



## **Modeling Vulnerability: Confronting White Supremacy in Our Mathematical Policies, Practices, and Ourselves**

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### **Abstract**

School districts' anti-racist efforts often fail to consider the prevailing culture in which this work is situated: one of white supremacy. In this piece, we detail efforts of district-level mathematics leaders to engage building-level leaders in the naming, critically reflecting on, and finally taking action to redress racism in mathematics policy and practice. We share concrete examples of how the characteristics of White Supremacy Culture (WSC) and the levels of racism are at play in decisions around assessments, curriculum pacing guidelines, and course pathways. We hope our story will inspire others to engage leaders in reflection about their role in challenging long-standing inequities and actualizing anti-racism.

### **Discussion And Reflection Enhancement (DARE) Pre-Reading Questions**

1. How would you describe the overall mathematics culture in your district/setting?
2. What is your reaction to the phrase 'White Supremacy Culture'? What thoughts, feelings, and/or beliefs does it raise for you?

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Catherine Malchodi, and Katrina Rucker**

### **Introduction**

Our story is set in a large diverse mid-Atlantic school district that is geographically mostly suburban, with both rural and urban emergent (Milner, 2012) communities as well. It is home to more than 160,000 students PK-12 who are about 33% Latinx, 27% White, 21% Black, 14% Asian and 5% multiracial. The authors are five district-level instructional specialists and one district-level curriculum supervisor who support the work of 70 school-based middle and high school math teacher leaders. Annually, this team provides two full-day summer trainings followed up with monthly professional learning sessions and ongoing job-embedded coaching as requested by individual schools and leaders.

In her renowned TED Talk (Adichie, 2009), Nigerian author Chimamanda Ngozi Adichie speaks to “the danger

of the single story” when we are taught incomplete narratives about individuals, groups of people, and the world at large. The main problem, Adichie argues, is that the single story creates stereotypes, which though not wholly untrue, can be incomplete: “They make one story become the only story.” Our collective work is grounded in the stories of how we each experience the district, and how they vary along racial/ethnic lines. We invite readers to pause after reading these stories and reflect on how the stories reflect our racialized experiences and those of our children in this district. Do perspectives vary along racial/ethnic lines in your context? If yes, how so? If you don’t know, this may serve as an invitation to find out.

### **Christina, Black<sup>1</sup> District Math Supervisor**

A week after the murder of George Floyd, I sent an email to math building leaders asking how they were leading in

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<sup>1</sup> We acknowledge the myriad complex and intersectional identities we each hold as educators and chose to focus on

race/ethnicity as most salient to this story. The stories of two white authors were purposely not included to make space for the narratives of our BIPOC colleagues.

the context of the dual pandemics (Laing, 2020) of COVID and racial violence. Intended to spark dialogue, it included an article and reflective questions. I received not a single response. A week later, I penned another email:

“I am the first African American woman to serve in the role of secondary mathematics supervisor in [the district]; a descendant of slavery, and a survivor of racism, because I am still alive. I know systematic oppression, because I have seen and experienced it through subjection to entitlement, privilege, and superiority. Silent complacency and complicity is just as harmful as the aggressive violence captured on video.”

I invited building leaders to an open forum to engage in uncomfortable but needed dialogue with the goal of better understanding each other to develop empathy and unity moving forward. I also brought together an inter-departmental team of instructional specialists to co-design and facilitate anti-racism learning for leaders moving forward. This is the story of that work.

### **Cat, White Instructional Specialist and Katrina, Black Instructional Specialist**

Cat: My youngest son, with his beautiful blue eyes and blond curls, has always been described as spirited and mischievous by teachers and administrators. His willingness to stand up for friends who are being teased or bullied has always been celebrated, even when his reactions and/or language may not always be the most appropriate. I am embarrassed to admit that it didn't occur to me that other young boys are reprimanded and disciplined for similar behavior based on their skin color and/or language differences. I wanted to believe that adults would value all students and the unique experiences they bring with them. I have so much more to learn about implicit bias, white supremacy and how both negatively impact our students and their families in our district.

