Reflection in Online Education

Managing peer-to-peer implicit bias in the classroom: Educator options for promoting inclusive and equitable higher-education learning

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Abstract: Some manifestations of bias amongst students may be more immediately apparent to instructors than others. While the urgency to address all forms of racism must not be overlooked, higher-education teachers may be more readily equipped to address explicit bias, as it is often most recognizable due to its overt nature. Yet an even greater looming threat for ensuring equity in the classroom is the necessity of addressing peer-to-peer implicit bias in the classroom.

This article attempts to provide solutions for higher-education instructors to address peer-to-peer bias in the classroom by: encouraging self-evaluation for implicit bias, discussing (both online and in-person) course structure and management strategies to prepare a neutral environment, providing tools to understand the impact of students' own implicit biases upon self-perception or performance, and engaging with implicit bias response as a process rather than a "fix." With a commitment to addressing ever-prevalent implicit bias in the classroom, educators may be well-positioned to improve classroom equity and respond to the injustices their students may experience.

Keywords: implicit bias, inclusion, equity, management, learning, classroom environment

Introduction

On May 25, 2020, George Floyd, a black man, died during an arrest for allegedly utilizing a counterfeit $20 bill at a grocery store in Minneapolis, MN. Mr. Floyd's death, and the harsh reality of the arresting officers' racially motivated actions, ignited a global firestorm of grief, anger, and unrest that has left virtually no person in the United States untouched by its reverberations.

Public demonstrations and rallies filled the streets of our cities across the country. Corporations have responded by reviewing equity policies and taking swift action to terminate employees who demonstrate disregard for equality. Media management companies have cancelled television shows glorifying police actions or refocused resources to provide continuous news coverage of our nation's varied responses. City governments have made assurances of immediate action to remedy inequities and address injustices. While many of these responses have been delivered swiftly on the heels of public outcry, it is yet to be determined if all (or any) of these responses will be sufficient to heal the pain of vulnerable communities.

Educators, however, are left alone in their classrooms to help some of those most significantly impacted by these events: students.

Higher-learning teaching professionals are called upon to engage with students who possess a maturity and a desire to engage with social justice, many of whom have had the opportunity to develop life experience, knowledge, and a personal belief system. While a 2019 UCLA national survey of undergraduate freshman students reported that 11.1% expected to participate in a protest during their college years (Stolzenberg, et al., 2019, p. 47), recent events may allow for a logical inference that this number may increase as students take to the streets to express their outrage at government systems. However, these passionate outcries do not fall aside at the threshold where street meets academic building. Educators must be prepared to address these convictions in the classroom as well.

In the spring of 1968, an elementary school teacher similarly faced the task of explaining a racially motivated assassination to her third-grade classroom. On April 4, 1968, the day after Dr. Martin Luther King, Jr. delivered his landmark address "I've Been to the Mountaintop," he was assassinated in an act of prejudice (Martin Luther King, Jr. Research and Education Institute, n.d.). Jane Elliott, a teacher in Riceville, IA, arrived at school the next morning to face

a room of nine-year-olds and their questions (Bloom, 2005). Understanding that her students would be impacted by familial influence, a lack of developed cognition about the events surrounding Dr. King's murder—and a need for guidance that would lead them to develop an understanding of discrimination and prejudice—Jane Elliott utilized this moment of national suffering to teach a (now infamous) lesson.

Elliott conducted what she termed an "exercise," during which all brown-eyed students were told that they were the "better" people in the room and were both cleaner and smarter than the blue-eyed students (Bloom, 2005). Elliott assigned special privileges to the brown-eyed students, such as longer recess breaks and preferential placement in class lines and observed as the brown-eyed students became emboldened by their preferred status and asserted themselves over the blue-eyed students.

The following school day, Elliott reversed the directions and told the blue-eyed students that they were now dominant (Bloom, 2005). While the blue-eyed students were observed to have a slight reduction in the degree of aggressiveness towards the brown-eyed students (thought anecdotally to be the result of the blue-eyed students having the fresh perspective of experiencing disparity the prior day), nevertheless the same behaviors resulted. At the conclusion of the exercise, Elliott gathered the students together to share and discuss their experiences. Elliott explained to the class that the actions they had engaged in or borne consequences of were discrimination. Elliott explained that discrimination had been the reason for Dr. King's assassination and urged her students to record their reflections of the experience.

Regardless of whether one may critique or applaud Elliott's methods, her response to an act of incredible violence, grief, and blatant prejudice in the classroom demonstrated the significant role educators play in responding to social inequities that manifest not just on a national or global scale, but in the classrooms of small towns as well. While higher-education teaching professionals still face the ever-prevalent task of confronting blatant discrimination in the classroom—a recent study from Stanford University has shown that evidence of homophily is present amongst student groups even in an online course setting (Baker, Dee, Evans, & John, 2018)—an even greater looming threat for ensuring equity in the classroom is the necessity of addressing peer-to-peer implicit bias in the classroom.

