The Potential of Collaborative Inquiry for Teachers' Equity-Oriented Development in Complex Sociopolitical Contexts

Stephanie L. Dodman
George Mason University

Jessica Hiltabidel
George Mason University

Rebecca Brusseau
George Mason University

Abstract

After conducting a collaborative inquiry professional development project with educators at a suburban Title I school focused on data use for equity, researchers followed up with participants a year later to determine if there were lasting, meaningful learning outcomes. Findings from interviews indicate that the project was impactful because it provided access to tools (e.g., graphics and rating scales) and rich dialogue that the educators could reference in their continued practice and reflection. Evidence also suggests that despite being primed to notice inequities and to adjust their practice, educators still need improvement to challenge their biases and integrate equitable, asset-forward philosophies and practices. To explore the potential and complexities of such a collaborative inquiry project, the experiences of the sole participant of color are highlighted. Considerations and cautions are provided for teacher educators who wish to engage educators in equity-oriented collaborative inquiry.

Keywords: equity-oriented collaborative inquiry, data use for equity

In spring of 2020, a group of university teacher educators and elementary school educators concluded a year-long professional development project. The project focused on developing the capacity for equity, the extent to which teachers' dispositions, knowledge, and skills align to transformational change, within the school via the educators' engagement in collaborative inquiry. The educators' inquiries began with varied forms of data from inside and outside of their classrooms, as well as concurrent learning in culturally responsive and relevant teaching (Gay, 2018; Ladson-Billings, 2011; Nieto & Bode, 2018; Souto-Manning et al., 2018). Spurred by research that has consistently found educators to be underprepared to engage with

data critically and in ways that employ asset-based views of students, the project design centered

educators' learning in a data use for equity (DUE) construct (Dodman et al., 2023). DUE

theorizes that it is at the intersection of data literacy (Mandinach & Gummer, 2016) and equity

literacy (Gorski & Swalwell, 2015) where educators must engage to be able to notice, reflect,

and act (Wink, 2010) on how their own and their school's policies and practices contribute to

in/equitable learning conditions and opportunities.

The initial study asked what happens when a group of educators at the same school site

engage in collaborative inquiry within a DUE framework. We published the initial findings from

the conclusion of the yearlong study, which demonstrated potential in the DUE construct and

professional development design to strengthen educators' skills, dispositions, and knowledges

related to data and equity literacies. Because the conclusion of the project coincided with

pandemic-related school shutdowns, we wanted to then know how the project influenced the

educators the following year. In addition to the inequities highlighted by the pandemic, the year

in question saw massive public calls for racial equity, and we realized that the findings would

represent a sociopolitical complexity different from the context in which the project occurred.

The sociopolitical context of this time was characterized by increased calls for anti-

racism in all facets of society from policing, to housing, to education, and so on (Bonilla-Silva,

2022). The interconnected social systems that both influence and that are influenced by

schooling were called on to make impactful changes that would disrupt the systemic racism and

classism that had re-emerged as broadly visible with the murder of George Floyd by police and

the closure of schools due to the COVID-19 pandemic. States made great strides to immediately

begin using a discourse of equity and access. Anti-racism became a common term in educational

initiatives. The state within which this study occurred created an online repository of

professional learning materials devoted to educational equity that included readings for educators in cultural responsiveness and curriculum materials aimed at developing anti-racist perspectives and actions. Educators were also engaged in continual conversations about equitable access to instruction during school closures as the differences in marginalized and minoritized students' barriers and opportunities became more evident than ever before in recent history (Office for Civil Rights, 2021). However, as these calls, resources, and conversations increased, so did a whitelash (Lippard et al., 2020) that pushed back on the ideas of systemic racism. Whitelash, or White backlash, is resistance to the existence of White supremacy and the structures and systems that maintain it, a rejection of White privilege, and an adoption of color-blind racial ideology (Doane, 2020; Williams, 2020). During this time, educators became caught in a space that simultaneously had them engaging in conversations related to access and equity and a space that reinforced considering these things in individual rather than in systemic ways.

To this end, we report here on how the educators described the influence of the project on their personal and professional lives and elements of the professional development model that participants noted to be impactful given all that they experienced over the year. We highlight the experience of the only teacher of color in the educators' group, as her experience holds important implications for designing collaborative professional development opportunities.

Project Design and Related Literature

The project was designed to develop teachers' data use for equity through collaborative inquiry spurred by data. As we designed the project, we were informed by literature in equity and data literacies and teacher inquiry.

Equity and Data Literacies

Elsewhere, we have argued that data in schools can be harnessed for equity ends, but doing so requires the intentional cultivation of educators' data and equity literacies (Dodman et al., 2021). Such literacies are necessary to move educators away from neoliberal models of data-driven decision making with accountability emphases towards a liberatory model of critical data-driven decision making (CDDDM), that reorients what, why, and how data are considered. DUE exists at the intersection of data literacy and equity literacy, in a space where teachers can recognize, respond, redress, and sustain equity by using what they know and are able to do with data. The framework that represents how we positioned DUE and inquiry in teachers' professional learning is presented in Figure 1. To support the development of equity literacy, the project included professional learning in culturally responsive and relevant teaching that positioned teaching and learning as culturally mediated and influenced by sociopolitical-historical policies and practices experienced by both teachers and students. We utilized tools, such as the Multicultural Teacher Capacity Scale (MTCS; Cain, 2015), which is a self-evaluation rubric featuring dispositions that influence teachers' knowledge development and skill application. The rubric provides concrete descriptions of knowledge and skill progressions from nascent to transformational that can act as a guide for educators who seek to move from awareness to critical analysis and action-oriented changes in pedagogy and content.

