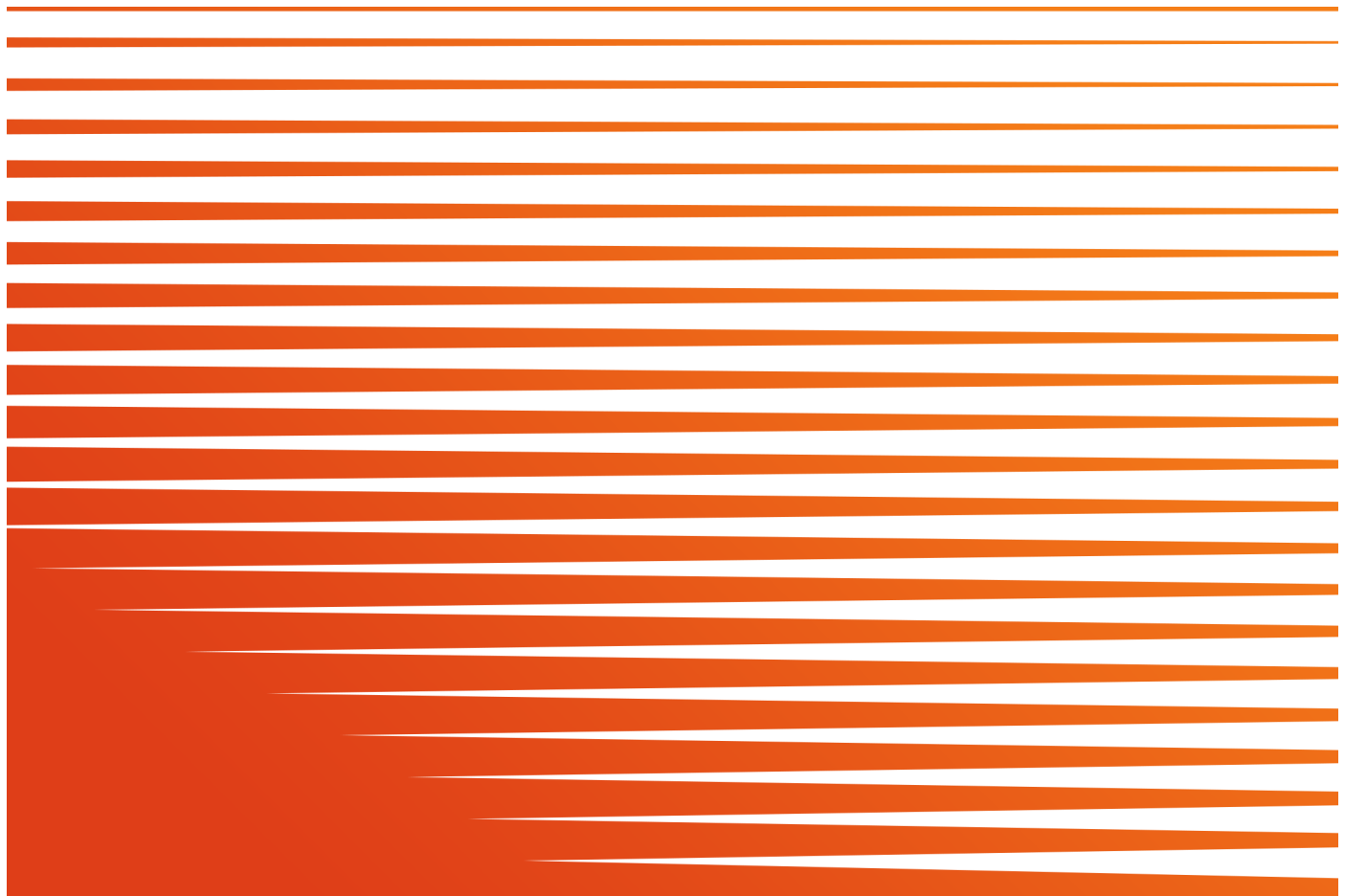


Can Evidence-Based Teaching Techniques Address the Education Debt that Students of Color Are Owed?