The prevalence of implicit bias has been a well-documented component of human existence. When describing the occurrence of implicit bias, some researchers have utilized the term "pervasive," arguing that "everyone possesses them" (Staats, Capatosto, Wright, & Contractor, 2015, p. 63). One may logically assume, therefore, that not only do educators introduce their own unconscious bias into the classroom, but also that students contribute their implicit biases as well.

The subject of implicit bias is both a rapidly developing field of study and trending topic of professional training. Implicit bias study has been used to establish informed and diversified hiring practices, improve equity in the workplace, improve unconscious bias in the justice system, and conduct medical research (Brownstein, 2019). By 2018, the United States Department of Justice had presented implicit bias training to more than 28,000 of its employees, demonstrating the importance of shifting our collective focus towards understanding and confronting unconscious bias in the workplace (Sleek, 2018).

Yet, despite the growing understanding of the critical role implicit bias plays in both personal and professional decision-making, relatively few resources exist to support those in management roles in addressing manifestations of peer-to-peer bias in either the workplace or the classroom. While regulating the thought process of others may be difficult, if not entirely impossible, teachers still face the insurmountable task of ensuring equitable classrooms in which all students are able to navigate both course content and peers in manner that ensures engaged learning. Ready, or not, teachers are called upon increasingly to manage peer-to-peer bias in their classrooms.

Awareness of Personal Implicit Bias

Many working professionals today have benefitted from the opportunity to engage in implicit bias training. Generally, educators serving in institutions that receive federal funds are required to attend Title IX and VI training sessions that frequently addresses diversity awareness and explicit bias response training (U.S. Department of Justice, n.d.) The frequency and widespread availability of this anti-discrimination training in higher education is supported by a 2015 report by the US Department of Education Office for Civil Rights, which stated that approximately 7,000 post-secondary institutions receive federal financial assistance and are required to adhere to Title IX requirements (including training) (Office for Civil Rights, 2015).

While it is a safe assumption that most educators are all too acutely aware of the existence of bias and discrimination in their classrooms—either through first-hand observation or through exposure during institutional training—it would be remiss to not discuss the significant connection between instructor implicit bias and the resulting prevalence of peer-to-peer implicit bias.

Implicit bias as a component of the human experience is well-documented as a persistent and intrusive factor in perception and decision-making processes (Brownstein, 2019). Left unexamined, unconscious bias may result in the biased and inequitable decision-making. As leaders in a classroom, educators set the tone for classroom decorum. If impacted by implicit bias, teachers may unknowingly cultivate an environment in which bias and discrimination seed and become the weeds that impact a student's ability to grow and flourish in knowledge. Should instructors not address their own personal bias, many good-faith attempts to extract racism from classrooms may not be successful (Benson & Fiarman, 2019).

The impact of a teacher's perception upon a classroom has been a long-examined topic. A 1968 study of elementary school teachers demonstrated, with clarity, how a teacher's perceptions of the classroom may directly impact the environment and student performance (Rosenthal & Jacobson, 1968). Researchers in this study began by administering a standardized test to elementary school classes to measure levels of student performance. After the testing, the researchers identified the "highest achievers" for each classroom to the teacher. The teachers were carefully instructed to not reveal the test results to the students or make any adjustments to the amount of time spent with those students. Researchers then readministered the standardized testing at the end of the school year and determined that those identified at the beginning of the school year as high achievers were, in fact, the highest achievers in their respective classes at the end of the year. The catch? Those students identified as "high achievers" at the beginning of the school year had, in fact, tested as average achievers during the initial test. The conclusion drawn from the study was that the teacher's own beliefs on the achievement capabilities of those students caused implicit teaching practice changes that ultimately impacted students' abilities to learn and achieve.

The lessons learned in 1968 about a teacher's ability to impact student performance based solely upon the teacher's own perception of ability emphasize the importance of educator

commitment to identifying and addressing implicit bias (Rosenthal & Jacobson, 1968). As this study suggests, a teacher's unconscious perceptions play a significant role in the teacher's treatment of individual students. An impact to the overall classroom environment—particularly with adult learners in higher education who are likely to better recognize subtle differences in teaching approaches—is a reasonable extension of these findings.

