Using Assessment Data to Advance Equity: Five Things That Get in the Way

Mary B. Ziskin, Ph.D., Pamela Cross Young, Ph.D.

Author Note

Mary B. Ziskin, ORCID iD: 0000-0002-1057-3094

Pamela Cross Young

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Abstract: This manuscript reports on in-depth interviews with 27 faculty and administrators, regarding their experiences using data to advance equity at their institutions. Participants were drawn from five institutions: two community colleges, a public baccalaureate college, a private not-for-profit doctoral university, and a public research university. Consistent with the AALHE's recent calls for research on assessment's role in advancing equity, this study applies critical social theory and critical-race lenses to understand how participants experience exchanges over data in the context of equity efforts at colleges and universities. We outline five barriers to productive data-use for equity that participants described in interviews: performativity misalignment; collaborators' resistance; non-equity-minded frameworks; inequitable processes; and lack of structure for follow-through. Findings explore best practices and counterstories, including participants' sense-making around the barriers they encountered. The manuscript provides assessment practitioners with practical recommendations on how to improve interactions, and thereby contribute to improved institutional practices advancing equity.

Introduction

Assessment professionals have recently brought renewed focus to the role of assessment in advancing equity in colleges and universities. Although work in this vein has been developed by key scholars of assessment for years (Baker & Gordon, 2014; Gordon, 1995), in 2020, the Association for the Assessment of Learning in Higher Education (AALHE) made a call for grand challenges for the future of the field, which included a focus on assessment's role in issues of equity. An AALHE working group formed to explore this question (Milligan et al., 2021) outlined a set of findings, challenges, and practical next steps for understanding how assessment practices produce inequities, and how they might be transformed to advance equity instead.

The working group has called on higher education researchers and assessment practitioners to collaborate on a situated inquiry into how assessment findings can be used to promote and support equity, noting that this cannot be done without transforming practitioners and methods at the same time (Milligan et al., 2021). In order to achieve this broader transformation in the field, therefore, we

need to hear from practitioners. In this next step, it is necessary to build a research-based understanding of practitioners' and collaborators' lived experience — their perceptions, experiences, and counterstories — into the process.

As this work is just beginning, several have begun to investigate the phenomenon of assessment in the service of equity (American Association of Colleges and Universities [AAC&U], 2015; Baker & Gordon, 2014; Chikwe & Cooper, 2019; Milligan et al., 2021; Oliveri et al., 2020). However, in the current context, more research is needed to foreground and analyze the experiences practitioners describe from efforts to use assessment to advance equity in colleges and universities. Knowledge of the barriers that participants in data-informed equity work perceive and experience can help assessment professionals, institutional researchers, faculty, and administrators to design, lead and navigate processes that anticipate and counter these barriers, potentially leading to more successful, engaged discussion and more impactful, equity-focused action. This manuscript reports on a study of in-depth interviews with 27 faculty and administrators regarding their experiences using institutional data to advance equity at their institutions. Consequently, the findings and discussion will be especially useful for assessment professionals, and faculty and administrators committed to advancing diversity, equity, and inclusion (DEI) at their institutions.

Purpose of the Study

The purpose of this manuscript is to understand the perspectives and experiences of assessment professionals and their collaborators, in the context of equity efforts in colleges and universities, and in particular, to explore the barriers they describe encountering in these processes. Accordingly, the specific research question pursued in these analyses was: What are the barriers to action that faculty, practitioners, and administrators describe encountering in data-informed equity work at their institutions? This exploration offers insight into faculty's and other collaborators' views and assumptions, with a particular eye to helping assessment practitioners, including faculty, in their efforts to advance equity in their institutions. With this insight, assessment professionals can build on current practices to support colleagues in these crucial exchanges using data to improve equity. In service to this goal, the manuscript explores the dynamics of everyday exchanges over data — to relate best practices and counterstories of resistance, including participants' sense-making around the barriers they describe encountering. In the process, we aim to help practitioners with insights on how to improve interactions, and by extension how to contribute to the improvement of institutional practices.

Participants described challenges related to data infrastructure, the dynamics of accountability and performativity, and nonequity-minded interpretive frames. Assessment practitioners can help with many of these challenges. While addressing the accessibility and responsiveness of data systems, or accountability structures may seem relatively straight-forward, for example, these practices are situated in complex contexts, shaped by sociocultural frames and assumptions, and more broadly by

systems of privilege and oppression. Navigating these frames, assumptions and systems relations may require skilled and reflective practice, in order to truly center equity.

Finally, nonequity-minded interpretive frameworks and assumptions are similarly endemic in educational institutions and practices, and by extension, in our collaborations with colleagues. Working with the nonequity-minded frames that our colleagues, or we ourselves, may sometimes introduce into an exchange is a central part of this endeavor, and perhaps even more than the data-infrastructure or accountability issues discussed above, is deeply complex and socially situated.

Literature Review

A mainstay in the field of assessment is the belief that good assessment data can be used to improve teaching and learning (Astin & Antonio, 2012). This cornerstone belief intersects with the broader discussions about data-informed processes in higher education institutions (Dowd, 2005). In the following review of the literature, we bring these threads together to explore what researchers have found regarding assessment and data-use for equity in educational contexts.

Assessment for Equity

Assessment researchers and practitioners have developed an extended practical and theoretical literature on how to improve and transform assessment practices so that they become vehicles for advancing equity in colleges and universities (Bryan & Lewis, 2019; Henning et al., 2021; Hood et al., 2015; Milligan et al., 2021). The emerging literature on this topic is comprised predominantly of methodological essays (Cushman, 2016; Kane, 2013; Olivieri et al., 2020) and practice- and policy-oriented pieces (Baker & Gordon, 2014; Henning et al., 2021; Hood et al., 2015; Milligan et al., 2021; Olivieri et al., 2020) that discuss the role of assessment in efforts to advance DEI in postsecondary institutions. In exploring how to push the field in this direction, assessment leaders and researchers have documented that some institutions are in fact extending their assessment practices in support of equity efforts (Henning et al., 2021). At the same time, others have begun to explore the complex ways in which existing assessment policies, instruments, and practices are deeply implicated in the production of inequities (Baker & Gordon, 2014; Milligan et al., 2021). An important theme in these discussions describes the tensions between accountability on the one hand and student learning on the other, conceived as central purposes for assessment (Baker & Gordon, 2014; Marsh et al., 2016; Milligan et al., 2021). Focusing on the pressing need to make assessment practices and institutions more equitable, several important theoretical pieces have called for more research on how assessment practices unfold in institutional contexts (Baker & Gordon, 2014; Henning et al., 2021; Milligan et al., 2021).

