITY.

assimilationist (noun)

1. Definition: “One who is expressing the RACIST IDEA that a racial group is culturally or behaviorally inferior and is supporting cultural or behavioral enrichment programs to develop that racial group” (Kendi, 2019, p. 24).
2. Examples: (a) A White person who feels guilt from growing up in a PRIVILEGED background decides to become involved in an EQUITY program to help students who the person believes are suffering from educational deficits and are academically inferior because of their ethnicity; (b) Indigenous children are forced to attend boarding schools under the Civilization Fund Act of 1819 (Wong, 2019); and (c) A tutoring di-

rector does not share a math employment opportunity with POC because the director perceives non-POCs as academically inferior to their White counterparts.

3. Compare with ACCULTURATION, ASSIMILATIONIST (adjective), BIAS, DISCRIMINATION, and RACIST IDEA.

assimilationist (adjective)

1. Definition: Describes the process that a dominant group makes invisible a smaller, powerless group defining characteristics and identity (Yoshino, 2013).
2. Examples: (a) Focusing on Standard Written English in school may be considered an assimilationist pedagogy, as it requires racial and ethnic groups to change or hide their linguistic heritage; (b) reminding immigrant children how fortunate they are to have arrived in the United States; (c) not permitting reading in or using language from the country of origin during class sessions; and (d) not recognizing the common experience of confusion and stressful transition for the immigrant or marginalized U.S. citizens.
3. Compare with ACCULTURATION, ASSIMILATIONIST (noun), BIAS, DISCRIMINATION, and RACIST IDEA.

behavioral antiracist

1. Definition: "Makes racial group behavior fictional and individual behavior real" (Kendi, 2019, p. 92).
2. Example: Challenging someone who makes a stereotypical statement about everyone within a racial or other identity group.
3. Compare with ANTIRACIST (adjective) and ANTIRACIST (noun).

behavioral racist

1. Definition: "One who is making individuals responsible for the perceived behavior of RACIAL groups and making RACIAL groups responsible for the behavior of individuals" (Kendi, 2019, p. 92).
2. Example: The false assumption that Black people are more likely to commit crimes than White people. In 2019, White people committed 7 million criminal offenses while Black people committed 2.6 million (Office of Justice Programs, 2019.)
3. Compare with RACIST and CULTURAL RACIST.

bias

1. Definition: (a) Tendency, inclination, or prejudice toward or against something or someone that is preconceived or unreasoned; (b) "stems from the internalization and institutionalization of particular values, beliefs, and assumptions. Not to be

confused with BIGOTRY, which is motivated by ill intent, bias can coexist unconsciously with good intentions, but nevertheless result in outcomes that are inclined to favor some groups over others" (Diversity Advisory Council, n.d., section B, para. 1).

2. Examples: (a) Deciding not to conduct an ANTIRACIST staff selection process that ensures that POC are fairly evaluated for a job opening; (b) an Asian American student coming into the center for math tutoring, and the White tutor blurting out, "I thought Asians were supposed to be good at math;" and (c) a student job applicant not being considered for an open position simply because they did not earn an A in a course for which they would like to be selected as a tutor.
3. Compare with: BIGOTRY, DISCRIMINATION, IMPLICIT BIAS, PRIVILEGE, and RACISM.

bigotry

1. Definition: "Intolerant PREJUDICE which glorifies one's own group and denigrates members of another group" (W.K. Kellogg Foundation, n.d.-a. p. 161).
2. Examples: (a) a group of men in a car driving by and yelling, "Muslim terrorist" at an Hispanic woman who is walking down the street; (b) the campus food service making racial assumptions about food preferences during special receptions it hosts for first-year students by serving fried chicken, collard greens, and macaroni and cheese to welcome first-year Black students and serving tacos for Hispanic or Latinx students at a separate function; and (c) a White hiring manager sharing employment opportunities only with White candidates.
3. Compare with BIAS, DISCRIMINATION, IMPLICIT BIAS, PREJUDICE, PRIVILEGE, and RACISM.

check your privilege

1. Definition: "When someone asks you to "CHECK YOUR PRIVILEGE," they are asking you to pause and consider how the advantages you've had in your life are contributing to your opinions and actions, and how the lack of disadvantages in certain areas is keeping you from fully understanding the struggles others are facing and in fact may be contributing to those struggles" (Oluo, 2019, p. 63).
2. Examples: (a) A White person considering the advantages that being White affords them regarding assumptions about their

creditworthiness, honesty, trustworthiness, among others; (b) advantages that accompany being the second generation in the family to attend or graduate from college; and (c) having family members who can mentor a younger person as they navigate the challenges of life.

3. Compare with BIAS, IMPLICIT BIAS, and PRIVILEGE.

climate

1. Definitions: (a) Perceptions and experiences by individual members of the organizational environment; and (b) influences how an individual feels valued, safe, fairly treated, and treated with dignity.
2. Examples: (a) At a learning center, POC experience a CLIMATE of hostility and unwelcomeness toward them due to the attitudes and behaviors of its staff. For example, a staff member assumes that a student of color who comes to the front desk needs a tutor when the student is actually applying for a tutoring or study group job; (b) usually, on predominantly White institutions with few faculty, staff, and administrators who are POC, the CLIMATE is “cold” or “chilly” to Latinx students who attend class or participate in predominantly White clubs; (c) When a Black student walks into a campus honor society meeting with all White students in attendance, the White students stare at the Black student as though they are entering by mistake. The honor society president asks immediately for credentials to validate the Black student’s participation but does not ask other White applicants to validate their participation. The Black student begins to feel unwelcomed, and, as a result, the events at the honor society create an atmosphere in which the Black student experiences STEREOTYPE THREAT; and (d) A Black adult male is stopped by the campus police while he is walking across the campus at night, which often happens to African, Black, Hispanic, Indigenous, and Latinx people. The Black male was wearing a dark pea coat and a kufi skull cap. The campus police demanded to know why he was on the campus. He replied that he just finished work after a long day as the Vice-Chancellor for Diversity Affairs and was walking home to have a late dinner with his family in his own neighborhood.
3. Compare with BIAS, BIGOTRY, IMPLICIT BIAS, RACISM, and STEREOTYPE THREAT.