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As colleges and universities become more diverse, higher education practitioners are questioning how they can create an equitable campus that supports students of color who often have distinct needs and challenges.¹ Evidence-based teaching strategies (EBTs) have become increasingly popular among these practitioners, as the practices have been linked to positive academic outcomes (such as higher grades and better retention) and should, theoretically, benefit all students regardless of their background. For instance, cultivating a sense of belonging in classrooms and on campus has been found to improve student performance.² However, equity demands more than improved outcomes; truly pursuing equity in higher education means addressing the social and historical contexts that influence everyday policy and practice in ways that continuously create and maintain unequal access and opportunities for Black, Latinx, and Indigenous students.³

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Research on EBTs have rarely addressed the social factors that affect the outcomes of students of color, and equity-minded practitioners must be vigilant in ensuring that these practices truly serve their student's needs. Specifically, we must critically interrogate the "evidence" that has informed evidence-based approaches and center equity as we decide what constitutes good evidence. For instance, researchers studying belonging find that students with higher belonging are more likely to manage academic adjustment, use campus resources more, and perceive coursework as more relevant—all of which are positive outcomes.⁴ But much of this research does not examine these differences across demographic groups, so might we expect different results for students of color?⁵ Black, Latinx, and Indigenous students may not use campus resources because they are first-generation college students and unaware those resources exist; they may not "manage" academic adjustment because the campus norms do not culturally align with them. If this is the case, simply improving belonging will not have the same positive outcomes for these groups because there are additional factors that are going unaddressed. These are questions that must be explored before we suggest that there is good evidence that belonging and other EBTs actually lead to improved outcomes for students of color. Consequently, in this brief we identify the areas where research on EBTs lacks a critical, equity-minded orientation and offer suggestions on how future research can utilize an equity-first

¹ Estela Bensimon, "From Equity Walk to Equity Talk," *Faculti*, 17 February 2021, <https://faculti.net/from-equity-talk-to-equity-walk-expanding-practitioner-knowledge-for-racial-justice-in-higher-education/>.

² "Here's Why a Sense of Belonging in College Matters More Than You Think," *Study International*, 7 January 2020, <https://www.studyinternational.com/news/sense-of-belonging/>.

³ "Equity Mindedness," USC Center for Urban Education, <https://cue.usc.edu/equity/equity-mindedness/>.

⁴ "Academic Belonging," Teaching + Learning Lab, MIT, <https://tll.mit.edu/teaching-resources/inclusive-classroom/academic-belonging/>.

⁵ Elin Johnson, "Students' Sense of Belonging Varies by Identity, Institution," *Inside Higher Education*, 2 January 2020, <https://www.insidehighered.com/news/2020/01/02/minority-students-sense-place-higher-two-year-four-year-institutions>.

mindset. We present strategies that can be used by practitioners who hope to orient EBTs towards creating equitable learning environments for their students. In short, we propose that EBTs, when implemented with an equity-lens, have the potential to promote equitable experiences and outcomes for Black, Latinx, and Indigenous students and other underserved populations.

Rejecting Deficit Based Orientations in Teaching and Learning

Many advocates of EBTs call for curricula and student learning opportunities to be informed by empirical research on learning and teaching. While a variety of practices can be considered EBTs, a common feature is that they are often student-centered and used to encourage students' active participation and engagement with the course content, giving students a level of autonomy over their learning, access to authentic learning experiences (i.e., learning that simulates real-life occurrences), and diverse interactions in their collaborations.