Consistent with these calls, our review of the literature confirmed that there are relatively few recent studies of assessment practices *per se*, and even fewer that examine their implications for equity specifically. These studies have focused on varying contexts, from P-12 schools (Chikwe, 2013; Marsh et al., 2016), to higher education institutions (HEIs) (Borgioli et al., 2015; Tsai et al., 2020), to policy

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and accreditation organizations (AAC&U, 2015; Arnold et al., 2019; Meehan et al., 2020). Although they are few in number, these studies nevertheless provide invaluable insight into how assessment practices and their implications for equity actually unfold in the hands of faculty and practitioners. Findings center primarily on leadership (Borgioli et al., 2015; Chikwe, 2013), the structure and availability of data (AAC&U, 2015; Chikwe, 2013), and the equity-minded and nonequity-minded frameworks applied by stakeholders (AAC&U, 2015; Arnold et al., 2019; Meehan et al., 2020; Tsai et al., 2020).

Even more specifically, Milligan et al. (2021) point to a need for more research based in critical approaches. In fact, a small number of critical research studies have emerged to focus on assessment practices in colleges and universities. Although Shay (2008) and Tsai et al. (2020) are two examples, both focus on contexts outside the US. Shay's study centered on a university in South Africa and Tsai's study – focused on students' experiences of assessment, and not on practitioners – was conducted in the UK.

Equity Data Use

The broader literature on data use in educational contexts can shed additional light on how to study and think about practitioners' experiences enacting and supporting assessment for equity. Emerging over the last 10 years, research on how educators use data in P-12 and postsecondary settings complements and extends the parallel discussion occurring among assessment professionals. These studies add further theoretical dimensions and empirical evidence relevant to this exploration.

P-12 Settings. In the early 2010s, the Spencer Foundation brought heightened attention to the question of data use in P-12 education by hosting a convening and funding a group of studies (Datnow & Park, 2018; Mandinach, Friedman & Gummer, 2015; Marsh et al., 2016). Two special issues of *Teachers College Record*, one in 2012 (Turner & Coburn, 2012) and another in 2015 (Mandinach & Gummer, 2015), collected several key studies on the topic (Datnow & Hubbard, 2015; Little, 2012; Marsh et al., 2015; Roderick, 2012).

These contributions applied various sociocultural and organizational theories in studying how educators make sense of and use data in reform and improvement efforts. Henig (2012), for example, applied political science frameworks to raise questions about whether data use can be understood as free of ideological context and intent. Garner et al. (2017) used sociolinguistics and a critique-of-neoliberalism approach to explore how a group of sixth-grade math teachers used data to understand and respond to inequities highlighted by a test-based accountability system. Coburn and Turner's (2011; 2012) foundational work on these questions focused on developing a sociocultural understanding of the processes underlying educators' use of data (Little, 2012). Datnow and Park (2014; 2018) drew broadly on continuous improvement theories (Firestone & González, 2007; Shirley, 2017) and cited equity research by Ladson-Billings (2006), Pollock (2017), and Oakes (2005). Both Park (2018) and Roegman (2020) employed Ishimaru and Galloway's (2014) organizational-theory

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framework for equitable leadership practice, drawing particularly on its emphasis of discursive framing, distributed leadership, inquiry culture, and the role of context.

Building on work by Firestone and González (2007), and others, Datnow and Park's ongoing work (Datnow et al., 2018; Datnow & Park, 2009, 2014, 2018; Park, 2018; Park & Datnow, 2017) is pivotal in defining a relevant subset of the P-12 data use discussion, focused on data-informed work toward equity. Their studies homing in on data-use related to equity entailed multi-year case studies of collaborations among working groups of teachers, and collaborations involving building and district-level administrators (Datnow, et al., 2018; Park, 2018; Park & Datnow, 2017; Park, et al., 2017). In this research, the authors examined how organizational and sociocultural contexts shaped the process as educators made sense of equity data. Their findings include explorations of (1) how framing accountability versus continuous-improvement as the purpose of data use shaped sense-making (Datnow & Park, 2018); (2) discursive "moves" defining collaborative exchanges (Park, 2018); (3) how participants applied deficit- and equity-minded schemas (Datnow & Park, 2018; Park, 2018); and (4) actions taken (e.g., flexible or persistent ability grouping) as a result of discussions (Datnow & Park, 2018).

Marsh, Bertrand, and colleagues have similarly driven a thread in the P-12 literature on data-use practices and equity (Bertrand & Marsh, 2015; Marsh, 2012; Marsh etal., 2015; Marsh et al., 2016). In a series of Spencer-funded studies conducted in multiple districts and involving extensive interview and observation data, Marsh, Bertrand and their colleagues focused their analyses on teachers' sense-making and work with student data in professional learning communities (PLCs) and in collaboration with data coaches or administrative leaders. Bertrand and Marsh (2015), for example, found that the PLC collaborators they observed employed four mental models in exchanges making sense of student scores. The four mental models teachers used attributed inequities or other patterns in scores to various sources: (1) instruction; (2) student understanding; (3) test wording; or (4) student characteristics. The authors found that, in most examples analyzed (40, or 65% overall), teachers attributed results to instruction, but that attribution to student characteristics was also prevalent (25, or 40% overall). Marsh et al. (2015) showed that dialogue and interaction among colleagues played a pivotal role in whether teachers successfully implemented instructional improvements in response to data on student learning, as opposed to simply reteaching material, or sorting students.

In light of recent calls for more research, a recent study by Garner et al., (2020) deserves particular attention because of the critical research methods they employed to study teacher practices in the assessment of student learning. In their analysis of data discussions held by a small working group of sixth-grade math teachers, Garner and colleagues found that test-centered accountability structures resulted in teachers' employing "colorblind, techno-rational" reasoning in analyzing assessment data (p. 411), rather than attending to inequities or equitable teaching and learning practices. The authors noted, that participants' sense-making around benchmarking data led them to propose solutions favoring decontextualized technical "reteaching" over instructional improvements aimed at increasing

students' conceptual understanding. Finally, the study found these discourses reinforced a passive conception of learners, and highlighted deficit narratives to explain inequities.

Postsecondary Settings. While relatively newer and not as extensive as the data-use literature focused on P-12 settings, the research on data-use in higher education institutions (HEIs), and in policy contexts surrounding them, is especially relevant to the question of how assessment practices can be extended to advance equity in colleges and universities. While practice- and policy-oriented literature on data-use for equity in higher education is relatively robust, research focused on how participants experience and navigate the process is still emerging.

The Center for Urban Education at the University of Southern California has led the way on this question with over a decade of work on the Equity Scorecard, including theoretical, practical, and empirical contributions. The equity scorecard studies have illuminated organizational change for equity, and the role of data use in those processes. The literature on data-use for equity in postsecondary institutions is rich and developing largely because of research, policy and practice-oriented work of Bensimon, Dowd, Malcolm-Picqueux and colleagues. Several theoretical, methodological, and practical books, and even more chapters and articles are available to illuminate the process and rationale of the Equity Scorecard (Bensimon, 2012; Bensimon & Malcolm, 2012; Dowd & Bensimon, 2015). In addition, however, there are several empirical studies, including Dowd and Liera (2018) and Bustillos et al. (2011), which are particularly useful for this discussion.