cultural antiracist

1. Definition: “Rejects cultural standards and equalizing cultural differences among racial groups” (Kendi, 2019, p. 81).
2. Examples: (a) Appreciating differences and commonalities among artistic expressions such as in art, dance, and music; and (b) using INCLUSIVE curriculum that includes readings by authors from a variety of backgrounds.
3. Compare with ANTIRACIST (adjective), ANTIRACIST (noun), BEHAVIORAL ANTIRACIST, and INCLUSION.

cultural appropriation

1. Definition: “Power imbalance between the CULTURE doing the appropriating and the CULTURE being appropriated. That power imbalance allows the CULTURE being appropriated to be distorted and redefined by the dominant CULTURE and siphons any material or financial benefit of that piece of cultural way to the dominant CULTURE, while marginalized CULTURES are still persecuted for living in that CULTURE. Without that cultural power imbalance, CULTURAL APPROPRIATION becomes much less harmful” (Oluo, 2019, p. 147).
2. Examples: (a) A person taking music, dance, and style from another the Latinx community and profits off it for personal gain without acknowledging the source; (b) a sports team, organization, restaurant, or other commercial establishment using a logo or an image from an Indigenous culture for promotion; and (c) non-Indigenous music festival attendees wearing tribal headdresses as accessories.
3. Compare with CULTURE and MICROAGGRESSION.

cultural racist

1. Definition: “One who is creating a cultural standard and imposing a cultural hierarchy among RACIAL groups” (Kendi, 2019, p. 81).
2. Example: Black females are considered by some at the bottom of the social hierarchy and therefore, in practice, their contributions during class discussions or in their publications are dismissed or marginalized.
3. Compare with RACIST and BEHAVIORAL RACIST.

culture

1. Definition: Customary beliefs, social forms, and material traits of a RACIAL, religious, or social group (Merriam Webster, n.d., first definition).
2. Examples: African, Asian, Black, Indige-

nous, Latinx, Multi-RACIAL, and White.

3. Compare with CULTURAL APPROPRIATION, MICROAGGRESSION, and STEREOTYPE THREAT.

discrimination

1. Definition: “Unequal treatment of members of a group based on RACE, gender, religion, and other demographics” (Institute for Democratic Renewal and Project Change Anti-Racism Institute, 2019, p. 6).
2. Examples: (a) Due to PREJUDICE, not hiring someone from a particular RACIAL or other identity group; (b) not hiring someone from a particular RACIAL or other identity group due to the belief that there is sufficient representation of that group already present; and (b) Not providing services or making services inaccessible for a particular RACIAL group due to PREJUDICE.
3. Compare with AFFIRMATIVE ACTION, ANTI-RACIST DISCRIMINATION, BIAS, BIGOTRY, IMPLICIT BIAS, PREJUDICE, and RACISM.

diversity

1. Definitions: (a) Wide range of shared and different personal and group characteristics such as nationality, ETHNICITY, RACE, and religion; (b) “aspects of RACE, ETHNICITY, gender, sexual identity, class, and other demographic categories” (Institute for Democratic Renewal and Project Change Anti-Racism Institute, 2019. p. 8); and (c) “embodies inclusiveness, mutual respect, and multiple perspectives and serves as a catalyst for change resulting in EQUITY” (Diversity Advisory Council, n.d., section D, para. 5).
2. Examples: (a) Visible characteristics such as RACE, gender, and age; and (b) “... less obvious characteristics like personality style, ethnicity, ability, prior college experience by family member, economic status, academic preparation, education, living location, religion, job function, life experience, lifestyle, sexual identity, gender identity, geography, regional differences, work experience, and family situation” (Center for Equity, Gender, and Leadership, 2020, para. 38).
3. Compare with CULTURE, ETHNICITY, and RACE.

equality (synonymous with “equal opportunity,” a now outdated term)

1. Definition: Ensuring that everyone has similar opportunities for success, such as the same quality of teaching materials, textbooks, and qualified teachers regardless of where they are attending school. The focus

is providing an equal starting context for learning rather than similar outcomes for the students. On the other hand, EQUITY is focused on all student demographic groups achieving equal outcomes, such as high school graduation rates, grades, acceptance to college, and graduation rates.

2. Examples: (a) Free test preparation materials and workshops for college admission; (b) financial aid for all students; (c) no use of standardized college admission exams; and (d) colleges employing holistic, asset-based admissions criteria.
3. Compare with AFFIRMATIVE ACTION, EQUITY, INCLUSION, and SOCIAL JUSTICE.

equity

1. Definitions: (a) “EQUITY recognizes that each person has different circumstances and allocates the exact resources and opportunities needed to reach an equal outcome” (MPH@GW, 2020, para. 2). “EQUITY is a solution for addressing imbalanced social systems. Justice can take EQUITY one step further by fixing the systems in a way that leads to long-term, sustainable, EQUITABLE access for generations to come” (MPH@GW, 2020, para. 5). In contrast, EQUALITY “means [that] each individual or group of people is given the same resources or opportunities” (MPH@GW, 2020, para. 2); (b) “proportional distribution or parity of desirable outcomes across groups. Sometimes confused with EQUALITY, EQUITY refers to outcomes, while EQUALITY connotes equal treatment” (Diversity Advisory Council, n.d., section E, para. 6).
2. Examples: (a) Giving students with certain disabilities accommodations so they can thrive in their classes and earn the same outcomes as students without similar disabilities; (b) providing the services and resources needed for students who are POC to achieve outcome rates for graduation, homeownership rates, and wealth-accumulation that are similar to outcome rates of White students; (c) partially basing public institution funding on the institution’s achievement of student demographics that are similar for both graduating and admitted students; and (d) law enforcement treating protestors inequitably, such as the difference in police treatment of Black Lives Matter protestors at Lafayette Park in Washington, DC on June 1, 2020 (where protestors were overwhelmingly met with rubber bullets and tear gas) as compared to the treatment of White protestors who

stormed the Capitol on January 6, 2021 (where protesters were met only with Capitol police with no call for backup, national guard, or law enforcement presence). But this is “White man’s country, so they are allowed to go into the Capitol and take it over. They are allowed to do whatever they want” (BLM activist, personal communication, 2021).