One manner by which instructors may develop a better understanding of individual implicit bias is to engage with learning tools designed to aid in identifying potential areas of bias. For example, Harvard University has developed an array of popular tests as part of its "Project Implicit" aimed at assisting users in identifying potential areas of implicit bias (Project Implicit, n.d.). The Harvard Implicit Associations Tests (IAT) allow users to explore personal hidden biases by answering a series of questions and engaging in tasks assigned within the tool. Upon completion of a test, users will receive results indicating areas of potential bias on topics including race, gender, weight, age, disability, sexuality, etc. While it is important to recognize that implicit bias tools may not be able to measure the precise amount or degree of bias, using these resources may provide a valuable opportunity to self-assess how unconscious bias impacts each educator's learning environment.

Identifying personal biases goes beyond merely making an instructor aware of their existence, but may also allow for opportunities to examine how these biases may manifest in the instructor's own teaching practices. Using colloquial terms such as "you guys" (which applies gender-specific pronouns favoring a traditionally favored gender) in addressing the class, assigning gender-normative roles for characters in a case study, making behavioral assumptions based upon race or ethnicity, or assuming equitable access to resources may result from the instructor's implicit bias and have a significant impact upon individual student's ability to thrive and learn in the classroom environment (Pinsker, 2018). Similarly, instructors may consider use of other gender-normative language, such as "ladies and gentlemen" when addressing a class in order to avoid excluding nonbinary or trans individuals. When educators become aware of specific areas of personal unconscious bias, they are more capable of reviewing specific teaching actions (such as lecture preparation or the preparation of an online classroom environment) to determine if implicit bias may be present.

Educators may also wish to review their individual teaching practices to determine if they are equitably applied to all students. While many instructors would strongly assert that their personal practice is to grade in accordance with assessment guidelines and grading standards—rather than based upon perception of a student's race, gender, ethnicity, age, or other identifying characteristics—statistical data supports a finding that teacher perception of student background impacts grade determinations. A 2018 study from the University of Mannheim reported that teachers who perceived a student to have a "migrant background" (based upon the student's name) issued them a lower grade than for similarly situated students who were perceived to have "non-migrant backgrounds" (Bonefeld & Dickhäuser, 2018). The power of a name, or other identifying characteristics, to influence decision-making must not be undervalued.

Whenever possible, "blind" grading practices—or those which conceal identifying characteristics of the student submitting the work—should be substituted for those that reveal the student's name or other identifying factors. Examples of blind grading practices may include utilizing anonymous grading tools available in online learning platforms (such as those available in Canvas), concealing student names, or ensuring assignments are submitted in electronic format to avoid identifying handwriting (Poorvu Center for Teaching and Learning, n.d.). By adopting these (or similar) practices, educators may issue grades based upon merit and adherence to assignment guidelines rather than implicit bias contaminating the process. Blind grading practices, when applied on a consistent basis, may develop a consistent record for an instructor of equitable grading rather than discretionary grading impacted by implicit bias (Hardré, 2014).

Instructors may also wish to advise students of their intent to grade using a blind grading system. Not only will this discussion promote transparency in grading practices, but it may also develop trust and encourage a dialogue regarding equity in higher-learning practices. Student perception of the instructor's efforts to promote equity and take affirmative steps towards reducing implicit bias may improve student perception of the instructor and promote improved student achievement.

When grading, instructors may also wish to review the nature and type of feedback presented to students, as the feedback itself may demonstrate implicit bias. Ensuring that feedback is focused on constructive criticism and cites policies or assessment instructions may motivate students to improve achievement. Providing feedback that students perceive as being

without bias may be promoted by grading based upon institutional rubrics and adherence to assignment guidelines. Utilizing grading metrics provided to students as the model for assessment feedback lends credibility to grading decisions and demonstrates the instructor's reliance upon equitable practices rather than broad discretion.

The importance of tone and content in instructor feedback is demonstrated by a 1999 case study of feedback provided to both students identified as both Black and White (Cohen, Steele, & Ross, 1999). Researchers in this study examined student responses to positive and negative feedback in the classroom. The researchers concluded that both groups (African American students and Caucasian students) responded favorably to feedback that combined citing achievement standards and performance praise. On the other hand, critiques of student work that were perceived as "unbuffered criticism" (without adherence to achievement standards) were responded to less favorably by African American students.

Instructors should also be cognizant of the format by which praise is delivered. Additional research supports the conclusion that students belonging to culturally stigmatized groups tend to view positive feedback provided by an instructor belonging to a culturally dominant group more negatively than students belonging to culturally dominant groups (Lawrence, Crocker, & Blanton, 2010). The delivery of instructor feedback may be equally as important as the feedback itself. Educators may wish to work towards providing uniform quantities of praise that are based upon institutional grading and achievement standards in a race, age, and gender-neutral language.