Dowd and Liera's (2018) exposition of the processes entailed in organizational learning toward racial equity advances the discussion on how colleges and universities use data to improve equity-related practices. Their research focuses on organizational change, and on individual sense-making as a part of organizational learning (Dowd & Liera, 2018). Moreover, the equity scorecard studies necessarily focus in on structured experiences (i.e., the equity scorecard process). In discussing the complex drivers of organizational change, the authors use categories of micro- and mesogenetic change (Lee, 2011). Foundations and other policy-mediating organizations have begun to contribute to the conversation. For example, while the American Council on Education (ACE) has issued reports (Gagliardi & Turk, 2017) including research studies focusing on data-informed leadership for equity, the American Association of Colleges and Universities (AAC&U) (2015) published a study on how member institutions frame and structure data use to advance equity. Research for Action, working with Lumina Foundation for Education, has conducted a qualitative study of the frameworks SHEEOs used in data-informed processes over questions of educational equity (Meehan et al., 2020). IHEP has done parallel work with accreditors, in order to encourage them to incorporate data use for equity into their processes (Arnold et al., 2019).

The current study can extend this work and contribute to building the research record. Consistent with Milligan et al.'s calls for new studies (2021), this study applies critical social theory and critical-race lenses to understanding how participants experience exchanges over data in the context of equity

efforts at their respective institutions. Building on Dowd and Liera's (2018) emphasis on the role of mesogenetic drivers of organizational change, this study focuses on the dialectic between individual interactions and the systems that can shape them, or in other words, the macro- and microgenetic drivers of change.

Theoretical Framework

The theoretical framework for this study combines concepts and insights from critical race theory (CRT) (Villenas & Angeles, 2013; Patton, 2016) and critical social theory (Habermas, 1984; 1987) as articulated in critical qualitative research methodology (CQR) (Carspecken, 1996, 2012; Steinberg & Cannella, 2012). Because they provide insight into the complex roles played by discourse and power in everyday exchanges, we apply these theoretical resources to understand the experiences faculty, administrators, and assessment practitioners describe in the context of data-informed efforts to advance equity in their institutions.

We use CQR concepts that explain how culture and power are intertwined in everyday communication to analyze and understand participants' data-use interactions and sense-making. Similarly, CRT tenets such as the systemic nature of racism and interest convergence, for example, are useful for understanding participants' experiences in equity efforts, including data-use.

Methods and Data

This manuscript reports on 27 interviews with faculty, administrators, institutional researchers, and assessment professionals, working in different institutional contexts. Participants were drawn from five participating institutions: two community colleges, a public baccalaureate college, a private not-for-profit doctoral university, and a public research university. Site institutions with high involvement in data-informed equity efforts were identified via a review of institutions recognized at national conferences or with national distinctions (e.g., USC Center for Race and Equity; Achieving the Dream; Carnegie Foundation). Participants were recruited based on an identified set of relevant roles, including formal responsibilities or committee assignments focused on DEI, assessment, and institutional research (IR). Participants included 12 faculty members, 11 participants who were working in either institutional research, assessment, or both, and 4 mid- to senior-level administrators.

The semistructured interviews focused on participants' experiences with institutional data, assessment data, and institutional improvement efforts related to equity. A list of interview questions is included in the Appendix. These questions were asked in every interview, although the specific wording and order varied to fit the protocol with the specific situation and, as suggested by Gubrium and Holstein (2011), in order to respond to new topics or direction introduced by the participant. Consistent with Gubrium and Holstein's concept of the active interview (2011), we aimed to build the interviews around a collaborative exchange with participants. Using this approach helped us to foreground participants' roles as experts on the processes in place at their institutions and on their own experiences working with and making sense of data with colleagues. Moreover, it created space for participants to raise

issues relevant to the project and to direct us toward questions we had not anticipated in the early stages of designing the study.

Data analyses began with open, low-inference coding, focused on identifying emergent patterns and themes. Our analyses proceeded from there in an iterative process, building toward more theoretically oriented codes in the later stages. Initial coding was completed by one collaborator (Mary) and then reviewed and discussed by both authors in collaboration and peer debriefing sessions. Subsequent analyses were conducted in a similar collaborative process, with Mary drafting and organizing initial rounds of annotation, followed by collaborative discussions in which we both made meaning of themes and results. Specifically, we incorporated Carspecken's (1996) pragmatic horizon analysis, to help us to analyze the layers of meaning inherent in our participants' comments. To improve the transparency and reflexivity of our methods, we developed analytical and reflexive memos throughout the process. These memos included reflection on our own positionalities, social identities, assumptions, and expectations, and how these intersectional dimensions of our lived experiences shaped the study.

We are faculty colleagues who have collaborated extensively on research and service related to student learning assessment. A highly valued friendship has grown between us as a result. As a White woman and a Black woman, our lived experiences and shared conversations around the importance and complexity of assessment led to further discussions of the role of data in advancing equity at our own institution. Our intersectional social identities and lived experiences brought us to these questions via divergent pathways, pervasively conditioned by racism and other systems of privilege and oppression. As critical educational researchers, we place a high value on researcher reflexivity and do not believe it is possible or desirable to set aside our beliefs and knowledge about (1) the systematic nature of racism in US institutions and culture, or (2) the complex ways that both social systems and discourse shape everyday experiences. On the contrary, we use critical social theory, collaboration, and reflexivity to help us navigate the pitfalls our experiences and perspectives may introduce into the study (Dennis, 2013). However, our own perspectives and sense-making as researchers are not separable from the study, but instead are part of the co-constructed data and analyses presented in this article. In this way, we used our peer debriefing sessions to build multiple perspectives into our process, and as a result, our collaboration provided a further method for deepening the analysis (Dennis, 2013).

In this study we aim to understand participants' experiences and perceptions of the processes they have participated in, from their own perspectives. Gaining participants' perspectives on the barriers to action is important, as noted above, because it adds the research record on the dynamics and conditions underlying data-informed equity work. Moreover, focusing data collection on interviews has the benefit of incorporating participants' own reflection and meaning-making, drawing on their multiple experiences in exchanges they recounted. By the same token, however, because this study centers on interviews, findings are naturally limited by what participants remember and decide to share. This study has limitations in that it does not include the detail, primary record, or prolonged

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engagement that a long series of observations might provide. In addition, the experiences shared by participants will be specific to the individuals and institutions included in the study. While we aimed to include institutions of multiple types, and individuals in a variety of institutional roles, it is clear that we have not included the full range of possible experiences. Instead of aiming for a "representative sample" in the mode of probability sampling, however, we have used (1) purposeful sampling to encompass a range of roles and institutional contexts; (2) thick description to aid readers in relating to and applying the experiences described by participants; and (3) connection to theory to support and extend the appropriate application of study findings outside of the site institutions.

Results: Barriers to Data-Use for Equity

Study participants voiced a belief in the potential of data use to improve practices for equity at their institutions, but simultaneously reported meeting barriers in practice. Both the relevance of barriers to action in participants' narratives, and the patterns in the specific barriers mentioned originated in the participants' comments and were identified in the emergent coding phase of our analyses. In the summary below, we outline five barriers to productive data-use in support of equity that participants described in our interviews with them:

1. Performativity misalignment (failure to center equity; examining data only when needed for reporting; overly summative or punitive orientation toward individuals and programs).
2. Collaborators questioning the legitimacy of the data.
3. Nonequity-minded frames (e.g., bias and everyday racism).
4. Failure to construct equitable processes.
5. Lack of structure for follow-through (not telling the story of the data; inability to disaggregate; lack of integration with routine processes).