3. Compare with AFFIRMATIVE ACTION, ANTIRACISM, ANTIRACIST, ANTIRACIST DISCRIMINATION, EQUALITY, INCLUSION, and SOCIAL JUSTICE.

ethnic antiracism

1. Definition: “A powerful collection of ANTIRACIST policies that lead to EQUITY between racialized and ethnic groups and are substantiated by ANTIRACIST ideas about racialized ethnic groups” (Kendi, 2019, p. 56).
2. Examples: (a) An ethnically diverse coalition of faculty, staff, and student employees peacefully protest DISCRIMINATION against Hispanic and Latinx groups regarding their lower salary and inequitable personnel practices; and (b) Black students peacefully protest against prejudice found among White faculty who unfairly grade according to perceived notions that POC students are unable to produce high-quality academic writing (i.e., an African American male in a philosophy class writing an outstanding paper and being unfairly accused of plagiarism because he was from the southwest side of Washington, DC, which is a predominately lower-socio economic section of town).
3. Compare with ALLY, ANTIRACISM (verb), ANTIRACIST (noun), SPACE ANTIRACISM, and SOCIAL JUSTICE.

ethnic racism

1. Definitions: (a) “powerful collection of RACIST POLICIES that lead to inequity between racialized ethnic groups and are substantiated by RACIST IDEAS about racialized ethnic groups” (Kendi, 2019, p. 56); and (b) racializing ethnic groups serves to create hierarchies of value. RACE becomes more important than ETHNICITY (Kendi, 2019).
2. Examples: (a) A PRIVILEGED English professor assigned lower grades on a Black student’s papers because the teacher automatically associated the paper with Ebonics. In this particular case, a White student (a friend of the Black student) swapped names on the paper, and both turned them in to the instructor. Once they received the papers back, they confronted the PRIVILEGED

professor because the White student, whose name was on the Black student’s paper, received an A grade, while the Black student, whose name was on the White student’s paper, received a C. Once confronted, the PRIVILEGED professor said nothing, took both papers from them, walked away, and did not change the grades; and (b) A PRIVILEGED English professor referred one of his Black female students (who was earning straight A’s in his class) to interview for a writing center peer tutor position. When she arrived for the interview and asked to see the director, the director (a PRIVILEGED person) stopped her at the door and insisted that she was waiting for another person, yet the director kept saying her name. After several interchanges, with the tone of the director getting nastier and more persistent for her to leave, the Black student said, “My name is so-and-so.” The Director was embarrassed and excused herself for a moment, came back, and followed through with the interview. The Black student was subsequently hired for the position.

3. Compare with INSTITUTIONAL RACISM, PASSIVE RACISM, RACISM, SPACE RACISM, and STRUCTURAL RACISM.

ethnicity

1. Definition: ‘Social construct that divides people into smaller social groups based on characteristics such as shared series of group membership, values, behavioral patterns, language, political and economic interests, history, and ancestral geographic location” (Florida Institute of Technology, n.d., para. 15)
2. Examples: Cuban, Hmong, and Mexican.
3. Compare with DIVERSITY and RACE.

implicit bias

1. Definition: “Refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner. These BIASES, which encompass both favorable and unfavorable assessments, are activated involuntarily and without an individual’s awareness or intentional control. Residing deep in the subconscious, these BIASES are different from known BIASES that individuals may choose to conceal for the purposes of social and/or political correctness. Rather, IMPLICIT BIASES are not accessible through introspection. The implicit associations we harbor in our subconscious cause us to have feelings and attitudes about other people based on characteristics such as RACE, ETHNICITY, age, and ap-

pearance. These associations develop over the course of a lifetime beginning at a very early age through exposure to direct and indirect messages. In addition to early life experiences, the media and news programming are often-cited origins of implicit associations” (Kirwan Institute for the Study of Race and Ethnicity, 2012, para. 1–2).

2. Examples: (a) Assuming that some RACIAL groups are better or worse athletes than others for a particular sport; (b) assuming that students of color are often academically underprepared for college-level work; (c) assuming that Asians are better at math than other ethnic groups; and (d) a male White student not wanting to work with a female Black computer science tutor because he assumes that she is not as capable as a White male tutor.
3. Compare with BIAS, BIGOTRY, DISCRIMINATION, PRIVILEGE, and RACISM.

impostor syndrome

1. Definition: “Also known as IMPOSTORSHIP or IMPOSTOR PHENOMENON, describes a psychological phenomenon in which people are unable to internalize their accomplishments. IMPOSTORSHIP characteristics are largely organized into three subcategories: (1) feeling like a fake, or the belief that one does not deserve one’s success; (2) attributing success to luck or other external reasons and not to one’s own internal abilities; and (3) discounting success, or the tendency to downplay or disregard achievement of success” (Dancy, 2017, pp. 933).
2. Examples: IMPOSTER SYNDROME may be experienced when (a) A new tutor from a historically underrepresented or disadvantaged background compares themselves to other tutors, regardless of having been hired under the same requirements and fulfilling the necessary qualifications; (b) An Asian American professor comes into a new position with a decade of experience does not feel as smart as her peers; and (c) As a Black male, I was marginalized repeatedly by White superiors since they perceived that because I was raised in the “hood,” my contributions and background were less than theirs. Furthermore, when I proposed a great idea concerning programming, I was accused of plagiarism or stealing a White colleague’s ideas.
3. Compare with CULTURE, MACROAGGRESSION, MICROAGGRESSION, and STEREOTYPE THREAT.