Katrina: While in elementary school my son was seated next to a student on the autism spectrum (he was not aware of this). Her frequent verbalizations often distracted my anxious son. When he shushed her, he was sent to the office and assigned a lunch detention for bullying. He then ate lunch in the main office for nearly two weeks. No one noticed until he brought it to my attention. The principal seemed surprised and merely

returned him to lunch. He finished elementary school under the impression that the principal thought he was a “bad” student.

My son was always quiet in school, often overlooked and allowed to struggle. Despite being diagnosed with social anxiety and selective mutism, he was often told that he needed to ask the teachers for the accommodations afforded by his legally-mandated IEP. He eventually began to shield himself from the world by wearing his hood and shutting out distracting and anxiety-inducing noises by wearing earbuds. Despite this being an IEP-endorsed coping mechanism, he was repeatedly reprimanded by his teachers, triggering further anxiety attacks. When anxious, he shut down, unable to speak. A teacher described him as “angry.”

### **Jennifer, Latinx Instructional Specialist**

Our district has increasingly begun to utilize racial affinity groups (Warren-Grice, 2021) as part of sessions on advancing anti-racism and racial equity. As a Latinx woman and one of few non-Black people of color in our district, I am often asked to select which of two (BIPOC or white) to join. In either group, I am alone and an outsider because there are few Latinx leaders at the school or district level. Latinx people do not have access to the privilege of White people, though we have privileges not granted to Black/African Americans. Latinx hold dual roles of victims and benefactors in white supremacist culture. At one particular affinity group meeting, as breakout rooms were released, I assumed I would be placed with other BIPOC math leaders. However, I ended up in a room with the only other Latinx leader. The experience was jolting. Stunned by the visual confirmation of just how few Latinx leaders we have in the district, I asked myself what had led them to avoid or be shut out of positional leadership?

### **Conceptual Framework**

Like the Leadership of TODOS (2020), we identify as math educators who “cannot look away or claim a privileged stance because we might prefer to believe mathematics is a culturally or politically neutral subject” (p. 2). Pursuit of equity inherently requires the identification and redress of *inequity*, and we find our district specifically and the field of mathematics generally

to be ripe in this regard. We also associate ourselves with the notion that each action can be only racist or anti-racist (Kendi, 2020). Like many other youth, students in our district flooded social media with their experiences of racism after the murder of George Floyd. They implored adults to dismantle the racist structures undergirding their experiences as students in the district. We knew we must provide leaders with the skills to be able to identify racism, but soon worried that the prevailing culture of the district itself would serve as a formidable foe in this effort. The culture itself literally kept us from being able to see and name racism.

### ***White Supremacy Culture***

We utilize the model of White Supremacy Culture (WSC) articulated by racial equity educators Tema Okun and Kenneth Jones, who define white supremacy as how “the ruling class elite or the power elite in the colonies of what was to become the United States used the pseudo-scientific concept of race to create whiteness and a hierarchy of racialized value” (Okun, 2021, para. 5). This hierarchy is codified in the enactment of the tenets of WSC, including: fear, one right way and perfectionism, either/or thinking and the binary, denial and defensiveness, individualism, progress is more, quantity over quality, and sense of urgency (detailed further in Table 1). This culture and its attendant characteristics have been normalized, rendering it nearly invisible, especially for White educators.