We discuss each of these barriers and provide examples in the section below and in the appendix.

Performativity Misalignment

Performativity is often an assumed "policy lever" in the logic of educational reforms in higher education. Defined as institutional and managerial practices that determine success by establishing standardized goals and measures, performativity is a central dynamic in neoliberal management philosophies (Ball, 2012). When it comes to institutions' DEI efforts, unsurprisingly, this is an intuitive approach used to encourage (in neoliberal language *incentivize)* the improvement of practices. According to the participants in this study, performativity was a prevalent phenomenon they encountered in their work. Their experiences included several examples of performativity practices and structures that were misaligned with equity efforts and created barriers in their processes.

Several examples of this phenomenon demonstrated that institutions were not centering equity in their expectations and structures for reporting and accountability. (All names used throughout are pseudonyms.) Lance, a White faculty member and chair of a community college STEM department, recounted experiences preparing grant proposals that contrasted with his experiences with program review and other routine reporting required by the institution:

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> Lance: Until I did this [grant proposal], I didn't know what our female-to-male ratios were… I knew that they weren't good, but I didn't know what the exact number or percentages were.

> Mary: So previous questions you had encountered in program review, and things like that, did not ask you to disaggregate by gender, by race?

> Lance: Right. So [the grant proposal] helped me drill down and put together things…to make decisions. Because after going through some of this, I realized that I really needed to focus on females in STEM programs. So now when the college offers extra training, I go to the women in tech education trainings.

In relating this experience, Lance noted that an external grant prompted him to explore data relevant to gender equity in his department's programs. Importantly, he recounted also that these data explorations led him to make focused decisions and to take actions aimed at improving his own and his department's practices related to equity and women in STEM (attending professional development opportunities, for example). Lance later described the external prompt as a necessary precondition to his taking any of these steps:

> Lance: I think, just due to workload and everything, I wouldn't have personally drilled down and gathered this information unless it was asked specifically as a part of [the grant proposal]. …If I didn't have a project or an outcome, I'm not sure if I could have dedicated that [time and effort], you know, in order to make that happen.

This is a simple example, but it illustrates what opportunities are lost when questions related to equity are relegated to optional processes outside of an institution's centered routines and requirements. Lance's experience provides one example of performativity structures that sidestep or omit equity goals. Our interviews included many other examples in which institutions and individuals failed to center equity as a part of understanding how well programs are doing.

In the case of one experience shared by Michael, a Black senior administrator, the norms of communicating among his colleagues positioned equity as an optional or specialized issue, outside of the typical topics discussed by senior leadership. This framing produced a persistent barrier, preventing discussions about equity from occurring, and by extension precluding action:

> There's a pushback to even taking a look at [equity] because it's so uncomfortable. There's a threat of creating conflict and increased tension within the [leadership] team itself. So that now has to be managed. Right?. . . You don't want to cause any ripples. So [the unspoken norm is] 'Let's just deal with the typical, standard things' . . . you know …physical plant, credits …teaching loads.

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As Michael recounts his experience, he describes a resistance ("pushback") to substantive discussions of equity issues. He attributes this resistance to a generalized concern that discussing equity issues may cause tension among the group. Michael points to a perceived need for this dynamic to be 'managed', and notes that, for this reason, the discussion of equity is tacitly discouraged by the working norms of the group. Instead, the leadership discussions Michael remembered seemed to gravitate to less controversial, non-equity-related topics (e.g., physical plant, credits, teaching loads).

Will, a White IR professional at a community college, highlighted the importance of centering equity with a different example:

> [Discussions about equity are] something that has to happen. We've already said as an organization, '[Equity] is important. We need to continually engage in it.' ...Now you know, just saying that [in the mission and vision], okay that's great, but that is only going to work if there's truth to it. And that's where the cultural component is: that the institution actually believes in that mission and vision, and values and acts it out. You know, if they say, 'Hey, this is the mission and it includes equity,' but …it's clear that we don't practice that, ...Well then, okay, that's out the window too.

Will emphasized in his comments that a focus on equity in the form of living practices is what demonstrates commitment through action. According to Will's explanation, this demonstrated focus on equity is a necessary condition for the broad involvement of faculty, administrators and staff. Leadership and policy makers often think in terms of performativity when planning and implementing change and improvement of any kind. As shown in these examples, sidelining equity concerns in the operational definition of what it means to do a good job (i.e., not including equity in performativity concepts and structures) is one form of barrier to action described by participants. If improving equity is not among the expectations centered in accountability structures, participants shared, they and their colleagues found it difficult to devote time and energy to collecting and discussing data on problems of equity, let alone to identifying implications for practice. Even beyond formal performativity structures, such as program review or required reporting, more subtle expectations can work similarly to facilitate or block data-informed action for equity. Failures to center equity in implicit communication norms or institutional culture can likewise create barriers, as described by Michael and Will.

Colleagues' Resistance and Data-Questioning

Another prevalent barrier encountered by the practitioners we interviewed centered on the resistance they often encountered from colleagues when discussing data with implications for equity. For one example, Bette, a White senior faculty member at a public four-year institution, referenced this phenomenon briefly in passing saying:

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And there was a little bit of 'How did you take this data?' But then people said, 'Well, that's the data that we have. We're not writing a paper....' And I do have friends, colleagues who will grump and moan about how the data was taken. and use that as an excuse not to engage.

In this excerpt, Bette recounted her experience at a meeting in which collaborators raised questions about the equity-related data collected from an institutional student survey. The responses Bette described ("These are the data we have. We're not writing a paper") suggest that the data, while possibly too imperfect for a formal publication, were valid enough to support the practical purposes the group was using them for. Bette then connected the incident to her own broader experience with similar objections, and noted in an aside that this kind of questioning can be used to avoid engaging in discussions of problems of equity ("an excuse").

Ilene, a White IR professional at a community college, provided a more detailed example of this phenomenon:

When we were first going through some of this stuff [faculty questioning whether data were 'right'] ...I had hurt feelings. You know what I mean? You're like, 'I put this stuff together. I know it's right,' kind of a thing. ...But luckily we had a very seasoned boss at the time that said, '...This is really about ...becoming comfortable in an uncomfortable spot, and having to recognize that, by acknowledging the correctness of this, there is something that then has to follow, and change.'...It took a lot of time to sit and really be in a position to say 'Let's come to this shared understanding.' Because we knew, if they didn't believe us, ...they weren't going to do anything.

In the story that Ilene recounts, questioning the quality of the data was an important barrier that had to be overcome, before a discussion about improving practices for equity could proceed. Her supervisor brought valuable insight to helping Ilene place the questioning in perspective and realize that, while some questions may be earnestly motivated, often the questioning reflects a coming to terms: Accepting the results presented will necessarily imply that there is an equity problem that must be addressed. Ilene and her IR colleagues were persistent, and practiced patience in resolving the questions raised, ultimately arriving at a "shared understanding" of what the data meant.