inclusion

1. Definitions: (a) “Providing equal educational opportunity by co-creating learning communities in which unique needs and diverse capacities are recognized, understood, accepted, and valued” (Arendale, 2007, p. 21); and (b) “core element for successfully achieving diversity, INCLUSION is created by nurturing the culture and CLIMATE of the institution through professional development, education, policy, and practice. The objective is to create a CLIMATE that fosters belonging, respect, and value for all and encourages engagement and connection throughout the institution and community” (Diversity Advisory Council, n.d., section I, para. 1).
2. Examples: (a) A person of color worked at three predominantly White institutions where they did not experience a CLIMATE of INCLUSION since they were excluded from many decision-making activities. When they began working at a Historic Black College or University (HBCU), they did experience INCLUSION since they were treated as an integral part of the decision-making process; (b) Policies and procedures ensure that resources are accessible to all students; and (c) Advisory boards ensure that multiple student identities are represented.
3. Compare with ANTIRACISM, ANTIRACIST, ANTIRACIST DISCRIMINATION, EQUALITY, and EQUITY.

institutional racism (synonymous with STRUCTURAL RACISM or systemic racism).

1. Definitions: (a) A network of institutional structures, policies, and practices that create advantages and benefits for White people, and DISCRIMINATION, oppression, and disadvantage for people from targeted RACIAL groups. The advantages created for White people are often invisible to them or are considered “rights” available to everyone as opposed to “privileges” awarded to only some individuals and groups (Adams et al., 2007, p. 93); (b) “refers specifically to the ways in which institutional policies and practices create different outcomes for different RACIAL groups. The institutional policies may never mention any RACIAL group, but their effect is to create advantages for whites [*sic*] and oppression and disadvantage for people from groups classified as non-white” (Potapchuk et al., 2005, p. 39); and (c) “The difference between STRUCTURAL RACISM and MACROAGGRESSIONS

is MACROAGGRESSIONS are purposeful, deliberate, and blatantly damaging acts that make an impact at the individual level. STRUCTURAL RACISM is integral to everyday, ordinary interactions” (Osanloo et al., 2016, p. 7).

2. Examples: (a) Government policies that explicitly restrict the ability of people to get loans to buy or improve their homes in neighborhoods with high concentrations of African Americans (also known as “red-lining”); (b) city sanitation department policies that concentrate trash transfer stations and other environmental hazards disproportionately in communities of color (Potapchuk et al., 2005); and (c) admissions departments that do not have POC recruiters may decrease the number of POC who apply since they will not meet someone from a culturally and ethnically diverse background may have experienced similar life experiences and not see someone with whom they can identify.
3. Compare with ETHNIC RACISM, MACROAGGRESSION, MICROAGGRESSION, PASSIVE RACISM, RACISM, and SPACE RACISM

intersectionality

1. Definitions: (a) “analytical framework through which the relationship among systems of oppression can be understood. African American women made an early contribution to this analysis in the 19th century. Recognizing that they experienced racism and sexism differently from both Black men and White women even while they shared commonalities with both, they argued that a struggle that did not simultaneously address sexism and racism would only perpetuate both” (Diversity Advisory Council, n.d., section I, para. 4); and (b) “SOCIAL JUSTICE movements consider all INTERSECTIONS of identity, PRIVILEGE, and oppression that people face” (Oluo, 2019, p. 7.)
2. Examples: (a) Students from multiple affinity groups collaborating to discuss ways of combating systematic oppression experienced by members of marginalized groups on their campus; and (b) acknowledging the two sets of challenges that a woman of color may face in a field dominated by White men.
3. Compare with CLIMATE and SOCIAL JUSTICE.

macroaggressions

1. Definition: “Microassaults conducted in a public forum or sphere, and are buttressed by the nuanced behaviors that exist in a particular or specific context. That is to

say, MACROAGGRESSIONS are verbal or non-verbal communications that are not only purposeful and deliberate, but are meant to create longitudinally debilitating and depressive results in the victim. They are persistent and malicious. MACROAGGRESSIONS occur in the nebulous space between MICROAGGRESSIONS and INSTITUTIONAL/STRUCTURAL RACISM” (Osanloo et al., 2016, p. 6).

2. Examples: (a) Physical violence; (b) verbal abuse; (c) over-policing Black and Latinx communities; (d) stopping POC drivers or walkers in predominantly White neighborhoods without probable cause; and (e) banks DISCRIMINATING against Black and Latinx families by denying their applications for mortgage loans while granting a loan to a White family with a similar loan application, loan history, and the same available financial assets.
3. Compare with CLIMATE, IMPOSTOR SYNDROME, MICROAGGRESSION, and STRUCTURAL RACISM.

microaggression

1. Definitions: (a) “Small daily insults and indignities perpetuated against marginalized or oppressed people because of their affiliation with the marginalized or oppressed group and here we are going to talk about RACIAL microaggressions—insults and indignities perpetuated against people of color. But many aggressions are more than just annoyances. The cumulative effect of these constant reminders that you are less valuable than others does real psychological damage. Regular exposure to micro aggressions causes POC to feel isolated and invalidated” (Oluo, 2019, p. 169); (b) the term “ABUSE is used instead of MICROAGGRESSION because aggression is not as exacting a term. ABUSE accurately describes the action and its effects on people: distress, anger, worry, depression, anxiety, pain, fatigue, and suicide. What other people call RACIAL MICROAGGRESSIONS, I call RACIST ABUSE” (Kendi, 2019, p. 47); (c) “stunning, automatic acts of disregard that stem from unconscious attitudes of White superiority and constitute a verification of Black inferiority” (Davis, 1989, p. 1576); and (d) “an onslaught of derogatory comments, invalidations, avoidance behaviors, and deficit-laden comments, the experiences may weigh heavy on an individual’s spirit, self-worth, and sense of self” (Osanloo et al., 2016, p. 5).