Figure 1

Professional Development Design Framework
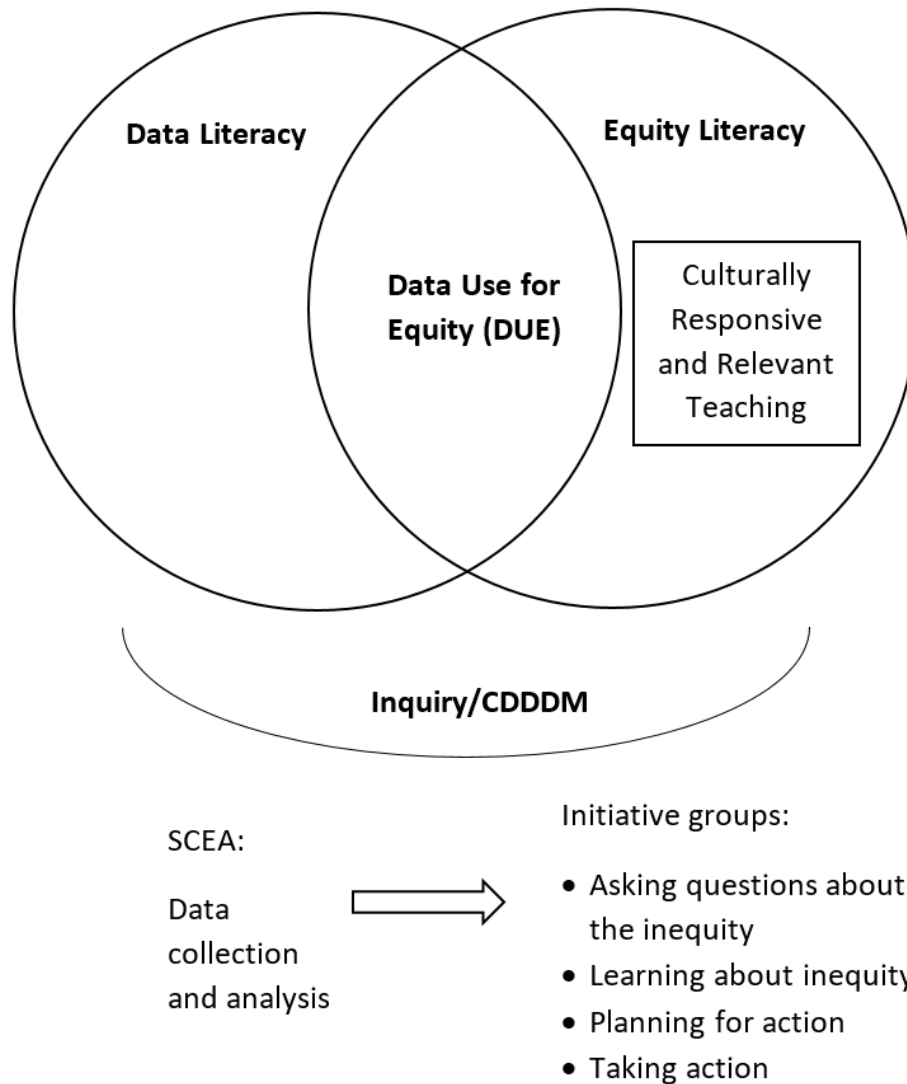
Teacher Inquiry

Teacher inquiry is a key vehicle for utilizing and building skills in DUE. The CDDDM

model is founded in a critical inquiry stance that demands educators' curiosity and attention to

their own positionalities, expanded notions of data, and assumptions of in/equity built into the

systems of schooling (Cochran-Smith & Lytle, 2001). A typical model of teacher inquiry begins

with a question of interest about which an educator then seeks out more information by consulting with professional practitioner and academic resources to design an action plan in response. The plan includes the collection of data to monitor the action's outcomes. The data are analyzed, the teacher reflects on the findings, and they determine the next steps or the next question. There is then a key sharing phase as teachers make their learning and practices public to others (Dana & Yendol-Hoppey, 2020). Mohr et al. (2012) offer six attributes of teacher inquiry: "intentional, systematic, public, voluntary, ethical, and contextual" (p. 23). While, typically, teacher inquiry is conducted by individual or pairs of teachers to study their own pedagogical practices (Mohr et al., 2012), the inquiry engaged in this project was collaborative and intended to target the school's *systems*.