However, practitioners who work towards creating equitable outcomes for students of color too often utilize frameworks that are built upon the notion that marginalized students are deficient in some way. This deficit lens emerges in the language used to discuss the disparate educational outcomes of Black, Latinx, and Indigenous students, often referred to as the “achievement gap”—implying that these students are failing to achieve. But students of color are not failing; they are being underserved due to historic and systemic discrimination. To start to recognize the cumulative impact and harm of systemic inequity, Gloria Ladson-Billings proposed that we instead use the term “education debt” when examining the differing outcomes of marginalized students. This term shifts the responsibility from the students to the institutions who, in actuality, are failing to provide the support that their minoritized students need.

An equity lens means examining the systems, socio-historical experiences, power, and privilege that create inequitable access to resources and funds, often limiting the educational opportunities that students of color receive.

What Ladson-Billings uses in her work, and what most institutions lack, is an equity lens.⁶ This perspective means moving beyond equality, or simply treating everyone the same, to equity, where we instead address the specific needs of the individual.⁷ An equity lens means examining the systems, socio-historical experiences, power, and privilege that create inequitable access to resources and funds, often limiting the educational opportunities that students of color receive. This shift in lenses is not just semantic. It requires a significant reframing of who we hold

⁶ “Racial Equity: A Critical Lens,” *California Educator*, 18 June 2019, <https://www.cta.org/educator/posts/a-critical-lens>.

⁷ “Equity vs. Equality: What’s the Difference?” Milken Institute School of Public Health, The George Washington University, 5 November 2020, <https://onlinepublichealth.gwu.edu/resources/equity-vs-equality/>.

responsible for the educational outcomes of marginalized students and a redesigning of the interventions that we implement.

Building on Ladson-Billings' important work, Estela Bensimon and colleagues at the Center for Urban Education at the University of Southern California coined a term that we want to call attention to: equity-minded.⁸ To center equity, postsecondary practitioners—such as researchers, faculty, administration, and staff—must continually question their own assumptions and biases and address the ways that this affects their student practices. Further, equity-minded practitioners do not place the burden of change on the student, but rather on the institution and those who hold power within the institution. The explicit goal of equity-minded practitioners is justice—tangible changes in policies and practices that “pay off” higher education’s debt to students of color.⁹

To actually address the debt that students of color are owed, we must instead demand that institutional culture, policy, and practice shift in ways that better serve these students.

But how do we do this? If Black, Latinx, and Indigenous students have difficulty acclimating to college, the solution is not to institute a bridge program to help them assimilate, as that places the burden of change on the student and does not address the systemic inequity that makes higher education unwelcoming to these students. To actually address the debt that students of color are owed, we must instead demand that institutional culture, policy, and practice shift in ways that better serve these students, such as by training faculty on how to engage with first-generation students or by increasing the financial support these students receive. Replacing our deficit lens with an equity lens helps us to imagine approaches that are inclusive and appropriate for creating equitable outcomes—not just so that these students get better grades or have higher retention, but so that Black, Latinx, and Indigenous students can actually thrive on campuses that clearly value their presence.

Adopting an Equity Orientation to EBTs

So how might practitioners introduce an equity lens into evidence-based teaching strategies? Again, EBTs can offer a way to improve learning and outcomes for students—and they can perhaps be leveraged as a way to pay the educational debt that students of color are owed. However, the evidence used to develop EBTs has, thus far, not centered Black, Latinx, and Indigenous students or addressed the institutional racism they often experience, and it is important that we remedy this and redesign these EBTs in an equity-minded way.

⁸ Estela Mara Bensimon, Alicia C. Dowd and Keith Witham, “Five Principles for Enacting Equity by Design,” *Diversity and Democracy, The Equity Imperative* 19, no. 2 (Winter 2016), <http://www.aacu.org/diversitydemocracy/2016/winter/bensimon>.

⁹ Estela Mara Bensimon, “The Case for an Anti-Racist Stance Toward Paying Off Higher Education’s Racial Debt,” *Change: The Magazine of Higher Learning*, 52:2 (2020): 7-11, <https://doi.org/10.1080/00091383.2020.1732752>.