2. Examples: (a) “Sue et al. (2007) distinguished three types of microaggressions. They are: microassaults; microinsults; and microinvalidations. A microassault is ‘an explicit RACIAL derogation characterized primarily by a verbal or nonverbal attack meant to hurt the intended victim through name-calling, avoidant behavior, or purposeful discriminatory actions (p. 274).’ ... While explicit, overt, and deliberate, they are deemed ‘micro’ because they are often conducted on an individual or private level. ... Microinsults are characterized as ‘... communications that convey rudeness and insensitivity and demean a person’s RACIAL heritage or identity. Microinsults represent subtle snubs, frequently unknown to the perpetrator, but clearly convey a hidden insulting message to the recipient of color’ (Sue et. al., 2007, p. 274). ... Last, microinvalidations are described as: ‘... communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color’ (Sue et al., 2007, p. 274)” (Osanloo et al., 2007, p. 5); (b) ethnic or identity group jokes; (c) singling out POC in the room to speak on behalf of their RACE or other identity group; (d) when visiting the campus learning center multiple times weekly, Catelyn, who is White, speaks to every staff member except Tanisha, who is Black; (e) telling POC that they speak good English (Osanloo et al., 2017) or write very well; (f) crossing to the opposite side of the street when you see a Black man walking in your direction; (g) telling POC that they are “cute but not that bright” because of their ETHNICITY or RACIAL background; (h) a White PRIVILEGED female comparing her tanned arm with that of her Black colleague in order to measure the darkness of her tan; (i) in front of other White colleagues at work, a White person touching the hair of an African American woman to see what dreadlocks feel like and thus interrupting the African American female as she is making her point and contributing to the conversation; (j) a teacher not calling on the first student to raise her hand, who is Black, and instead calling on a White student who raises her hand afterward; (k) a White woman clutching her purse when a Black man sits next to her (Kendi, 2019, p. 46); and (l) a Black person not receiving the same benefit of the doubt when stopped by the police as is given to White youth.
 3. Compare with CLIMATE, CULTURAL APPROPRIATION, IMPOSTOR SYNDROME, MACROAGGRESSION, STEREOTYPE THREAT, and STRUCTURAL RACISM.
- passive racism**
1. Definition: “Beliefs, attitudes, and actions that contribute to the maintenance of RACISM without openly advocating violence or oppression. The conscious and unconscious maintenance of attitudes, beliefs, and behaviors that support the system of RACISM, RACIAL PREJUDICE, and RACIAL dominance” (Wijeysinghe, et al., 1997, p. 89).
 2. Examples: (a) During the current year’s faculty professional development session on inclusive teaching, a tenured faculty member said that the theme of each year’s professional development session centers—the lack of friendliness towards members of marginalized communities as it relates to RACE or ETHNICITY—was untrue and offensive and that we should instead focus on issues related to teaching; (b) Rather than having the admissions director make a formal recruiting presentation accompanied by offers for grants and scholarships to the TRIO Upward Bound (UB) students, the college assumes that these students will automatically apply for admission based upon encouragement from the UB staff. Meanwhile, these same ethnically diverse students are actively recruited and offered grants and scholarships by admissions departments at several surrounding public and private institutions in the city; and (c) White people continue to participate in CULTURAL APPROPRIATION, which is a form of passive racism.
 3. Compare with ETHNIC RACISM, INSTITUTIONAL RACISM, SPACE RACISM, and STRUCTURAL RACISM.
- prejudice**
1. Definition: “Pre-judgment or unjustifiable, and usually negative, attitude of one type of individual or groups toward another group and its members. Such negative attitudes are typically based on unsupported generalizations (or stereotypes) that deny the right of individual members of certain groups to be recognized and treated as individuals with individual characteristics” (Institute for Democratic Renewal and Project Change Anti-Racism Institute, 2019, p. 15).
 2. Examples: (a) Assuming homeless POC are houseless because they have an addiction problem or mental health issues; (b) a

White student is angry because the teacher put a Black male student in their small group; (c) a White student is angry because of perceived notions of laziness or lack of intelligence of other races and therefore does not include any of the Black student's contributions in a small group project; (d) belief that all Black women are "angry;" (e) belief that all White female college students, especially sorority White females, are sexually promiscuous and (f) locking the car doors when riding through urban neighborhoods perceived as predominately lower-socio economic sections of cities (e.g., North Philadelphia, Homewood section of Pittsburgh, Northeast Minneapolis).