In the initial study, the project's participating educators engaged in eight professional development sessions that were structured as a mix of half and full day sessions from summer 2019 through spring 2020. The emphasis on the systemic nature of in/equity was catalyzed via an initial data gathering exercise using a School and Classroom Equity Audit (SCEA). Participants included a variety of school staff including teachers, counselors, and administrators, referred to collectively in this article as *educators*. Using the SCEA, the educators in the project collected data on a range of equity indicators both within their classrooms and at the larger school-level. They examined for over- and underrepresentation of students in such areas as gifted programming, achievement, student council, special education, school clubs, disciplinary referrals, etc. This initial data analysis identified compelling areas of inequity that helped the educators "define the field of action" of their inquiries (Lambirth et al., 2021). Educators then formed groups of two to three to address inequities through collaborative inquiry: gender disproportionality in discipline data, English Learner underrepresentation in the gifted program,

gender disproportionality in STEM, and high student mobility causing disrupted learning and community. To support the collaborative inquiries, teachers engaged with multiple resources and tools and there was ongoing attention to culturally responsive and relevant teaching.

Findings at the conclusion of the project indicated that participants' sense of agency, perceptions of equity and data, and perceived multicultural capacities were enhanced; yet, findings also demonstrated that while participants made progress in strengthening their data and equity literacies on almost all indicators, they were still developing in these capacities. We theorized that the project served as a priming foundation for educators, increasing their awareness and comfortability in discussing inequities, rather than as a finished effort that would include consistent critical self-reflection, changes to classroom practices, and addressing of systemic inequities as a way of being as an educator. To this end, we individually interviewed participants one year later to learn how the project may have impacted their continued work and learning, particularly in the new sociopolitical context forged since the project ended.

Methods

We employed qualitative methods to learn how the participants were affected by their engagement in the professional development project a year later in a different sociopolitical context. We specifically asked the following research questions:

1. In what ways do participants describe the influence of the collaborative inquiry project on their work and learning one year later?

2. In what ways did the professional development design facilitate or hinder participants' identified learning?

Participants

The professional development project initially took place with nine educators in a single elementary school. One educator identified as a Black woman and eight educators identified as White women. All were native English speakers. Initial and follow-up study participant demographics are presented in Table 1. The suburban Title I school's student demographics were 77% Hispanic, 12% White, 6% Black/African American, 3% Asian/Pacific Islander, and 2% Multiracial. Nineteen percent of students were identified with Autism, Specific Learning Disabilities, and/or Speech/Language Impairments. Six percent of students were identified as gifted. Sixty percent of students were identified as English Learners. Finally, 85% of students were considered economically disadvantaged.

Table 1

Follow-up Interview Participants

Participant Name	Grade/Position	Race	Sex	Career Stage	Study Participation
Erica	K	White	Female	Late	I & F
Sara	1	Black	Female	Late	I & F
Maisy	2	White	Female	Early	I
Veronica	3/ESOL	White	Female	Mid	I & F
Tracey	5	White	Female	Early	I & F
Katrina	ESOL	White	Female	Late	I & F
Marilyn	Principal	White	Female	Late	I & F
Tina	Assistant Principal	White	Female	Late	I & F
Diana	Guidance Counselor	White	Female	Mid	I & F

Note. All names are pseudonyms; Veronica began the project teaching 3rd grade and moved into an ESOL position during the project.
Note. "I" represents initial study participation; "F" represents follow-up study participation.

Eight of the nine educators who engaged in the project participated in the follow-up interviews: the school's two administrators (principal and assistant principal), one guidance counselor, two English for Speakers of Other Languages (ESOL) teachers, and three teachers from grades kindergarten, first, and fifth. Seven of the interview participants identified as White and one identified as Black. Two of the teachers were not teaching at the time of the follow-up interview: the fifth-grade teacher left the teaching profession to attend law school and the 3rd/ESOL teacher took the year off to care for a new baby. A final participant in the project (a second-grade early career teacher) declined to participate in the follow-up interview due to personal and professional time commitments.

Data Collection and Analysis

An individual follow-up interview was conducted with eight of the participants. Thirty-to-forty-five-minute interviews were conducted using a semi-structured interview protocol. Each participant was interviewed by one of the researchers via Zoom to ascertain the educators' perspectives on the impact of the data use for equity project on their professional learning and growth. At the time of the interviews, educators were in the spring semester of pandemic teaching. Two of the eight participants were still teaching virtually (first grade teacher Sara and kindergarten teacher Erica), while four had returned to in-person teaching in the school (Katrina, Marilyn, Tina, and Diana). Contributing to the teaching and social context at that time were local, national, and global calls for racial reckonings in public-serving institutions. We recognized that the educators' responses to our work the previous year would be influenced in important ways by the new/renewed conversations around equity that were taking place both within and outside of educational contexts. We crafted interview questions in response. Questions focused on the topics of: successes and challenges during the year, perceptions of

students and families as influenced by virtual teaching and racial justice movements, feelings of preparedness to address newly visible inequities, and reflections on the professional development project and any potential lasting influences.