Sam, a White senior administrator at a research university, described a similar experience of frequently needing to reanimate discussions mired in questions about data collection and data quality:

We know we have the data. We have so much, you know, that ...it almost paralyzes us to some degree. It's that we don't take it out to the next step.... We argue or work around the data, and we need to move beyond that. And so we're trying real hard to not, ...[get stuck in arguing] 'Well that doesn't look right there, so that means that's all wrong.' ...I often say, and I have for years now, 'Stop arguing around the data. Because it's right *enough,* to be perfectly honest with

> you.'...When you only question the data, you're losing sight of what you need to do with the data.

In his comments, Sam bemoaned a common tendency to stay "stuck" in the step of arguing over the quality of the data. This, in his experience, prevented discussions from progressing to the point of identifying data-informed actions to improve practices and advance equity at the institution. Study participants from across institution types described encountering resistance among colleagues in the form of persistently questioning the quality of data relevant to equity efforts. Whether this took the form of active avoidance ("an excuse not to engage") or getting stuck in a loop ("we don't take it to the next step"), interviewees found that this phenomenon could produce a barrier to taking data-informed action on equity. Ilene and Sam described divergent strategies for breaking through this barrier: While Sam–in his senior role, and with relatively privileged social identities–felt comfortable prompting colleagues directly to stop the questioning and move forward, Ilene took pains to address all questions from the faculty until she and they were able to reach a "shared understanding." Participants described many examples of colleagues' resistance to data-informed discussions advancing equity. While several examples converged on questioning the data, others illustrated a broader dynamic of resistance. In the context of discussing equity aims at his community college , for instance, Will noted that, "assessment can be a really scary sort of thing for people who are overseeing programs." Likewise, David–a Latino senior administrator at a public four-year institution – often encountered resistance in equity discussions, observing "People do a lot of, you know, 'I don't want to hear these things, because I'll feel bad.'"

Nonequity-Minded Frameworks

Another barrier described by participants centered on a lack of DEI-related knowledge and skill that colleagues and they themselves sometimes brought to their discussions. Practitioners and faculty highlighted examples in which colleagues and they themselves applied non-equity-minded frameworks in making sense of data. Predictably, these interpretations hindered discussions, and often blocked efforts to take action.

Will's experience working with faculty and administrators at his community college illustrated this phenomenon in the context of the variety of frameworks and skills that colleagues can bring to discussions of learning assessment and equity:

> I have to know sort of where people may be coming from because that's really important in some of these conversations too, especially as we share the data, right? Like, if I'm sharing [data on performance indicators] and, you know, pointing towards achievement gaps, that can be, . . . tough language to use when someone's still in a deficit perspective. I don't want them to jump towards, 'Oh, well, well those students . . . have shortcomings that are because of their race or class' or something, rather than engaging with what are the barriers that they're facing

that other students aren't facing. That's equity. You know, if people aren't coming with that perspective, well, we can't necessarily have the right conversation.

In describing his need to strategize according to "where people may be coming from", Will noted that a lack of equity-mindedness among colleagues can result in misdirection of discussions of equity gaps, taking the conversation in a damaging direction. He identified the collaborators' lack of equity-minded orientations and skills as a literal barrier ("we can't . . . have the right conversation").

Jennifer, a Black administrator at a four-year institution, related similarly that colleagues' non-equity-minded frameworks had, in her experience, created barriers to advancing equity at the institutional level:

> [We need to] look at points of learning, and what needs to be offered next to move individuals along in their understanding, particularly of diversity, inclusion, and equity. We have not necessarily been trained with an equitable mindset. So what is this data telling us, that's requiring us to do something, to make sure this is an equitable experience for students and [colleagues]?

Speaking in general terms, Jennifer pointed to a need for further learning or professional development surrounding DEI, as a precondition to discussing how data can show the way forward to action in advancing equity.

In pointing to a specific example, Jennifer remembered an early discussion about students facing food insecurity that stalled out, before later discussions moved to action:

> So the [term] was spent having a conversation. . . ['Do we offer more affordable access to food on campus?'] 'Do we give them more [financial support]?' And one suggestion from an administrator was . . . 'If people are really hungry, they'll eat the Ramen noodles.' [pause] So we've got quantitative [data]—because we can see what's happening in the trends. You have qualitative [data] for students who are saying 'I'm not eating.' And we spent the [term] talking about 'What do we do?' And nothing. [We] didn't do anything.

In Jennifer's example above, the need to develop collaborators' understanding around issues of equity and inclusion for low-SES students led to a severe barrier to action. The non-equity minded response to food insecurity (let them eat Ramen) was emblematic, in Jennifer's experience of the discussion, of more generally inequitable orientations which ultimately led to inaction.

In another instance, Scott – a White faculty member at a community college – demonstrated his own application of what could be characterized as an inequitable framework, and how his interpretations fit in with broader discussions about student success at the institution:

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> I think we should have flunked [student]. But we put together a plan to catch him up and I was sitting there going, 'If I hire you in the workforce and you don't show up. . . .you're not working for me'. . . .If I didn't have such a challenging upbringing and stuff, you know. . . I mean I was working full time at 16 and going to high school and then [taking community college classes] in the evenings and stuff and – . . . And if you want it bad enough, you will do it. [I'm a] first-generation college student, Appalachian background. . . But we keep making excuses for students not being successful. . .You can't mention that in today's world that students aren't trying. It doesn't [get anywhere] . . . [The conversation is framed], 'How can we help them be successful?' It's not an option to say that a student needs to participate in this. And I'm okay not discussing that because, I mean, you kind of look like a chump if you do.

Scott's narrative equated his experiences, persevering through hardship growing up, with his students' struggles. Based on this imputed equivalency, applying a non-equity-minded framing, Scott reasoned that his students who struggle were 'not trying' and possibly also that they did not 'want it enough.' Citing workplace consequences for not showing up, Scott advocated for harsher penalties for a student who fell behind due to a protracted absence. Scott's account suggests that he didn't voice those concerns, however. In the second half of the quote cited here, Scott emphasizes that even though he holds these views, he does not voice them in formal discussions, noting that doing so only makes him seem out of step with a discussion that is framed around meeting students where they are. Participants' accounts of colleagues' and their own applications of inequitable frameworks offers another piece of the picture, describing how data-use for equity can commonly stall out. Jennifer and Will encountered this common phenomenon enough to describe it as a general pattern, in addition to offering specific examples. Scott's direct experience of how his own non-equity-minded reasoning created barriers to action resulted in a change in outward behavior, even if his underlying perceptions remained unchanged.