3. Compare with BIAS, DISCRIMINATION, IMPLICIT BIAS, and RACISM.

privilege

1. Definition: (a) "A right that only some people have access or availability to because of their social group membership. Because hierarchies of PRIVILEGE exist, even within the same group, people who are part of the group in power (White people with respect to people of color, men with respect to women, heterosexuals with respect to homosexuals, adults with respect to children, and rich people with respect to poor people) often deny they have privilege even when evidence of differential benefit is obvious" (Institute for Democratic Renewal and Project Change Anti-Racism Institute, 2019, p. 15); and (b) "These advantages can often be ascribed to certain social groups: PRIVILEGE based on RACE, physical ability, gender, class, etc. But these PRIVILEGES can also lie in areas that you may have not considered, like sexuality, body type, and neurological differences" (Oluo, 2019, p. 60).
2. Examples: (a) A person who is a Brahmin Hindu has access to education loans, jobs, and wealth more easily than those who are not born into this caste; (b) White people are more often given the benefit of the doubt than Black people by police when they are stopped and questioned by them; and (c) White people are more likely than other RACIAL groups to be approved for car and home loans and at lower rates than POC.
3. Compare with BIAS, CHECK YOUR PRIVILEGE, DISCRIMINATION, IMPLICIT BIAS, and RACISM.

race

1. Definitions: (a) "A power construct of collected or merged difference that lives so-

cially" (Kendi, 2019, p. 35); and (b) "RACE is a central organizing idea that shapes much of human life across the world. ... Currently, RACE is understood to be socially constructed because the value placed on RACIAL groupings reflects a social and political rationale rather than distinct genetic differences. Historically, RACE has been conceptualized using three types of theories: (1) ETHNICITY, (2) class, and (3) nation" (Williams, 2017, p. 1389).

2. Examples: (a) Skin color, (b) ancestral heritage, (c) cultural affiliation, (d) cultural history, and (e) ethnic classification.
3. Compare with DIVERSITY and ETHNICITY.

racial equity

1. Definition: "When two or more RACIAL groups are standing on a relatively equal footing" (Kendi, 2019, p. 18).
2. Examples: (a) The rates of homeownerships in a city are nearly the same regardless of RACIAL group; (b) An audit of salaries for employees in a business does not display RACIAL disparity; and (c) Insurance premiums display no differences when analyzed for the RACE of the policyholder.
3. Compare with DISCRIMINATION and RACIAL INEQUITY.

racial healing

1. Definition: "Racial healing recognizes the need to acknowledge and tell the truth about past wrongs created by individual and systemic racism and address the present consequences. It is a process and tool that can facilitate trust and build authentic relationships that bridge divides created by real and perceived differences. We believe it is essential to pursue racial healing prior to doing change making work in a community. Because, before you can transform systems and structures, you must do the people work first" (W.K. Kellogg Foundation, n.d.-b, p. 5).
2. Examples: (a) Access to quality health care is as easily available and financially accessible in the urban core as it is in the suburbs; (b) Health indicators for POC such as childbirth survivability, diabetes, heart health, and length of life are similar to those of White people; (c) Homeownership rates among POC and White people are similar; (d) Regardless of geographical location, housing occupancy is diverse between POC and White neighborhoods and the city-at-large; (e) Business employees are RACIALLY diverse regardless of work location; and (f) Regardless of religious faith, the members of religious congregations are RACIALLY diverse.

3. Compare with RACIAL HUMILITY and RACIAL RECONCILIATION.

racial humility (synonymous with CULTURAL HUMILITY)

1. Definitions: (a) Learning across the lines of RACIAL difference (Gallardo, 2013); and (b) a look back (at prior RACIAL injustices) in order to move forward (Perkins, 2018).
2. Examples: (a) Engaging in conversations with people of different ethnic groups concerning issues of RACE; (b) a personal or a professional development activity being conducted by learning center staff, tutors, faculty members, or student study group leaders who read, study, and reflect about books on RACE and consider changes in personal actions, attitudes, and words; (c) visiting civil rights sites and learning about the historical events that occurred there and, if possible, visiting the Smithsonian National Museum of African American History and Culture and continuing with a deeper study of the events and conversations with POC; (d) attending an ethno-religious service or social club whose members are of a different ETHNIC group than their own for a significant period of time, talking with the regular attendees, and becoming a learner by listening and observing (Perkins, 2018); (e) attending a branch meeting of the NAACP or the National Urban League in your city or on a college campus; and (f) attending campus events hosted by different RACIAL groups and reflecting about what was seen and heard.
3. Compare with RACIAL HEALING and RACIAL RECONCILIATION.

racial inequity

1. Definition: “When two or more RACIAL groups are not standing on approximately equal footing” (Kendi, 2019, p. 18).
2. Examples: Differences among RACIAL groups regarding (a) access to equal standards of education; (b) access to equal standards of health care, home ownership, job opportunity, retirement savings, salary and benefits, and social capital; and (c) home ownership; over 73% of White families live in owner-occupied homes, 47% of Latinx families in owner-occupied homes, and 42% of Black families in owner-occupied homes (USA Facts, 2020.)
3. Compare with BIAS, BIGOTRY, DISCRIMINATION, and IMPLICIT BIAS, RACIAL EQUITY.

racial policy (synonymous with INSTITUTIONAL RACISM, STRUCTURAL RACISM, and systemic racism).

1. Definition: “By policy, I mean written and

unwritten laws, rules, procedures, processes, regulations, and guidelines that govern people. There is no such thing as a nonracist or RACE-neutral policy. Every policy in every institution in every community in every nation is producing or sustaining either RACIAL inequity or equity between RACIAL groups” (Kendi, 2019, p. 18).

2. Examples: (a) offering tutoring sessions and study groups during hours when a higher percentage of students of color are working in comparison to White students; (b) consistently selecting student professionals who are recommended by the classroom instructors for positions of tutors, study group leaders, and other student paraprofessionals without leaving the final decision to the program administrator who can balance applicant experiences with creating a RACIALLY diverse staff; (c) “use of standardized tests to measure aptitude and intelligence is one of the most effective racist policies ever devised to degrade Black minds and legally exclude Black bodies. We degrade Black minds every time we speak of an ‘academic achievement gap’ based on these numbers. It creates a RACIAL hierarchy with Whites and Asians at the top and Latinx and Blacks at the bottom” (Kendi, 2019, pp. 101–102). The real issue is an opportunity gap rather than an achievement gap, with inequitable funding between predominantly Black and White schools for curriculum, teacher-student ratios, and per-pupil expenditures (Kendi, 2019).
3. Compare with RACISM, STRUCTURAL RACISM, and systemic racism.