Analysis followed Braun and Clarke's (2006) thematic analysis approach. Transcribed interviews were analyzed inductively by the first two authors by first assigning open codes to related text segments in two participant interviews. The two researchers met to determine agreement and refine codes, keeping a code book that defined each code and offered representative excerpts. Each of the two researchers then individually coded two more interviews using the refined codes, meeting again to compare codes with each other and with previous code applications to determine agreement. Via discussion of the coded text, these two researchers ensured that each data excerpt was given equal consideration in the sense-making process so as to avoid ignoring data that did not fit potentially anticipated themes. The process was repeated for the remaining interviews. Each time researchers met, emergent themes were brainstormed and tested against the coded data set. This process resulted in the development of themes as the researchers used the codes to make meaning of the data. The researchers created "an overall conceptualization of the data patterns and relationships between them" (Braun & Clarke, 2006, p. 89) as final themes were constructed.

Central to the analysis was researchers' intentional attention to their positionality. The second author is an administrator in a Preschool-8th grade charter school and a PhD student in teaching and teacher education. She identifies as a Latina woman. She was not involved with the initial project but engaged in data analysis with the first author for this follow-up study. The first author is a university faculty member and facilitated the initial project. As such, she had background knowledge of participants' engagement and pre-existing relationships with each

educator. She identifies as a White woman. The third author helped to facilitate the initial project with an additional three colleagues but was not engaged in data analysis. She identifies as a White woman.

Findings

Our prior research posited that the professional development endeavor acted as a potential priming experience for the educators. That is, that educators were prepared to use the foundation they had developed in equity and data literacies to continue acting to create more equitable environments for their students, particularly using data. Our follow-up interviews a year later, after a year of virtual teaching, school closures, and widespread public movements for racial justice, confirm that educators were indeed primed and indicate that the project was impactful because it provided access to tools (e.g., graphics, audits, and rating scales) and rich dialogue that the educators could reference in their continued practice and reflection. However, as we analyzed our follow-up interviews, there were findings in areas that we did not anticipate related to colleague relationships and the experience of the sole teacher of color (Sara) in the participant group. The findings of our two research questions overlapped (1. In what ways do participants describe the influence of the collaborative inquiry project on their work and learning one year later? and 2. In what ways did the professional development design facilitate or hinder participants' identified learning?), so we first present the tools and dialogue space that were named by the participants as meaningful to their learning. As we do this, we describe how the educators utilized these elements in their continued learning and work in a sociopolitical context that increased in complexity post-project. We then report on the participants' characterizations of their relationships. It is here that we highlight the experience of Sara.

Project Tools

After the forced end of the project due to the school's COVID-19 pandemic-related closure, public dialogue around equity increased. Participating educators named the equity work in which we engaged as important to how they then asked questions related to, "What do students need? What do parents need?" (Veronica). A graphic depiction of equality, equity, and liberation used during the sessions offered participants a touchpoint on which to return as they considered fairness in terms of their students' opportunities and access to instruction during the pandemic. Kindergarten teacher, Erica, spoke to an altered way of noticing, even if she could not articulate it in the way she wanted:

> I have to say that I do think more about equity things now, you know, when I hear about somebody's situation, I'm like "Is that really fair?" I mean - is that their fault or is there something we can do to fix it? I'm more conscious of [in/equity] … Because I used to just like say "Yeah, okay, whatever everybody gets [the] same thing you know. If you don't get it, you don't get it." … And some people just need extra help, so you know... I do think differently now, I think. I really think I do, but I can't really kind of put that into words.

Erica's time in the project was interrupted by health-related absences. Due to this, she was unable to be fully present in the project. Despite this, there were noted instances during the sessions where Erica identified new learning, particularly related to cultural representations. Her expression of a perspective shift in relation to fairness of opportunity in her follow-up interview was noteworthy for her, even though she is still thinking in terms of 'help' and individual 'fault.'

Katrina expressed a sense of critical reflection in which she probed her own understandings of diversity and race. She specifically spoke to the SCEA as "opening [her] eyes":

I think other schools definitely should get into [the SCEA] and should look at [their data] themselves … I grew up in [a large city]. I grew up in a diverse world. I have biracial nieces and nephews. In my mind, I was culturally relevant. I work in Title I – I thought I had it. And then we see [the SCEA data] and, like I said, I start thinking of other things, like the ableism, and it's like, 'Ok, my mind is kind of been blown and it's even more than I thought' kind of thing.

During the project, Katrina expressed the greatest skepticism towards our emphasis on equity and culture. For her to express such strong critical reflection in the follow-up interviews was surprising and confirming of the priming nature of the tools and activities in which participants engaged. The principal, Tina, also referred back to the equity graphic and SCEA as important influences on her current work as she moves away from an equality- to a justice-based approach:

Making sure that students had the things that they needed to be successful at the beginning of the year [when the school was virtual] … [and] we do need to continue to learn and make sure that we're not only treating people equally, but providing the support that people need … That [equity graphic] always comes to mind. That sometimes you need a big box and sometimes you need a medium box, sometimes you don't need a box.

The final tool that was named by participants was the MTCS (Cain, 2015). The MTCS enabled imaginative futures for Veronica in which she is able to increase her understanding of the sociopolitical contexts of schools:

When first reading [the MTCS], I thought "No, but maybe I'll get there" and now, I think

more and try to take action. For example, one of the [knowledge of sociopolitical context

of schools] indicators was "watching the news." At first, I thought, "No, people don't do

that! ... But do people actually?" Then I thought, "Maybe I could. How could I?" Then

thinking [after trying] "Did I do it?"