Failure to Construct Equitable Processes

The fourth barrier, outlined in this subsection, highlights the importance of building equitable processes for data-use discussions. An implied logic model underlying data-use for institutional improvement, including data-use for equity, entails a group of individuals rationally and freely interpreting patterns in the data to transparently arrive at conclusions that can then be applied to guide policy and practice, resulting in improved outcomes advancing equity. This scenario implies that the status and participation of each individual are valued equally. Not surprisingly, however, these dynamics are often more complicated in practice. Participants in this study highlighted inequitable processes as another barrier that can surface and prevent data-informed discussions on equity from moving forward.

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In one example. Patricia, a Black assessment professional at a four-year institution, shared an experience in which her voice and authority were habitually undermined, such that discussions could not move forward until her word had been seconded or confirmed by White male colleagues:

> The other issue that has come up is 'We know you're qualified, but we're still going to ask someone else to verify that what you're saying is right.' So there is this question of 'Does she really know what she knows on paper?' So that's an issue of equity in itself, right? Who is doing the talking? Whose voice is being heard? So even though I'm in the position. . . I'm undermined to some extent.

David raised a similar issue, noting that from his experience social identities and positional authority can work in similarly complicating ways, although both need to be explicitly addressed in order to have a functional discussion:

> ...But when someone who has more social capital, positional authority is telling you [what the data mean]... dealing with the power issue is going to be important because I think that's how people are going to be able to hear it ...and to really change their practice.

David's description of this phenomenon hinges on differences in social power held by discussion participants, either in the form of positional authority or via privileged social identities. If these power issues are not addressed – presumably by naming them explicitly and mutually deciding to "bracket" or interrupt them in the current discussion – then barriers arise. Participants are not "able to hear" what data on equity issues suggest they do to change practices.

Similar experiences were prevalent in our participants' sense-making regardless of institution type. Some interviewees recounted specific experiences in which the inequitable power dynamics distorted the process of sense-making in a group. In addition to Patricia and David's examples above, Kevin — a White senior administrator at a community college — implicated social and positional power as a barrier and tipping point in one department's taking action with a curricular change based on equity data. As he recounted the department's process making sense of student learning data – a process that had long been stymied by inaction – Kevin attributed the ultimate shift to a combination of factors:

> So it was some key leadership . . . And then, you know, just working with some of the younger faculty who are willing to try new things and who were no longer, who were freed from maybe being intimidated by some of the senior faculty who had been in place, but then who retired. So I think there was a number of, a number of factors that finally led them to embrace the co-requisite approach.

Several other participants described this phenomenon at a summary level. For example, Liam, a White assessment specialist at a four-year institution, acknowledged this kind of dynamic in saying "You have

some voices in power who can tend to dominate or shut down discourse and data flows within all of those [processes]: around the decision-making process and the how-we're-going-to-use-it process."

Study participants' experiences underscored the importance of building an open and equitable process in order to successfully direct data-use discussions toward the goal of advancing equity at institutions. When racism and other systems of privilege and oppression were reproduced in the data-use discussions our participants described, they and their colleagues were blocked from changing practices or otherwise taking concrete steps to advance equity.

Lack of Structure for Follow-Through

Several interviewees shared stories that demonstrated how crucial it is to structure data-informed equity work as a broadly participatory, social process. Analyzing these examples, we came to see that successful processes involve creating a balance between (1) being open enough to involve participants authentically, and (2) providing enough structure to ensure that the process is genuinely social. In participants' descriptions, we found that the second component is most evident when collaborators focus on the same data and information, apply a common framework, and attend to implications for practice in their own individual roles.

According to several participants' descriptions, processes often stalled out due to disengagement, especially when they are not framed openly enough to involve participants inclusively and authentically. At the same time, an overlapping group of faculty and practitioners warned against being so open that participants become overwhelmed or bogged down in iterative meaning-making. It seemed that both these, possibly contradictory, precautions are necessary. Several participants indirectly named this tension in describing their strategies for working with obstacles in the process. David, for example, summarized the tension while describing the need to acknowledge collaborators' emotional journeys toward proficiency and equity-minded practices:

> It's really about remembering what emotional processes will start. When someone sees that they're enacting inequities, they're going to be embarrassed. They're going to be angry, they're going to have a wall, they're going to feel shame, they're going to feel all these things. ...So I think it has to be small groups [to] have that trust. ...But it can't just be emotional...I think it also has to be structured ...Maybe at first saying like, 'Wow, what are people's reactions?' ...But we had structured questions...because ...I think if it becomes too loosey-goosey, ...it's not necessarily helpful.

Theresa invoked a similar combination of requirements as she recounted how she and her collaborators surmounted barriers and instituted equity-minded assessment structures:

> You've got to ...surround everybody with ...interpersonal relationships, the structure to do it, incentives to do it, examples of other people who have done it, people who care about you ...as

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a faculty member and are willing to listen to your ideas. All of those things had to happen at the same time.

Likewise, Sam noted that the success of a campus-wide initiative hinged on a balance between openness and structure:

> I think [the campus-wide discussion] was good for us. It was held in an open forum and the fear is that, if you have an open forum, you run the risk of it's not having a clear direction or purpose. But what happened was, we created a safe space so that everyone, no matter who you are, had a role and had an opportunity to provide their feedback. And some of that is because the provost made that a priority. …It was one of the ground rules.

In addition to these examples highlighting both sides of the coin, many more participants described barriers related to openness or structure individually. Regarding open processes, for example, Sam highlighted the necessity of "free[ing] up the data" and Theresa recommended "Don't come in with preplanned anything. Come in with a blank slate." Patricia experienced closed processes as a barrier "The way we use data will not change," and Liam noted similarly "top-down processes …get the whole train moving …at a really light pace. "Participants' comments about structures were comparatively more complex. First, practitioners and faculty across institution types pointed to the need to build equity data-use into routine work, and cited the absence of structures to accomplish this as a barrier to good practices. Jennifer offered, for example:

> We are saturated in data …There's open access, but I think, due to the nature of the work, there's not enough time. So it becomes looking for the red flags, and not necessarily points that will inform next steps.

In this brief reference, Jennifer described the wide availability of data but noted that because of the structure and pacing of their work, she and her colleagues were not supported in making sense of the data or using it to inform action ("next steps"). Scott outlined a similar pattern at his institution:

> I'm as guilty of this as anybody. We collect a lot, but we sometimes don't look at the data we've collected until accreditation or [until] something's spurring ...us to do it. ...You know, 'This is our review year.' And then [we decide] 'Let's look at this data that ...we should be looking at semester-to-semester, and maybe we don't because of everybody is just pulled a thousand different directions'.

Jennifer and Scott both highlighted a common theme visible in the study interviews and in the literature more broadly. Roderick (2012) termed the phenomenon "Drowning in Data, Thirsty for Analysis." As illustrated in Jennifer's and Scott's insights, several study participants noted that data were sitting on the shelf unused because everyone was stretched so thin that there was no time to

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analyze or make meaning of the data available— unless or until an accountability-related reason to examine it arose (e.g., program review, performance-based funding). This barrier resonates with some examples highlighted earlier in the "performativity misalignment" section but differs in that examples categorized under this theme point to problems with the structure and pace of work, rather than with the content of accountability measures.