racial reconciliation

1. Definitions: (a) “Involves three ideas. First, it recognizes that RACISM in America is both systemic and institutionalized, with effects on both political engagement and economic opportunities for minorities. Second, reconciliation is engendered by empowering local communities. Lastly, justice is the essential component of the conciliatory process-justice that is best termed as restorative rather than retributive, while still maintaining its vital punitive character” (William Winter Institute for Racial Reconciliation, 2007, para. 2); (b) The first step in RECONCILIATION is seeing the problem, not just the solution. “We’ve not been able to arrive at the solution because we haven’t acknowledged the problem” (Perkins, 2018, p. 16); and (c) “Biblical REC-

ONCILIATION is the removal of tension between parties and the restoration of loving relationships” (Perkins, 2018. p. 17).

2. Examples: (a) In 2018, the City of Charleston City Council formally recognized and apologized for its role in the slave trade. The city also pledged to create an office for RACIAL reconciliation to help with healing (Gomez, 2018); and (b) The city government of Evanston, Illinois, created a city reparations fund for local African Americans by using sales tax income on recreational marijuana (Lutz, 2020).
3. Compare with RACIAL HEALING and RACIAL HUMILITY.

racism

1. Definitions: (a) “Marriage of RACIST POLICIES and RACIST IDEAS that produces and normalizes RACIAL inequities” (Kendi, 2019, p. 18); and (b) “specific ways in which institutional policies and practices create different outcomes for different RACIAL groups. The policies may never mention specific RACIAL groups, but their effect is to create advantages for Whites [*sic*] and oppression and disadvantage for people from groups classified as non-White” (W.K. Kellogg Foundation, n.d.-a, p. 164).
2. Examples: See examples for ETHNIC RACISM, INSTITUTIONAL RACISM, PASSIVE RACISM, SPACE RACISM, and STRUCTURAL RACISM.
3. Compare with ETHNIC RACISM, INSTITUTIONAL RACISM, PASSIVE RACISM, SPACE RACISM, and STRUCTURAL RACISM.

racist (adjective)

1. Definitions: (a) “One who is supporting a RACIST POLICY through their actions or inaction or expressing a RACIST IDEA” (Kendi, 2019, p. 9); and (b) “But there is no neutrality in the racism struggle. The opposite of ‘RACIST’ is ‘antiracist’” (Kendi, 2019, p. 10).
2. Examples: See BEHAVIORAL RACIST and CULTURAL RACIST.
3. Compare with BEHAVIORAL RACIST and CULTURAL RACIST.

racist idea

1. Definitions: (a) “Any idea that suggests one RACIAL group is inferior or superior to another RACIAL group in any way. RACIST IDEAS argue that the inferiorities and superiorities of RACIAL groups explain RACIAL inequities in society” (Kendi, 2019, p. 20). “The source of RACIST IDEAS was not ignorance and hate, but self-interest” (Kendi, 2019, p. 230); and (b) “make people of color think less of themselves, which make

them more vulnerable to RACIST IDEAS and makes White people think more of themselves, which further attracts them to RACIST IDEAS” (Kendi, 2019, p. 6).

2. Examples: (a) The idea that there is a hierarchy of opportunity, of which the PRIVILEGED White male sits at the top, and the Black female sits at the bottom; (b) the false belief that most welfare recipients are Black people when actually the majority are White people. The majority of Black people refuse to accept welfare assistance (Kendi, 2019); (c) false assumption that Black neighborhoods have a higher rate of crime than White neighborhoods (Kendi, 2019); (d) terrorist are most have roots from the Middle East countries; and (e) most Black women are angry and loud.
3. Compare with RACISM.

space antiracism

1. Definition: “Powerful collection of ANTI-RACIST policies that lead to racial EQUITY between integrated and protected racialized spaces, which are substantiated by ANTIRACIST IDEAS about racialized spaces” (Kendi, 2019, p. 166).
2. Examples: (a) Classrooms for developmental-level courses and the offices of those who teach them are of the same quality as those for the undergraduate education classes; (b) Learning centers, tutoring centers, and educational equity grant programs such as TRIO are easily and quickly accessed by students through nearby parking lots and campus shuttles; (c) Office, meeting, and classroom spaces used by educational equity grant programs such as TRIO are similar those of undergraduate education programs; (d) Public bus routes to the campus offer frequent bus connections; and (e) Institutionally-sponsored bus routes are provided to ensure easy access for students who live in lower-economic neighborhoods for easy pickup and connection to the public bus or transit system.
3. Compare with ANTIRACISM (verb), ANTI-RACIST (noun), ETHNIC ANTIRACISM, and SOCIAL JUSTICE.

space racism

1. Definition: “Powerful collection of RACIST POLICIES that lead to resource inequity between racialized spaces or the elimination of certain racialized spaces, which are substantiated by RACIST IDEAS about racialized spaces” (Kendi, 2019, p. 166).
2. Examples: (a) Locating ethnic cultural centers in the basements of old buildings which

takes them away from the natural flow of students through the college campus; (b) locating learning centers which serve a culturally-diverse group of students in buildings without nearby parking lots or not close to campus bus routes making it inconvenient for students to access, especially during unsafe weather conditions; (c) locating academic support services which serve a diverse population of students, especially those from marginalized backgrounds in the oldest and most dilapidated campus buildings; (d) campus security officers more often stopping Black people than White people to check why they are on campus; (e) campus buildings of taxpayer-funded institutions that are locked and only admissible with the presentation of an institution-issued identity card, which creates an unfriendly atmosphere for staff and students, especially for those that are first-generation college and find the college experience unfamiliar and sometimes intimidating; (f) real estate agents steering prospective homeowners to neighborhoods of similar demographics (ETHNICITY and RACE) despite having credit ratings that allow them to purchase more expensive homes in predominantly White neighborhoods (Tatum, 2017); and (g) EQUITY programs such as TRIO being assigned by senior college administrators to old offices and classroom spaces abandoned by academic departments with hand-me-down furniture, old equipment, and dilapidated facility conditions. This treatment creates an impression of the low priority for the program by the campus administrators and diminished importance for the students who are often from diverse and marginalized backgrounds.