Being able to imagine differently is important to equity work. If we cannot imagine

beyond current structural, personal, and systemic boundaries to consider alternatives, then

dominant narratives are maintained and marginalized voices and experiences remain

afterthoughts. In each of the participant examples above, the educators relied on the project tools

as anchors to refer to when grappling with new reflections. Participants' engagement in the

collaborative inquiry project prepared them to use these tools to increase their awareness and

understanding of inequities experienced by their students and their families.

Dialogue

Participants mentioned that the opportunities for dialogue offered during the project had

lasting impacts on them. Dialogue during the project was positioned as an intentional kind of talk

meant for understanding versus agreement. Marilyn noted that such engagement has affected

how she interacts with others now:

I feel way more comfortable now, asking people things, [asking] for more information –

"I don't really understand what your experience has been, can you tell me more because I

really do want to understand." Or, not even understand so much, but just value.

Similarly, the principal, Tina, expressed how she is deliberately working on questioning more

before jumping immediately to action. Her emphasis on questioning and listening over telling is

important:

I want to fix things, and I think that I know the answers when sometimes I need to be

listening more than telling. So being an active listener, that's something that I've been

working on since the project is really listening to others more, and then trying to figure

out what questions to ask, too. Because we can't get the right answers if we don't ask the

right questions.

During the project, Tina was a supportive principal who clearly cared for her teachers. In service

of that support, at times, she shut down questioning and reflection by bolstering teachers'

confidence in their current efforts and perspectives. Her deliberate attempt now to listen more

and ask questions is a strong outcome from the high value we placed on dialogue, questioning,

and reflection. Veronica was also affected by her engagement in the project dialogue. She spoke

on her new attention to being okay with lag time between people's thoughts and giving wait time

to formulate thinking. Veronica also mused about this affecting not only her adult-to-adult talk

but also her consideration of what students need in her classroom in relation to talk and to varied

perspectives and representation. Noteworthy, participants' reflections on the dialogic nature of

each session also revealed sometimes conflicting experiences related to connections with

colleagues and the larger school community.

Characterizing Relationships

As participants shared their perspectives on their experiences in the professional

development project, an important theme emerged in how educators spoke of their relationships

with colleagues and students and families. While these relationships were often identified as

positive in relation to one's professional learning, they were also revealed to be complex in their

influence and their outcomes.

Colleagues

When describing relationships with colleagues, six of the eight participants reflected positively on the group and referenced the importance of camaraderie during the pandemic year following the research project. Diana spoke about having shared background knowledge as a result of participating in the project.

I'd like to believe that whether it's been a perspective change or just like a change of thinking...it's been helpful to be able to reference [the project] too, to some of those colleagues within that group, to say "Hey, do you remember?" "Or what if we thought about it in this?" "Or remember when we talked about this, you know, could what we're dealing with right now have a relationship with that or correlate?"

Participants found value in continuing their personal growth through collaborative dialogue and personal reflection with their colleagues. When interviewed a year later, over half of the participants referenced a new professional learning group at their school comprised of a mix of study participants and non-participants. The purpose of the educator-created group (EG) was to engage in critical dialogue with colleagues and read materials to support the development of their culturally responsive practices. As Diana again described,

[The EG] looks at that discomfort, accepting discomfort, difficult conversations piece of education – in regards to gender, in regards to class, in regards to race, in regards to culture. All of those different things has been a gift, I think, in a season that has been really unknown. It continues to push us into those unknown territories, but with each other.

When discussing how they had been affected by the movements for racial justice, participants described a renewed sense of urgency, new revelations, and their collective increase in racial

equity work. Marilyn described using dialogue to "push the envelope" by asking questions in a safe place of understanding.

Despite these positive outcomes, there were two educators in the group who both spoke of complex entanglements when aspects of their identity intersected with their professional roles. Tracey, a fifth-grade teacher who has since left the profession, spoke of a particularly difficult experience during the sessions:

I remember us having to have a really hard discussion, I think race did come up, and unfortunately, because I admitted and took that vulnerable moment - just admitting that there are people in my life that are not as understanding or not as willing to hear and entertain these conversations - unfortunately, I was perceived, and it was spread around the school, that I was racist.

Tracey recognized the importance of vulnerability and establishing trust in spaces when dialogue is used as a means of connection for people but acknowledged the challenge when "putting people from different backgrounds in a room." Sara, as the only participant of color, spoke frequently in her follow-up interview of how different her experience was because of her identity as a Black woman. She spoke about the professional development project, and she explicitly referred to the racialized social contexts of the past year. She hesitated to describe her relationship with colleagues, referring to herself as an outsider, and questioned her continued role in the school community.

I feel less connected to the school as a community after all of [the racial justice protests] happened. A lot of views have come out, a lot of opinions have come out, and it's been hard for me. It's been really hard for me … I've never thought of not being a teacher

more. It's just so – especially an African American teacher – it's just so much pressure

right now on everything and … I don't know.