Conceptual Clarity

One of the primary issues that exist for EBTs is that there is limited conceptual clarity around what an EBT is and how an instructor can properly engage in the technique in their classroom.¹⁰ For instance, active learning is one of the most well-known EBTs, and is loosely defined as a pedagogical practice that involves students with the course content and learning by doing. But what “learning by doing” means may vary greatly from instructor to instructor in the same field, and even more so across disciplines.

Researchers know that if a concept is hard to define, it is hard to measure and assess. Indeed, many EBT researchers note that a limitation of their work is that there are not specific criteria or standards to deem a practice as an EBT, so it is difficult to evaluate the evidence and make claims around their findings. Ambiguous definitions of what an EBT is and what practices constitute an EBT also prevents us from investigating demographic differences across groups, such as whether some practices work better for some groups than others. If we are limited in our understanding of EBTs as a whole, we cannot then delve deeper and further parse this research, a problem since adopting an equity lens in higher education requires specificity.

There are several steps that should be taken to remedy this issue. First, researchers can return to the drawing board and start with the basics: defining the concept of each specific EBT practice and establishing evidence-based guidelines that instructors can use when they implement that EBT in their classrooms. Having a conceptual and practical understanding of what EBTs are will allow instructors to implement them properly in their classroom and also allow researchers to accurately assess their efficacy across student groups. Further, an equity lens should be integrated into the development of the conceptual definitions of EBTs. For instance, researchers should pay specific attention to how and why these techniques might vary across demographic groups and also empirically assess this potential difference.

The use of data analytics in pedagogy provides an important example of the dangers of not approaching EBTs practices with an equity lens. Data analytics calls for the use of real-time student data to inform teaching and pedagogy. These data give instructors and administrators an opportunity to learn more about their students’ performance and to understand where there are potential gaps that need to be addressed. However, the data is often aggregated, so that instructors may have an idea of how students perform as a class overall, but the data is not disaggregated by race and gender to assess whether there are differences by group. Gateway courses, for example, are commonly used in higher education to introduce students to a field and teach them the foundational skills and knowledge they need to excel in that field.¹¹ Universities often track performance at the course-level to get an overall picture of how students are performing in those classes, since they can impact what students major in and their overall trajectory. However, it is important that universities and instructors also assess data by demographic groups to uncover whether there are trends in the class performance. In one study,

¹⁰ Brian Belcher, “How Conceptual Clarity Can Improve How We Assess Research,” *DORA*, 10 September 2019, <https://sfdora.org/2019/09/10/how-conceptual-clarity-can-improve-how-we-assess-research/>.

¹¹ Jessie Kwak, “What Are Gateway Courses and Why Do They Matter to Equity in Higher Ed?” *Every Learner Everywhere*, June 2020, <https://www.everylearnereverywhere.org/blog/what-are-gateway-courses-and-why-do-they-matter-to-equity-in-higher-ed/>.

taking this extra step allowed the researchers to recognize that students with minoritized identities (e.g., racial minorities, women) had disproportionate drop/fail/withdrawal/incomplete rates in gateway classes than non-minoritized students.¹² Further, assessing data by group throughout the semester can help the instructor identify areas where students are struggling and identify places where they should spend more time.¹³ Data analytics should be used as a way for universities and instructors to identify areas where students are having disparate outcomes, and that information can inform specific interventions that ensure students are receiving the appropriate and necessary support.

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The need for disaggregated data is just one issue that researchers and instructors must begin to prioritize and address. There are many different ways to rebuild our knowledge and evidence around pedagogy to ensure that we are making our best effort to engage in practices that improve the experience and outcomes of students of color. For instance, researchers can leverage tools like data analytics to help instructors monitor their students' performance. We can use these data not only to track student's progress and allow students themselves to determine where they may need additional support, but also as a way to gather empirical data that can then be disaggregated by race and make distinctions around which students are improving, which students are not, and explore the pedagogical changes instructors may need improve equity in their classrooms. We need intentionality in this work, so that we can, whenever possible, put the onus of change where it belongs: with the institution and those who hold power in the institution, including the instructors.