Educators utilizing these practices to conduct a self-examination and confront and address implicit bias in personal teaching practices may be more well-positioned to approach teaching with the goal of equitable achievement and promoting classroom respect. While personal bias is, to some degree, within the individual instructor's control, educators are also tasked with moderating the exchanges that occur within their classroom environments as well. Regulating one's own bias is a significant task. Managing the subconscious bias of others is daunting. However, teachers must also develop a learning environment designed to facilitate equity and learning amongst students.

Understanding the Role of Student Implicit Bias

In times of radical social change—such as contemporary calls to reform criminal justice systems, address racial equity issues, and respond to a global pandemic—instructors may likely find students expressing a desire to engage with these weighty global issues. Particularly in higher education settings, instructors may more readily expect to teach students who are committed to advocating for political or social justice issues. As cited above, as recently as 2019 UCLA college freshman reported that one in ten students expected to participate in a protest during their college years (Stolzenberg, et al., 2019). When considering the significant number of impactful social issues that have arisen since the completion of that study, it may not be unreasonable to speculate that rates of student activism are likely to exponentially increase.

While open conversations related to student engagement with important contemporary issues may flow within an online classroom discussion board or a physical classroom, not all student personal belief systems, political or societal opinions, or perceptions of classmates may be as readily apparent. In addition to the important work of cultivating a respectful dialogue that addresses and explores the relevance of contemporary social issues to the classroom subject matter, instructors must be prepared to manage and respond to manifestations of implicit bias in the classroom in order to preserve the learning environment and create equitable opportunities for achievement. In order to ensure classroom accessibility for all learners, educators must attempt to understand both the explicit and implicit biases students bring to the classroom.

One of the most impactful and well-documented manners in which student implicit bias may present in the classroom is the student's own implicitly biased perceptions of themselves. Unconscious bias not only impacts the manner in which students view and relate to their classroom peers but also the way in which they regard themselves. This unconscious self-image may have a significant impact upon student achievement in the classroom environment and impact peer-to-peer relationships.

While there may be little educators can do to change the nature and type of implicit bias amongst their students numerous studies have demonstrated the critical role that class management strategies may play in supporting academic achievement.

Research since the late 1990s has consistently shown that student self-perception significantly impacts achievement (Shih, Pittinsky, & Ambady, 1999). For example, student

self-disclosure of social identifying characteristics prior to standardized testing has been documented to impact performance during the test and subsequent test results. Researchers have concluded that reporting on identity prior to testing may trigger a student's implicit biases and expectations of performance based upon social identifying stereotypes Test administration practices that require students to report race prior to taking a test have been demonstrated to adversely impact the test taker's ability to perform amongst African American students (Stricker, Rock, & Bridgeman, 2015). The manner in which students view themselves and their potential for achievement contributes significantly to their academic successes or failures.

One study particularly emphasized the impact of student self-identify perception upon academic achievement: in this 2007 study, researchers evaluated a panel of Asian American women's ability to perform based upon gender or racial stereotypes (Shih, Pittinsky, & Trahan, 2007). During the study, the researchers administered two separate standardized math tests to the panel. In the first testing scenario, researchers suggested to the panel that "female identity was associated with inferior … mathematical reasoning skills" immediately prior to administering the test. During the second testing scenario, the researchers suggested to the same panel that "Asian ethnic identity was associated with positive stereotypes." While neither the level of difficulty nor the nature of the standardized testing varied between the two rounds, the panel performed better on the second test when primed with a positive stereotype rather than a negative stereotype. This study demonstrates the important role that self-perception plays in a student's ability to attain success in the classroom and the importance of instructor support of a student's positive self-image.

Educator Priming Approaches for Managing Bias and Promoting Equity

The responsibility of conducting a classroom in a manner that empowers all students to equitably achieve and explore the subject matter is a significant responsibility. While investing considerable effort into exploring personal bias is a strong first step, instructors must also consider how to regulate manifestations of bias between the student peer relationships within the classroom environment. If addressing and remedying one's own personal bias seems to be an extraordinary task, managing the bias of others may seem to be an insurmountable obstacle. Once a critical examination of personal implicit bias has begun, educators may next turn towards examining the classroom environment itself to determine how the teacher's management

approach is displayed to students and to be certain that students are provided with academic models that demonstrate and support inclusivity.

Successful management of a classroom environment should not include attempts to change or alter a student's self-perception or image. However, establishing a classroom environment of positive "priming" may improve equity and encourage student academic success. Current research has suggested a positive correlation between instructor "priming" of students and improved academic outcomes (Shanks, et al., 2013). Priming may be described as the practice of subconscious influence of behavior outcomes in another person. Priming may be the "passive, subtle, and unobtrusive activation of relevant mental representations by external, environmental stimuli, such that people are not and do not become aware of the influence exerted by those stimuli" (Moskowitz & Grant, 2009, p. 128).