Additionally, Sara contrasted her White colleagues' interests in racial equity work, stating, "It's

not really a movement for me because I've lived it my whole life." She described how her White

colleagues projected their feelings of anger, sadness, or frustrations in response to George

Floyd's murder onto her. They expected Sara to share their indignation and to feel similarly

because of her racial identity. When she didn't share their views, Sara felt judged and othered

("It's made me feel different...when I was at the school before, I didn't feel like the Black

teacher, and now I do."). This worry over having to defend her choices or rationalize her

decisions led Sara to withdraw as a member of the community, choosing to stay silent and

disengage instead of participating in the dialogue and reflection around controversial topics.

> Because here's the thing, if you tell a colleague, "Yes, that's offensive." Then their next
>
> question is "Well, why?" And now you're into defending why you're offended by it, and
>
> nobody wants to be put in that situation ... You're like "It's offensive because ..." "Well,
>
> why would that offend you?" And you're like "This is …" (trails off). I should have just
>
> said "It's fine."

In fact, while Sara indicated that the professional development project "covered everything that

[she] would have hoped it would cover" and "it was a chance to bring out a lot of different

perspectives that [colleagues] may not have had before or [she] may not have had before," she

also indicated that if the group was forming today, she probably would not join. She attributed

this hesitation to the potential difference that more teachers of color would have made to the

group's dialogue. She, as the only teacher of color in the participant group and a self-described

introvert, was not comfortable speaking up or back to issues on her own. In her words:

I think, maybe you would have gotten a different chance if you had other teachers of different color or ethnicity present. But I hate confrontation, first of all, and so the little things that I did feel strongly about enough to talk – which, you know, I didn't like to talk in there, to begin with - I (pause, sigh), I didn't even like that bit of confrontation, but I knew that [my colleagues] got where I was coming from. Like, there's a couple of instances that I can remember that I knew that they knew that that didn't sit well with me but because – it's, not that I didn't think you didn't poke enough, I think that you didn't have an opportunity to if that makes sense, like there was no pushback.

Despite the development of shared conversations, practical use of tools, and efforts to continue elements of professional learning related to equity-based practices, the contrasting experiences of Sara and her White colleagues highlight the continued need to consider racial positionality in professional learning, coupled with the need for strong challenging of assumptions and biases. Similar outcomes were observed when analyzing the positioning of the participants as they described their students and families.

Students and families

Some participants' engagement and outcomes related to the project were conflicting. For example, during Erica's follow-up interview, she often spoke about students and families from a place of deficit; her pity was interpreted as empathy to her. While she espoused how much she loved her students and described her growing noticing of inequity in resources, she simultaneously degraded students' home lives.

So, I have this one little kid who was in my class ... [at] his house, you can see, there were hammocks hanging in the background that people are sleeping in because he lived with so many other people. And you know, and he didn't speak a lick of English, he

showed up sometimes, sometimes he didn't. And it was just like, to me, it's like going, okay, so one kid has all the advantages of having a stay-at-home parent who can stay home and do that with them, and they give him all the resources they need. And then, we have this poor little guy over here who's you know sucking on a juice box, rolling around while other people, you know, sleep in hammocks behind him in the kitchen. And it, I mean, it kind of broke my heart.

Similarly, Katrina described contradictory reflections on her engagement with students and their families. On the one hand, she positioned schools and teachers as saviors and described families having to "swallow their pride" to seek assistance for access to food and technology. She expressed surprise when it was college educated families or those with students labeled as gifted and talented who needed support with access. However, Katrina also noted key revelations that caused her to rethink her interactions with students and families. As she furthered her understanding of equity and equality, Katrina gained confidence in engaging her students in meaningful dialogue.

> We have basically been reading and talking and studying various subjects about equality and equity, and opening our eyes to things that maybe we hadn't even thought were part of that equation, like ableism and Indigenous peoples and, you know, is it people-first wording or is it disability first wording? And the conversations we've had have been amazing. So, I definitely think that has probably opened my eyes to what is going on or maybe why is it going on kind of thing ... And try and talk to [the students] about things that maybe I wouldn't have in the past. I would have just kind of glossed over and gone "Oh, okay, I'm gonna keep going now."

Katrina's development is not linear. As she moves forward in one space of equity literacy development, she maintains a deficit perspective in another. Her experience demonstrates the necessity of DUE professional development that is ongoing and embedded within the facets of everyday work. Katrina demonstrated capacity for critical reflection and reexamination of assumptions. But this work is not all or nothing. She needs regular, naturally occurring opportunities to practice such reflection within a DUE framework.