Second, participants across institution types related experiences with collaborators who disengaged when discussions were insufficiently structured with shared theoretical frameworks. Nora, a White senior-level IR professional at a community college, described encountering colleagues who became overwhelmed and shut-down in the midst of equity discussions:

> We know that just tossing something out there and being like, you know, 'Hey, there's a disparity with our students of color.' People [respond] 'That's a really big problem to solve. I don't know. I'm checked out because I don't know what to do about that.' It's so broad. So what we do with those, loss/momentum points [the Gates Foundations' *Completion by Design* framework in use at the college (Pennington & Milliron, 2010)]...is we try to get people to take the data and use it within their role. ...If you're an instructor, how do you use this data to improve what you're doing? What is the point in the student experience where you come into play?

Nora observed that without a common framework to structure the sense-making around the data, her colleagues would stall out and disengage from the process. The problem under discussion was too vague. To overcome this barrier, Nora and others in IR asked collaborators to identify practical implications for their specific roles.

In another example, Phoebe, a White assessment specialist at a public four-year institution, described similar experiences:

> When you get into almost a bigger picture, things such as equity or [student learning] ...They [faculty] don't see themselves as being the person who's responsible for those results. Or, if they view themselves as responsible, they're like, 'Well, I'm just a tiny, tiny drop in the bucket here.'

Like Nora, Phoebe encountered collaborators' disengagement in the face of broadly-defined inequities. Her colleagues, similar to Nora's, struggled to see their role in producing equity. Without a heuristic or framework to support colleagues' application of findings on inequities, they tended to disconnect. Beyond the dynamics of interpretation in individual discussions, Nora and Ilene, colleagues working in IR at a community college, stressed the importance of institutional-level structures for follow-through. They noted that the absence of these structures had — in their separate experiences — created

barriers to effective data-informed action advancing equity. Ilene gave a clear overview of how the introduction of structures for follow-through were important in overcoming barriers at the college:

> We've gotten to a point where when we do process data and hand data over, and talk through it with people, it doesn't get put on a shelf and walked away from, it's actually the opposite....So we put together [a comprehensive user-friendly resource] which was a brilliant move by our previous boss. She had the foresight to say, 'We have all these pieces of information we collect, we have all these things floating all over, but you have to seek it out'...We really need to be more thoughtful in putting together pieces that tell the story, give the viewer kind of the highlights, but also the, 'Here's what we're doing in relation to it.' So that way we're not spinning our wheels and causing undue kinds of finger pointing stuff.

In Ilene's account, the community college was able to overcome stagnation in data-informed equity efforts, by creating structures for follow-through. Specifically, these steps included consolidating relevant data and making it available in a centralized, easily accessed format. In addition, data discussion was integrated into regular meetings and routines, to ensure that collaborators in a wide range of roles were interacting with the same data and frameworks. Since these structures were introduced, Ilene saw increased engagement across departments and increased action advancing equity at the college.

Nora outlined a similar pattern of integrating data-informed discussions about equity into routine meetings:

> [Our presentation of equity data is] not just focused on, like, a study, but you know, faculty updates, staff updates, brown bags, and things like that. That's where everybody at the college gets their information. And so it's sort of embedded in with other things that we need to talk about as an institution ...so those always get really great participation. It is very widely disseminated.

In her description, Nora underscored the multiple venues into which discussions on equity data are integrated at the college, noting (1) that equity data and topics are centered and (2) that they are reaching multiple audiences within the institution.

In summary, several participants concluded that successful data-informed action for equity required a structure for integrating data-use into routine practices. Others emphasized the need to have a structure for follow-through so that discussions can inform actions advancing equity. At the same time, the need to support meaning-making with shared frameworks and heuristics for application, was also a prominent theme.

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Discussion

Looking across these findings, we note several key points for further discussion in light of our theoretical framework. Participants described barriers to their data-informed equity work arising from multiple sources, including (1) structures (workload; reporting requirements; budgetary priorities); and (2) their own and their colleagues' meaning-making around the data (e.g., resistance; inequitable relations; deficit-model attributions). Analysis according to our critical qualitative research framework helps us to understand the themes in terms of *systems relations,* while application of CRT concepts further explains the study findings within the context of systemic racism. In this section, we discuss findings using each framework in turn. Subsequently, having made critical sense of the findings, we outline a set of practical recommendations.

Systems Relations

In a society largely defined by systemic racism and other intersecting systems of privilege and oppression, our lived experiences are shaped by broader structures, policies, and discourses that are enacted and reproduced in ways that legitimate those systems of privilege and oppression. In critical qualitative research, this phenomenon is termed *systems relations* (Carspecken, 1996; Habermas, 1984).

In our interviews, study participants described system relations in several forms. For example, as seen in examples shared under the performativity misalignment theme, several participant narratives demonstrated that accountability policies and applied norms framed equity as a side issue, or a secondary, specialized concern, rather than central to the institutions' expectations for individuals and groups. Second, although we saw a few exceptions, individuals' non-equity-minded frameworks, as discussed under theme of that name above, were often forwarded as the "common sense" stance and tended to be privileged in the exchanges our participants described. Consequently, the onus of challenging those framings fell on equity-minded individuals in the group, and barriers to action naturally arose from this dynamic. Finally, as we explored in the *structures for follow-through* section above, participants' own accounts included techno-rational explanations pointing to multiple competing social and logistical considerations that need to be balanced in order to ensure broad engagement with equity issues. Participants noted from experience that being too prescriptive in framing a discussion on equity can inhibit collaborative engagement with the issues. On the other hand, participants also shared stories in which being too open-ended gave rise to barriers. Social power was operative as participants described navigating this tricky balance: collaborators may have perceived it as useless to resist the top-down framing; yet, without a framework, collaborators often became overwhelmed, mainly because a system-level analysis was rendered invisible by the system relations themselves.

Applying CRT Concepts

Systemic Racism and Construction of Race. Participants' experiences illustrated that, within institutions, interactions surrounding data can themselves be inequitable, raising layered questions about leadership and who is "at the table." We explored examples illustrating this theme in the failure to construct equitable processes section above, but other themes included relevant examples as well. CRT concepts, including the systemic nature of racism in the U.S. (Ladson-Billings, 1998, 2013; Patton, 2016) and the social construction of race (Delgado & Stefancic, 2013)—along with critiques of neoliberal policies that emphasize performativity and prioritize market-logic in educational institutions (Ball, 2012)—can help to illuminate these aspects of participants' experiences. For instance, in examples shared under the "performativity misalignment" theme, equity data are sidelined, or simply not present in the conversation, making that theme itself a demonstration of the systemic nature of racism. Discussions of data related to equity throughout all the examples discussed in this manuscript further illustrate the complexities inherent in the social construction of race. Will's discussion of the complexity involved in making sense of nonsignificant findings comes to mind, as does Lance's experience going through multiple steps to access disaggregated data.