One study addressing the potential impact of priming in a classroom asked study participants to describe either a "typical professor" or a "soccer hooligan" prior to taking an un-related general knowledge test (Shanks, et al., 2013). Study participants primed to think about a "typical professor" trended higher scores than those who were primed to think of the "soccer hooligan." While the researchers administering the study acknowledged that results may be specific to this study alone, the results are nevertheless indicative of the potential power of positive suggestion and scholastic achievement. If the language deployed within the classroom environment bears the potential to improve or support student assessment scoring, instructors may similarly find it appropriate to prime their students for a respectful and equitable classroom environment in order to promote equal access to education and achievement opportunities.

While priming should not be utilized to manipulate students, change their personal beliefs or opinions, or impede the sharing of personal perspectives, priming may be used to encourage students to approach their course content in a neutral and respectful manner. Bearing in mind the ability of language to shift perceptions, educators should be aware of the manner in which classroom materials are presented to students to ensure unbiased priming to engage with course content.

One way in which priming may be implemented for this purpose is to consider how the classroom environment is presented to the students. Whether online or in-person, student perception of the subject matter, professor, and classmates may be impacted by encounters with

the organizational structure of the course itself. Higher-education instructors should examine course materials to determine whether the resources, assessments, and assessment instructions may impede student academic performance. Instructors should strive—whenever possible—for race, gender, age, or sexual orientation neutral language when engaging in discussion boards or developing assignments or participation instructions. Weekly announcements or class emails should also contain neutral language free from gendered or racial assumptions and avoid over-familiarity when appropriate.

When necessary for course objectives, identifying factors in the classroom should be deployed in a balanced manner to provide all students an equitable opportunity to perform. For example, in an online economics course, the instructor may post a web-based case study to illustrate purchasing habits of differing racial communities. While case study language identifying race is not typically neutral, instructors should ensure that the language deployed to introduce the case study to students is—to the highest degree possible—neutral and respectful in order to ensure inclusion of all students. Instructors should demonstrate transparency and provide students with context for use of the particular case study in order to foster understanding and dialogue related to the content. For example, the economics instructor in this example may wish to explain why racial or cultural differences are relevant to a cited course outcome and create an opportunity for students to engage constructively with the topic.

Similarly to the Cohen (1999) case study above, in which students responded more favorably to constructive criticism when it was presented within the context of institution policies or assignment directions, students may also be more receptive to discussions of community differences if they relate directly to the objectives of the assignment or course. Educators should—whenever possible—ensure that differences of race, gender, sexual orientation, or age are not deployed to isolate peers or promote division, but are rather facts in academic dialogue used only as necessary and supported by course or program learning objectives.

Educators should consider how use of language might impede a student's ability to engage with the course materials. One example might include a criminal justice ethics course essay assignment that uses an online case study involving a religious minority individual as the criminal actor in a hypothetical scenario. The instructor of this course should consider, first,

whether this identifier is necessary for the assignment. If so, the instructor should also examine whether other religious affiliations are being portrayed equally as criminal actors in the course and ensure that this same religious minority is also being portrayed equally in a positive manner. Course content negatively portraying a vulnerable or minority community may impact a student of the same social identification's ability (or, furthermore, students of any minority or vulnerable community's ability) to perform—and in this way be primed for failure.

Instructors should also examine course materials to ensure that they utilize positive images and words to describe and include diverse groups. For example, images utilized in online course modules, course textbooks, or included in classroom presentations should ensure individuals of a diverse range of racial, gender, ethnic, etc. communities are represented. Educators may also wish to ensure that course materials balance positive and negative associations with communities of color, genders, sexual orientations, or economic statuses. As higher-education professionals, instructors will want to ensure that classrooms properly prime students for success by striving for neutral language or, alternatively, ensuring a balanced use of social identifying information within the course content.

The organizational structure of a course sets the tone for student expectations of the course materials, the professor, and each other. By developing an awareness of student perception and potential responses to the materials—and adapting a practice of transparency and accountability—instructors may take an important step towards priming improved student perception of the classroom environment to foster an inclusive and equitable learning environment.

Managing Equitable Classroom Engagement

Respectful priming techniques may assist instructors not only in supporting a student's engagement with the course organizational structure, but also in creating positive engagement amongst peers as well. One of the most significant instructor opportunities for improved peer-to-peer relationships within the classroom environment is the educator's own engagement with the class.