Discussion and Future Implications

Findings of our follow-up study indicate the DUE inquiries primed teachers for noticing inequity and its associated critical reflection. However, some participants still struggled with assumptions and biases that influenced their perceptions of students and their families. While the kindergarten teacher was not fully engaged in the project due to health-related absences, her maintenance of assumptions and biases is still troubling and offers implications for future professional development design. In assessing their equity-oriented development, the participants provided feedback that asked for more concrete ways to apply the learnings from the collaborative inquiry and dialogue. While we focused heavily on Ladson-Billings's (2011) stance that "'doing' is less important than 'being'" (p. 176), teachers ultimately needed help translating the *being* to the *doing*, so that they may better inform one another (Castagno, 2012; Farinde-Wu et al., 2019; Irizarry, 2011). Veronica's response, in particular, implies that centering self-reported or evaluative rubrics (e.g., MTCS; Culturally Responsive Teaching Self-Efficacy Scale, Siwatu, 2007; Culturally Responsive Instruction Observation Protocol, Powell et al., 2016) may be useful to this translation because such instruments can serve an aspirational as well as evaluative function.

In the original professional development, the MTCS rubric was introduced as a tool to identify the dispositions, knowledge, and skills necessary to promote educational equity, but ultimately was not a central area of focus. Findings from this follow-up study indicate that educators can benefit from intentional focus on the rubric's personal to systemic continuum as they work to translate abstract concepts into actionable practices. Despite increased awareness of inequities, the participants were limited in their capacities across different spheres of influence, such as personal, interpersonal, cultural, school/district-based, or systemic. The result heavily influenced the different experiences between the participants.

As the White educators spoke of their learning and the powerful dialogue in which they engaged/were engaging, they also seemed oblivious to their Black colleague's discomfort or potentially different experiences. During her interview, Sara shared a powerful story of fear for her Black son at the hands of police. With the recent murder of Tyre Nichols as we write this, her fear weighs heavy. She noted in her interview that sharing her fears is not something that she would do with her White colleagues. Her anxiety related to being singled out as "the Black teacher," and therefore, burdened by having to speak for race and racism kept her quiet in the group setting, a phenomenon not unique to Sara (Daniel, 2019).

An impetus for the professional development was to move what was an individual inquiry graduate project to a school site where colleagues could collaborate in using data for school change. While we worked to create safety and trust between the educators and us as external researchers, our findings demonstrated that the shared histories and relationships among the educators themselves were essential influences on the group's trajectory. As we consider how to center experiences of teachers of color such as Sara, Mensah's (2019) use of personal

narratives and written reflections may be helpful. Incorporating journaling could emphasize

continuous reflection that would enable personal exploration without public judgment.

In fact, knowing what they know now, the participants themselves noted several areas for

future consideration in designing a similar professional learning effort. Those include a greater

focus on examining self/identity, greater attention to their own classroom data and practices,

more frequent sessions, and greater attention to the collection of "street data" (Safir & Dugan,

2021) to better understand the perspectives and desires of stakeholders to combat assumptions.

Street data are the "qualitative, experiential data … [data that are] asset based, building on the

tenets of culturally responsive education by helping educators look for what's right in our

students, schools, and communities instead of seeking out what's wrong" (p. 2). Street data value

the cultural wealth of communities (Yosso, 2005) by not relying solely on numerical data, but by

pairing those data with artifacts, stories, and observations. One such type of story, the counter

narrative, offers much potential to disrupt educators' socialized deficit orientations by presenting

alternatives to dominant stories of students', families', and educators' experiences.

Additionally, conceptually framing a stronger anti-deficit approach at the outset of the

project would potentially enable us as the research team to more visibly position intentional,

ongoing action as a key element of DUE. The emphasis on assets, while important and in many

ways successful to the educators' shifts in noticing, was also perhaps insufficient without the

action orientation of an anti-deficit framing. An anti-deficit framing would require the educators

to continually dismantle their own systems of deficit narratives that have developed over time

(Adiredja, 2019). Educators were more easily able to recognize inequitable conditions and

structures at the institution level, but were challenged to interrogate their own deficit

orientations. This was particularly true of the White educators who seemed unable to notice their

role in the markedly different experiences of their colleague of color, and in the case of Erica,

who intertwined equity and pity.

      While participants expressed important systemic learnings and skills in DUE from the

collaborative inquiry endeavor, the findings from a year later during a time of social uncertainty

indicate that there is still work to be done. While there is much potential to be seen in the

outcomes reported by the participants, the identified challenges and changes to the project's

design could have powerful implications for educators' sustainability of data use for equity

knowledges, dispositions, and skills in sociopolitical climates that are only becoming more

contradictory and complex.

References

Adiredja, A. P. (2019). Anti-deficit narratives: Engaging the politics of research on mathematical sense making. *Journal for Research in Mathematics Education*, *50*(4), 401–435. https://doi.org/10.5951/jresematheduc.50.4.0401

Bonilla-Silva, E. (2017). *Racism without racists: Color-blind racism and the persistence of racial inequality in America* (5th ed.). Rowman & Littlefield Publishers.

Bonilla-Silva, E. (2022). Color-blind racism in pandemic times. *Sociology of Race and Ethnicity*, *8*(3), 343–354. https://doi.org/10.1177/2332649220941024

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77-101. http://dx.doi.org/10.1191/1478088706qp063oa

Cain, J. M. (2015). *Clarifying multicultural: The development and initial validation of the Multicultural Teacher Capacity Scale* [Publication No: 3719723] [Doctoral dissertation, The University of North Carolina at Chapel Hill]. ProQuest Dissertations Publishing.