As detailed in the final theme above, participants recounted experiences with a lack of structure for follow-through. In those examples, the failure to involve a critical mass of participants and to make sense-making over equity data truly social created gaps in the process and stopped the discussion just as it was getting started. Without structures for follow-through, initial steps in data-informed equity discussions were necessarily repeated and rarely had a chance to progress past the beginning. Colorblind racism and other prevalent discourses can be dislodged only rarely in this context, because equity-minded participants have a harder time gaining traction, and are often required to start back at the beginning in successive discussions as a result. Consequently, colorblind, techno-rational solutions, neoliberalism, and deficit models carry the day, further illustrating the systemic nature of racist structures and policies.

Intersectionality. Intersectionality comes into play throughout the examples outlined in the results section. For example, Patricia, Ilene, and Sam all described very similar incidents, in which the validity of their data was questioned. However, the different dynamics that unfolded for each of them can only fully be explained within the context of their intersectional social identities. Patricia, a Black assessment professional and a young woman working at a PWI, encountered collaborators who undermined her authority and participation by asking a White male colleague whether the data she had presented were correct. Ilene, a White IR professional and a mid-career woman working at a community college, described feeling hurt by collaborators data-questioning at first, and ultimately devoted extensive time and effort to convince a faculty member that the data she had produced were accurate. In contrast, Sam, a White man in a senior administrative position at a research university, directed collaborators to stop their indefinite data-questioning, stating that the data were "right enough."

Interest Convergence. Likewise, the CRT concept of interest convergence can help illuminate how performativity structures can act as both a barrier and a support for data-informed equity work. While several examples under *performativity misalignment* above illustrated how accountability structures

and implicit norms experienced by our participants disregarded equity work, other examples demonstrated experiences in which performativity worked instead to center equity goals. For example, Scott changed his behaviors to support more equitable practices even though he still embraced deficit-model attributions for inequities. He made a shift in his practices and in the views he expressed in collaborations, not because he felt convinced to change, but rather because he wanted to avoid "looking like a chump." Moreover, both Scott and Sam observed that practices at their institutions had changed due to equity measures incorporated into performance-based funding policies in their states. Sam noted, for example, "I mean [equity] always mattered because it's within our values, but. . . now there's a financial incentive. . . . it really now matters in a really tangible way."

Counterstories. Finally, several study participants offered counterstories of navigating and resisting inequitable processes and pushing to center equity. David, for example, recounted instances when he named how positional and social privilege and power were distorting the discussion and took the discussion in a franker, more productive direction. Similarly, Ilene's narrative centered on an example of resisting and persevering with faculty colleagues to center both equity and data and ultimately gain more faculty engagement in equity work at her institution. Applying CRT, we see that counterstories like these are both illuminating and useful, as they disrupt "common sense" accounts that sideline data-informed action advancing equity as infeasible. Moreover, sharing insights and stories of practitioner knowledge and resistance helps to support and extend other practitioners' efforts in institutions nationwide.

Implications for Practice

The purpose of this manuscript is to share practitioners' perceptions and experiences and through analysis of these, to assemble a set of practically useful takeaways. One such resource, the themes and barriers outlined in the study results reflect a list of common problems and obstacles that assessment practitioners may need to anticipate, mitigate, or work around. As noted in our analyses, these barriers are inextricably connected to inherent trade-offs and tensions, as well as systems relations that practitioners and collaborators must navigate.

Our practical recommendations arise from this list of barriers and constitute a second set of takeaways. Practice-oriented implications of this research are outlined below. Some recommendations emerged from a single theme, while some others grew out of evidence that reaches across themes. The grounding of each recommendation is listed in parentheses, with numbers corresponding to the barriers in the order presented above (1. Performativity misalignment; 2. Collaborators' resistance and data-questioning; 3. Nonequity-minded frames; 4. Failure to construct equitable processes; 5. Lack of structure for follow-through.) To support data-informed advancement of equity, institutions and practitioners should:

1. Make equity-relevant disaggregated data available in centralized, consolidated, easily referenced formats (1,2,5)
2. Center equity goals; leverage performativity, but navigate carefully to keep processes open and responsive to students' experiences (1,3,5)

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3. Integrate equity efforts and data-informed discussions about equity into routine meetings and processes. (5)
4. When planning data-use discussions in the context of equity efforts,
    a. Make the purpose of data-informed equity discussions clear (2,4,5)
    b. To the extent possible, produce equity in the structure and norms of the discussions (e.g., raise and consider questions about whose voices and experiences are included; use non-hierarchical approaches; use group commitments to reduce the distortions introduced by social and positional power) (4)
    c. Aim for an open process, but provide enough structure to make discussions genuinely social (ensure participants are engaging with the same information; offer a framework or set of frameworks to support interpretation). (5)
    d. Expect that non-equity-minded frameworks may be introduced as "common sense" in collaborative exchanges; use dialogue to surface, question, and decenter them; model equity-mindedness, approaching the production of equity as a solvable problem of professional practice (Jones et al., 2011). (3)

The study's findings provide on-the-ground accounts from the perspective of assessment practitioners, IR professionals, faculty, and administrators engaged in equity efforts. Our analysis of the barriers they described offers insights into how institutions and practitioners can build effective collaborations, grounded in data, to produce equitable outcomes and experiences for students, faculty, and staff. Institutional leaders, policy makers, and assessment professionals can benefit from and build upon this research, as participants' experiences suggest revisions to structures and practices that could support data-informed action for equity at their institutions.

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Appendix

Interview Questions

This study is focused on how leaders, faculty, and administrators make sense of education data, and how they use it to improve their institutions, especially with regard to improvements for educational equity.

1. **What are the situations in which you and your colleagues have a chance to really interact with data about your own institution or programs?**

    Follow-up questions:

    - How do you usually gain access to those data? How do others throughout the institution gain access to those data?
    - What about the data (if anything) do you find most relevant to your equity efforts at [Institution]?

2. Would it be possible for you to **walk me through a recent experience with how you've structured group discussions focused on equity-related institutional data?** What was the process in that discussion like?

    Follow-up questions:

    - What lessons have you learned from working together around data of this kind?
    - What roles do you see different participants (including yourself) playing in these discussions?

3. We am also interested in how faculty, administrators and leaders make sense of these kind of data themselves (even individually, and not only in group discussions). You may not be able to show me a particular example of data, but **would it be possible for you to talk me through what you experience, interacting with output or reports when you are preparing for a meeting – or just making sense of the information yourself?**

    Follow-up questions:

    - Are there frameworks you use? Or questions you tend to ask first?

4. One finding from the P-12 literature on data-use is a recommendation that data-use practices should be structured so as to allow faculty and practitioners' to bring their professional judgment to bear on equity, as a solvable problem of practice. In your experience, **what is needed (or would be needed) to make space for faculty and practitioners to bring their professional insights into the process?**

5. **Can you recommend any additional questions** I should look into to help support the success of efforts like yours to use data to improve equity outcomes at [Institution], or in community colleges in general?

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About the Authors

Mary B. Ziskin, Associate Professor of Educational Administration, University of Dayton, mziskin1@udayton.edu

Pamela Cross Young, Associate Dean, School of Education & Health Sciences and Clinical Professor of Educational Administration, University of Dayton, pyoung1@udayton.edu