Research has supported the finding that educator participation in the classroom may serve as a model for support and conflict resolution amongst students (Hendrickx, Mainhard, Boor-Klip, Cillessen, & Brekelmans, 2016). Occasionally referred to as the "invisible hand" in the

classroom, teachers have long been considered to have an impactful role upon the perceptions and relationships of their students (Farmer, Lines, & Hamm, 2011). A 2016 study of instructor influence upon "peer ecology" in a classroom environment supported the conclusion that instructors "function as a model or social referent for students regarding how to interact and form relationships with others" (Hendrickx, Mainhard, Boor-Klip, Cillessen, & Brekelmans, 2016, p. 39). Educators were found to not only influence the teacher-to-student relationships, but also the manner in which peer-to-peer relationships approached support and conflict resolution in the classroom. It is critical that educators utilize this influence in order to role model positive interactions, and in this manner prime students to engage positively with each other.

Instructors may find it helpful to review course syllabi, schedules, or participation instructions to ensure that students are provided with guidelines for respectful peer interaction. For example, in an online course environment, a brief "netiquette" guide may provide an explanation to students on how to interact with one another virtually. The instructor in this setting may wish to include a written explanation of classroom engagement goals (e.g. respect, diversity, and inclusivity), as well as provide instructions for how students may wish to address peers (by username, first name, or formal title), use appropriate content (with an explanation of how inappropriate content will be managed), and use appropriate language.

Educators teaching in-person may similarly create written instructions for their environments, including respect policies and guidelines for peer interactions. In-person environments may also present instructors with additional opportunities to support these guidelines by adjusting the physical structure of the learning environment as well. For example, in order to encourage students to develop respectful peer dialogues, an instructor may wish to foster an environment in which students are encouraged to become familiar. The instructor may wish to encourage students to create online profiles that include the student's preferred name, pronoun use, and an avatar in order to foster relationship building and encourage students to address each other by name. Online instructors should also ensure that they are respectful of names and pronouns when addressing students (in the online classroom environment as well as individually) in order to establish a tone of respect and inclusiveness.

Instructors may also find value in developing guidelines for student conflict resolution amongst their peers. By providing students with a roadmap for addressing discomfort with

actions or language used by their peers, educators may empower students to develop a dialogue to both resolve the impact of statements of implicit bias as well as create learning opportunities for students to become aware of their own subconscious biases. Peer conflict resolution may include mediation by the instructor or may invite students to conduct the process independently. However, expectations, procedures, and any possible consequences should be clearly communicated with students and be implemented in accordance with institutional policies and practices.

While respectful student interactions may seem obvious and not worthy of written instructions, instructors may find these materials helpful for a several purposes. First, these guides or instructions provide students with affirmative steps they may take to contribute to an equitable environment. Second, written instructions may contribute to an atmosphere of accountability, as the instructions demonstrate the educator's commitment to respect and equity and their mindfulness of these critical issues by taking the time to address them at the start of the course. Last, the instructions also reassure students who may have been subject to incidents of bias or exclusion in prior courses that their current instructor is mindful of these issues and working to create an atmosphere of equity. To demonstrate inclusivity, teachers should also follow their own instructions and policies. As one of the strongest tools an educator possesses, instructor influence should be utilized to role model positive classroom ecology.

Invitations for student participation should also be primed for inclusion. Educators should examine courses to ensure equitable opportunities for students from minority communities to express their viewpoints. Instructors should also consider which course topics may require students to comment on topics of potential areas of bias. Healthy and respectful discussion should never be discouraged in an academic environment, but rather ought to be strongly and consistently encouraged. Instructors should actively engage with their students and environments to model inclusivity and empower respectful peer dialogue.

To better model an environment primed for respectful peer dialogues, instructors should also be aware of the language used to instruct students on the type and manner of their peer engagement. For example, educators should reconsider instructing students to "debate" each other rather than to "engage" each other. Instructors should question whether one format of instruction bears a more confrontational connotation (debate) versus the implication of

collaborative dialogue (engage). Bearing in the mind the aforementioned studies on the impact of priming, the language used to assign student assessments may influence student performance and peer ecology.

Similarly, instructors may also wish to review the method by which teams, lab partners, or work groups are assigned. Student self-selection may be impacted by implicit bias, as may instructor-assigned methods. When possible, educators may wish to consider methods of randomly assigning partnerships to promote diverse collaboration and expand student interaction.

Classroom environments should also be primed to ensure equitable access to resources. Instructors should ensure that all students are able to see, hear, and engage with peers and the instructor in the classroom as well as provide equal opportunity to observe and interact with labs and learning resources. Educators may wish to create invitations for student contact should the student require support or additional resources and provide opportunities for students to make contact outside of the presence of peers. These communication options should be included in any course syllabi or instructions provided to students.

Instructor modeling and active engagement with the class may not only have the benefit of managing manifestations of bias, but may also enable the instructor to become more attuned to how and when these situations arise. By understanding the circumstances that impede inclusivity and equity in a classroom, instructors may become better prepared to make future course adjustments that will further promote the goal of an unbiased learning environment.