3. Compare with ETHNIC RACISM, INSTITUTIONAL RACISM, PASSIVE RACISM, RACISM, and STRUCTURAL RACISM.

structural racism

1. Definition: STRUCTURAL RACISM is within systems and organizations. The RACISM is embedded into and throughout the everyday policies, rules, and regulations that are not neutral, but rather afford advantages to one or more RACES over others.
2. Examples: (a) It is not unusual within an urban high-school for textbooks to be used and out-of-date while suburban students have newer books and learning resources due to their higher per capital funding for the students; and (b) Immigration policies favor northern Europe and exclude or se-

riously reduce applicants from Africa and the Middle East (Kendi, 2019); “When Congress ended the national-origins quotas in the 1960s, lawmakers implemented a policy of seemingly “equal” country caps in order to limit legal immigration from Mexico and countries in Asia (Cook-Martin & Fitzgerald, 2014, para. 5).

3. Compare with ETHNIC RACISM, INSTITUTIONAL RACISM, PASSIVE RACISM, and SPACE RACISM.

social justice

1. Definitions: (a) The condition in which all people have equal access to education, employment, wealth, healthcare, well-being, justice, freedom, and opportunity; (b) a vision of society in which the distribution of resources is equitable and all members are physically and psychologically safe and secure (Adams et al., 2007); and (c) “individuals are both self-determining (able to develop their full capacities) and interdependent (capable of interacting democratically with others). SOCIAL JUSTICE involves social actors who have a sense of their own agency as well as a sense of social responsibility toward and with others, their society, and the broader world in which we live. These conditions we wish not only for our own society but also for every society in our interdependent global community. The process of attaining the goal of SOCIAL JUSTICE should also be democratic and participatory, inclusive and affirming of human agency and human capabilities for working collaboratively to create change. The goal of SOCIAL JUSTICE education is to enable people to develop the critical analytical tools necessary to understand oppression and their socialization within oppressive systems and to develop a sense of agency and capacity to interrupt and change oppressive patterns and behaviors in themselves and in the institutions and communities they are a part” (Bell, 2007, pp. 1–2).
2. Examples: (a) All people have equal access (EQUALITY) to education, employment, wealth, healthcare, well-being, justice, freedom, and opportunity; all people receive EQUITABLE outcomes from their education and employment regarding wealth, health, well-being, justice, freedom, and opportunity; and (c) access to distribution of resources, namely the COVID vaccine, is equally distributed to ethnic minorities and the poor.
3. Compare with ANTIRACISM, ANTIRACIST, ANTIRACIST DISCRIMINATION, EQUALITY, EQUITY, and INCLUSION.

stereotype threat

1. Definition: Risk of a person confirming unwarranted negative academic capability stereotypes based on an individual's RACIAL, ETHNIC, gender, or cultural group. This creates fear about academic failure, which results in difficulty focusing on academic tasks and lowering academic performance rather than predictions based on the person's academic preparation (Steele & Aronson, 1998).
2. Examples: (a) An academic advisor says that some students from Asian and White student groups will be naturally more successful in STEM academic majors than other RACIAL groups and therefore they should consider other academic majors and (b) a test administrator says to a group of ethnically diverse students that a high-stakes assessment will likely be a critical gatekeeper of whether a student is admitted to a highly selective STEM program.
3. Compare with CULTURE and IMPOSTOR SYNDROME.

tone policing

1. Definition: "When someone (the PRIVILEGED person) in a conversation or situation about oppression shifts the focus of the conversation from the oppression being discussed to the way it has been discussed. TONE POLICING prioritizes the comfort of the PRIVILEGED person in the situation over the oppression of the disadvantaged person" (Oluo, 2019, pp. 205–206).
2. Examples: (a) A White teacher or tutor telling POC to lower the volume of their conversation; (b) one person stating the other is acting too emotional while they are talking; (c) During a conversation about the history of racism perpetuated on Black and Indigenous populations, Jeremy (a White student), admonishes William (a Black student), for his emphatic manner of speaking in which he raises his voice when speaking about the topic, rather than the topic itself; (d) belief that an angry Black woman should refrain from conversations that may make her appear angry in a meeting; and (e) White resident assistants repeatedly telling the TRIO Upward Bound students they are too loud in the residence hall at night during their summer program while not doing the same for the White summer school residents in the same facility.
3. Compare with PRIVILEGE and RACISM.

Author Note

We owe much to the expertise of the authors, editors, and external review teams that created other race glossaries. We cited their work frequently in our glossary. Secondly, we acknowledge the Colleagues of Color for Social Justice (CCSJ). The coauthors of this glossary are members of that group. The CCSJ was created in fall 2020 to provide a forum for people of color in higher education to produce publications and media projects that intersect with race and social justice. This group will grow organically as we conduct our work. From a brief invitation in fall 2020 through a single email listserv, the group has grown to more than 50 participants. They serve in a variety of roles in academic affairs, enrollment management, and student affairs at various levels of their institutions. After starting with an initial set of writing and media projects, any member of CCSJ can propose new writing and media projects for others in the group to join. Periodically, the group will revisit the group name, purpose, composition, and projects. More information about CCSJ members and their publications and media are available at www.socialjustice.work. Currently, members are at various stages with a dozen publications and are contributing to our blog and Twitter channel. In the future, they will add a YouTube channel and Facebook page.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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