Castagno, A. E. (2012). "They prepared me to be a teacher, but not a culturally responsive Navajo teacher for Navajo kids": A tribal critical race theory analysis of an indigenous teacher preparation program. *Journal of American Indian Education*, *51*(1), 3–21.

Cochran-Smith, M., & Lytle, S. L. (2001). Beyond certainty: Taking an inquiry stance on practice. In A. Lieberman & L. Miller (Eds.), *Teachers caught in the action: Professional development that matters*. Teachers College Press.

Dana, N. F., & Yendol-Hoppey, D. (2020). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry* (4th ed.). Corwin.

Daniel, B. J. (2019). Teaching while Black: Racial dynamics, evaluations, and the role of White females in the Canadian academy in carrying the racism torch. *Race, Ethnicity, and Education*, *22*(1), 21–37. https://doi.org/10.1080/13613324.2018.1468745

Doane, A. (2020). Post–color blindness?: Trump and the rise of the new White nationalism. In C. D. Lippard, J. S. Carter, & D. G. Embrick (Eds.). *Protecting whiteness: Whitelash and the rejection of racial equality*. University of Washington Press

Dodman, S. L., DeMulder, E. K., View, J. L., Stribling, S. M., & Brusseau, R. (2023). "I knew it was a problem before, but did I really?": Engaging teachers in data use for equity. *Journal of Educational Change.* https://doi-org.mutex.gmu.edu/10.1007/s10833-022-09477-z

Dodman, S. L., Swalwell, K., DeMulder, E. K., View, J. L., & Stribling, S. M. (2021). Critical data-driven decision making: A conceptual model of data use for equity. *Teaching and Teacher Education, 99*, 1-12. https://doi.org/10.1016/j.tate.2020.103272

Farinde-Wu, A., Griffen, A. J., & Young, J. L. (2019). Black female teachers on teacher preparation and retention. *Penn GSE Perspectives on Urban Education, 16*(1). Retrieved from https://urbanedjournal.gse.upenn.edu/archive/volume-16-issue-1-spring-2019/black-female-teachers-teacher-preparation-and-retention

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice* (3rd ed.). Teachers College Press.

Gorski, P. C., & Swalwell, K. (2015). Equity literacy for all. *Educational Leadership, 72*(6), 34-40.

Irizarry, J. G. (2011). En la luncha: The struggle and triumphs of Latino/a preservice teachers. *Teachers College Record, 113*(12), 2804-2835.

Ladson-Billings, G. (2011). Yes, but how do we do it? Practicing culturally relevant pedagogy. In J. Landsman & C. Lewis (Eds.), *White teachers/Diverse classrooms* (2nd ed; pp. 33-46). Stylus Publishers.

Lambirth, A., Cabral, A., McDonald, R., Philpott, C., Brett, A., & Magaji, A. (2021). Teacher-led professional development through a model of action research, collaboration, and facilitation. *Professional Development in Education*, *47*(5), 815–833. https://doi.org/10.1080/19415257.2019.1685565

Lippard, C. D., Carter, J. S., & Embrick, D. G. (2020). *Protecting whiteness: Whitelash and the rejection of racial equality*. University of Washington Press

Mandinach, E. B., & Gummer, E. S. (2016). What does it mean for teachers to be data literate: Laying out the skills, knowledge, and dispositions. *Teaching and Teacher Education*, *60*, 366–376. https://doi.org/10.1016/j.tate.2016.07.011

Mensah, F. M. (2022). Educating future teacher educators of color to talk about race in teacher education. In C. D. Gist & T. J. Bristol (Eds.), *Handbook of research on teachers of color and indigenous teachers*. AERA.

Mohr, M. M., Sanford, B., MacLean, M. S., Rogers, C., & Clawson, S. (2012). *Teacher research for better schools*. Teachers College Press.

Nieto, S., & Bode, P. (2018). *Affirming diversity: The sociopolitical context of multicultural education* (7th ed.). Pearson.

Powell, R., Cantrell, S. C., Malo-Juvera, V., & Correll, P. (2016). Operationalizing culturally responsive instruction: Preliminary findings of CRIOP research. *Teacher College Record, 118*(1), 1-46.

Safir, S., & Dugan, J. (2021). *Street data: A next-generation model for equity, pedagogy, and school transformation*. Corwin.

Siwatu, K. O. (2007). Preservice teachers' culturally responsive teaching self-efficacy and outcome expectancy beliefs. *Teaching and Teacher Education, 23*, 1086-1101.

Souto-Manning, M., Llerena, C. L., Martell, J., Maguire, A. S., & Arce-Boardman, A. (2018). *No more culturally irrelevant teaching*. Heinemann.

Williams, J. (2020). The unblackening: "White" license and the "nice racism" trope. In C. D. Lippard, J. S. Carter, & D. G. Embrick (Eds.). *Protecting whiteness: Whitelash and the rejection of racial equality*. University of Washington Press

Wink, J. (2010). *Critical pedagogy: Notes from the real world.* Pearson.

Yosso, T. J. (2005). Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race, Ethnicity, and Education*, *8*(1), 69–91. https://doi.org/10.1080/1361332052000341006