Understand Addressing Implicit Bias Takes Time

Much like the students who fill higher-education classrooms, many educators may be eager to see changes implemented that provide immediate relief for inequity in education. While instructors—earnest in their attempts to manage implicit bias—may commit to classroom engagement, positive priming, understanding student implicit bias, and confronting their own personal subconscious biases, the harsh truth is that these efforts are not likely to eradicate bias overnight. Rather, instructors must recognize that addressing implicit bias in an intentional and impactful manner takes time.

Educators should not be discouraged by the ongoing nature of resolving implicit bias. Rather than viewing the recommendations outlined above as a "quick fix" to resolve

subconscious bias, instructors should instead view addressing implicit bias as a process. These recommendations are not intended to be one-time measures but instead should be reevaluated on an ongoing basis. This process will allow instructors the opportunity to reflect upon the impact each recommendation has had in their learning environment and consider how it may be adapted for future courses in order to create a greater positive change.

Additionally, just as instructors may wish to review their syllabi, assignment instructions, respect policies, and other course organizational tools on an ongoing basis to determine areas of growth, educators may also find value in reevaluating their own progress in addressing personal implicit bias. Self-assessment tools, such as the IAT, may be taken more than once to continue assessing for additional subconscious bias or to examine whether other previously identified areas of bias have been reduced. Instructors should feel comfortable reassessing periodically for implicit bias and confident that tools for continued efforts to address this important issue are available.

Instructors should also be encouraged to speak freely with colleagues regarding their experiences in managing peer implicit bias as well as confronting their own subconscious biases. Open conversation regarding manifestations of bias and techniques for responding to implicit bias in the classroom will establish an open exchange of information amongst educators and provide opportunities to share strategies for classroom environment management. Collaborative efforts to approach managing peer-based implicit bias will promote innovation and expanded availability of resources.

This dialogue may also allow individual educators to feel supported in addressing and managing their bias as well as contribute to the de-stigmatization of addressing personal bias. Developing open communication regarding a sensitive or generally reserved topic may result in more positive resolution of the issue. One study conducted at James Madison University, identified the strong reciprocal relationship between communication and stigma (Smith, 2015). In this study, Smith observed that students were more willing to discuss mental health issues with friends than family members or mental healthcare providers due to concerns regarding stigma. When students were able to communicate with friends regarding their mental health concerns, they were more likely to obtain care to address the issues of concern. Similarly, instructors should find support in discussing attempts to improve leadership and personal bias

amelioration skills with colleagues, and in this manner continue to address and resolve areas of subconscious bias.

Resolving personal implicit bias and creating a learning environment that successfully manages peer implicit bias and promotes equitable student achievement is a significant undertaking. However, instructors should feel encouraged by noting that the potential for large-scale benefits to students may be far outweighed by the investment of time and learning the instructor may contribute to accomplish this result. Educators committed to this process must recognize that meaningful and impactful change takes time. Finding academic community support and viewing managing implicit bias as a process—rather than a "fix"—will provide educators with additional strength in their journey to equity.

Conclusion

The process of creating an inclusive and equitable learning environment is perhaps one of the most significant challenges faced by educators today. Much as Jane Elliott stood in her Riceville classroom—preparing to explain racism, assassination, and discrimination to her third-grade students—contemporary educators find themselves leading classrooms of students during a national upheaval fueled by racism and bias. Impacted by the subconscious bias of students and their own personal perspectives, the course materials, the subject matter, and peer relationships, instructors face a great challenge in creating inclusive learning. As students and teachers alike process the social impact of recent events, it is the educators who must lead academic environments in a manner that promotes respect, equity, and inclusiveness.

While higher-learning professionals are not alone in facing the task of confronting and addressing implicit bias in their professional roles, these educators face the additional responsibility of managing the manifestations of implicit bias in others—understanding that the presence of bias may significantly impact the ability of their students to learn and achieve. Yet educators now more than ever may be uniquely positioned to create inclusive learning environments supported by the commitments to social justice and equity of their students. Teachers—the invisible hands of the classroom—may bear the great responsibility of not only teaching, but impacting the ability of their students to relate to their peers and the world beyond their classroom walls. With time, a commitment to addressing implicit bias, and a willingness to

innovate, educators may become the catalyst for equity and change needed to create an accessible education for all who desire it.

References

Baker, R., Dee, T., Evans, B., & John, J. (2018). Bias in online classes: Evidence from a field experiment (CEPA Working Paper No.18-03). Retrieved from https://cepa.stanford.edu/wp18-03

Benson, T. A., & Fiarman, S. E. (2019). *Unconscious bias in schools: A developmental approach to exploring race and racism.* Harvard Education Press.