Accounting for Students' Diverse Backgrounds

Being equity-minded in our understanding of EBTs also means that we must acknowledge the social factors that affect a student's life, experiences, and outcomes. For example, providing formative feedback to students is an EBT that involves giving timely and targeted feedback on academic work to ensure that students are able to identify their knowledge and their knowledge gaps. Most feedback is summative or evaluative in nature, typically used to show students what

¹² Andrew K. Koch and Brent M. Drake, "Digging into the Disciplines I: Accounting for Failure-The Impact of Principles of Accounting Courses on Student Success and Equitable Outcomes," *Gardner Institute*, 6 November 2018, <https://www.jngi.org/blog/2018/11/6/digging-into-the-disciplines-the-impact-of-gateway-courses-in-accounting-calculus-and-chemistry-on-student-success>.

¹³ Pamela Baker, "Disaggregating Learning Data to Support Equity Efforts: Resources for College and University Instructors," *Every Learner Everywhere*, June 2020, <https://www.everylearnereverywhere.org/blog/disaggregating-learning-data-adaptive-learning/>.

they do not know, and then students are expected to fill that gap on their own through tutors or extra studying—placing the burden on the student.¹⁴

Applying an equity-lens to feedback to make it formative in nature requires faculty take an “inquiry stance” when assessing students, where they use assessment and feedback as a tool to identify what students do and do not know and then use that information to inform future instruction in alignment with students’ needs and learning.¹⁵ For instance, students may take practice tests after they learn new material, and instead of using the results to show students what additional work they should do, faculty should use that data to determine what material they should spend more time teaching. A shift like this would ensure that every student is learning and moving closer to mastering the material. Some may argue that spending additional time on material where students are struggling is unnecessary, as there are opportunities for students to pursue extra help if they need it—attending a professor’s office hours, for example. However, research has found that racially minoritized students are often uncomfortable reaching out to faculty when they are struggling or unaware that they are able to do so,¹⁶ and so building feedback into the curriculum is a way to ensure that students of color receive the opportunity to develop.

Students come from diverse contexts and backgrounds, and their histories will impact their experiences in the classroom in myriad ways. As such, faculty members must be adaptive and responsive to their specific student’s needs, while also being informed by empirical evidence of what the “best-practices” are, which can be complicated. One way to begin this process may be to engage in a collaborative effort between researchers and instructors, supported by the institution itself. For example, institutions can and should train instructors not only to use EBTs properly, but also to recognize when the individualized needs of their students may call for deviations or adaptations. Using an equity-lens does not have to be difficult, and most faculty are already committed to creating equitable classrooms. A first step faculty can take towards being equity-minded is to account for their student’s background and diverse experiences and express a willingness to respond to those differences.

Overall, evidence-based practices offer a valuable way to help students learn. However, there is still work that must be done around EBTs to ensure that they are beneficial for all students, and not just some. As universities become more diverse, addressing the education debt owed to Black, Latinx, and Indigenous students is essential, and if we do not approach every aspect of teaching and learning with an equity lens, we risk increasing that debt rather than beginning to pay it back. There is much work to be done, but equity is always worth the work, and we are up to the challenge.

¹⁴ “Equity in Assessment,” *National Institute for Learning Outcomes Assessment*, <https://www.learningoutcomesassessment.org/equity/>.

¹⁵ “Expanding Formative Assessment for Equity and Agency,” *National Council of Teachers of English*, 11 November 2020, <https://ncte.org/statement/expanding-formative-assessment/>.

¹⁶ Mark A. Chesler, “Perceptions of Faculty Behavior by Students of Color,” *CRLT Occasional Papers*, No. 7 (1997), Ann Arbor, MI: Center for Research on Learning and Teaching, University of Michigan., https://crlt.umich.edu/sites/default/files/resource_files/CRLT_no7.pdf.