Bloom, S. G. (2005, September). Lesson of a lifetime. *Smithsonian Magazine*. Retrieved June 15, 2020, from https://www.smithsonianmag.com/science-nature/lesson-of-a-lifetime-72754306/

Bonefeld, M., & Dickhäuser, O. (2018). (Biased) grading of students' performance: Students' names, performance level, and implicit attitudes. *Frontiers in Psychology, 9*(481). https://doi.org/10.3389/fpsyg.2018.00481

Brownstein, M. (2019, July 31). *Implicit bias*. Retrieved from Stanford Encyclopedia of Philosophy: https://plato.stanford.edu/entries/implicit-bias/

Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin, 25*(10), 1302-1318. https://doi.org/10.1177%2F0146167299258011

Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology, 32*(5), 247-256. https://doi.org/10.1016/j.appdev.2011.04.006

Hardré, P. L. (2014). Checked your bias lately? Reasons and strategies for rural teachers to self-assess for grading bias. *The Rural Educator, 35*(2). https://doi.org/10.35608/ruraled.v35i2.352

Hendrickx, M. M., Mainhard, M. T., Boor-Klip, H. J., Cillessen, A. H., & Brekelmans, M. (2016). Social dynamics in the classroom: Teacher support and conflict and the peer ecology. *Teaching and Teacher Education, 53*, 30-40. https://doi.org/10.1016/j.tate.2015.10.004

Lawrence, J. S., Crocker, J., & Blanton, H. (2010). Stigmatized and dominant cultural groups differentially interpret positive feedback. *Journal of Cross-Cultural Psychology, 42*(1), 165-169. https://doi.org/10.1177%2F0022022110383569

Martin Luther King, Jr. Research and Education Institute. (n.d.). *"I've Been to the Mountaintop"*. Retrieved from Stanford University: https://kinginstitute.stanford.edu/encyclopedia/ive-been-mountaintop

Moskowitz, G. B., & Grant, H. (2009). *The psychology of goals.* Guilford Press.

Office for Civil Rights. (2015, April). *Title IX and Sex Discrimination*. Retrieved from US Department of Education: https://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html

Pinsker, J. (2018, August 23). The problem with "Hey guys". *The Atlantic*. Retrieved from https://www.theatlantic.com/family/archive/2018/08/guys-gender-neutral/568231/

Poorvu Center for Teaching and Learning. (n.d.). *Blind grading*. Retrieved from Yale University: https://poorvucenter.yale.edu/BlindGrading

Project Implicit. (n.d.). Retrieved June 22, 2020, from Harvard University: https://implicit.harvard.edu/implicit/

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development.* Holt, Rinehart & Winston.

Shanks, D. R., Newell, B. R., Lee, E. H., Balakrishnan, D., Ekelund, L., Cenac, Z., . . . Moore, C. (2013). Priming intelligent behavior: An elusive phenomenon. *PLOS One, 8*(4), e56515. https://doi.org/10.1371/journal.pone.0056515

Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science, 10*(1), 80-83. https://doi.org/10.1111%2F1467-9280.00111

Shih, M., Pittinsky, T. L., & Trahan, A. (2007). Domain-specific effects of stereotypes on performance. *Self and Identity, 5*(1), 1-14. https://doi.org/10.1080/15298860500338534

Sleek, S. (2018). The bias beneath: Two decades of measuring implicit associations. *Observer, 31*(2), pp. 11-14. Retrieved from https://www.psychologicalscience.org//observer/the-bias-beneath-two-decades-of-measuring-implicit-associations

Smith, E. D. (2015). Let's chat: Willingness to communicate and the development of a destigmatizing campaign. James Madison University. Retrieved from https://commons.lib.jmu.edu/cgi/viewcontent.cgi?article=1038&context=master201019

Staats, C., Capatosto, K., Wright, R. A., & Contractor, D. (2015). *State of the science: Implicit bias review 2015.* Kirwan Institute. Retrieved June 21, 2020, from

http://kirwaninstitute.osu.edu/research/understanding-implicit-bias/

Stolzenberg, E. B., Aragon, M. C., Romo, E., Couch, V., McLennan, D., Eagan, K., & Kang, N. (2019). *The American freshman: National norms Fall 2019.* University of California, Los Angeles, Higher Education Research Institute. Regents of the University of California. Retrieved from https://www.heri.ucla.edu/monographs/TheAmericanFreshman2019.pdf

Stricker, L. J., Rock, D. A., & Bridgeman, B. (2015). Stereotype threat, inquiring about test takers' race and gender, and performance on low-stakes tests in a large-scale assessment. *ETS Research Report Series, 2015*(1), 1-12. https://doi.org/10.1002/ets2.12046

U.S. Department of Justice. (n.d.). *Educational opportunities section*. Retrieved from https://www.justice.gov/crt/educational-opportunities-section