### ***Critical Pedagogy***

Our work with school-based math leaders is grounded in the Freirean concept of critical consciousness, or *conscientization*, a process in which participants examine the complexities of teaching and learning in service of creating a more equitable and just world (Freire & Macedo, 1995). Critical pedagogy requires educators to problematize the relationships among classroom practice, knowledge production, and schooling (McLaren, 1998). Teacher-educator Joan Wink (2011) translates Freire’s concept of critical pedagogy into a three-step reflective

cycle through which educators learn to think more critically about the world around them and their role in maintaining or challenging its mores. In this process, educators (a) name, (b) critically reflect, and finally, (c) take action informed by their reflections. They do so while engaging in a complex process of learning and unlearning driven by the unpacking of past and current experiences. This process is grounded in continual reflection that is deep, honest, and, at times, painful (Wink, 2011). In our summer and monthly learning sessions, we aimed to unearth the racial/ethnic inequities plaguing our mathematics classrooms and guide participants through Wink’s three-step process of naming them, reflecting on them, and then taking action designed to interrupt them.

### **Naming Racial Inequities and White Supremacy Culture**

We utilized one of our virtual summer kick-off days with secondary math leaders to give voice to our stories. Cat and Katrina shared their “tale of two mothers” (unabridged in Appendix A), painting starkly different pictures of how their sons had been treated as learners in the district. Sharing these complicated narratives provided building leaders with an entry point to examine how their own experiences were influenced by both race and culture. As Hammond (2015) argues, educators must become more knowledgeable about culture itself and how it plays out in social, economic, and political conditions that give rise to the inequities in our classrooms and school buildings. We utilized Hammond’s metaphor of culture as a tree with attendant surface, shallow, and deep elements to engage participants in guided reflection about their culture generally and mathematical culture specifically (see questions in Appendix B). After reflecting, participants shared portions of their responses in breakout discussions structured for deep listening (holding the space; not interrupting, giving advice, or editorializing on anyone’s story; maintaining confidentiality about what is shared).

**Table 1**

*Intersection of Leader-Identified District Math Culture and Characteristics of WSC*

WSC Characteristic	Overview of Characteristic (Okun, 2021)	Aspect of Math Culture in the District (Padlet Response)
Fear	WSC’s number one strategy is to make us afraid. When we are afraid, we lose touch with our power and are more easily manipulated by any promise of safety.	<ul style="list-style-type: none"> <li>● It's not "cool" to be on grade level; everyone wants to be advanced for fear of not fitting in.</li> <li>● We cater to a very small population of White and Asian parents out of fear of open conflict with them.</li> </ul>
One Right Way & Perfectionism	The belief there is one right way to do things and once people are introduced to the right way, they will see the light and adopt it.	<ul style="list-style-type: none"> <li>● Status quo, one-size-fits all curriculum and instruction.</li> <li>● The only way to engage in school improvement is to make BIPOC hypervisible and constantly the focus of these efforts.</li> </ul>
Either/Or Thinking & The Binary	Reducing the complexity of life and the nuances of relationships into either/or, yes or no, right or wrong, in ways that reinforce toxic power.	<ul style="list-style-type: none"> <li>● Low expectations for ESOL students; seen as slower and less capable. Assumptions made that lack of English proficiency means they cannot access advanced math (false binary).</li> </ul>
Denial & Defensiveness	The habit of denying and defending against the ways in which white supremacy and racism are (re)produced and our participation in doing so.	<ul style="list-style-type: none"> <li>● Students get passed from course to course without improving. Teachers blame students and social promotion for their lack of achievement (defensiveness).</li> </ul>
Individualism	Individualism is the myth that we should make it on our own without help and a toxic denial of our true interdependence.	<ul style="list-style-type: none"> <li>● The system is built for families that can access outside resources (tutors) and advocate for the course placement they want.</li> </ul>
Progress is More & Quantity Over Quality	The assumption that the goal is always more and bigger. What we can "objectively" measure valued more than the quality of our relationships.	<ul style="list-style-type: none"> <li>● Nothing is ever enough for the group at the “top”: the work isn't challenging enough, there aren't enough options, they want to skip courses, double up on courses, etc. to get ahead.</li> <li>● The perception that course placement = ability and intelligence.</li> </ul>
Sense of Urgency	Applying the urgency of racial and social justice to our everyday lives in ways that perpetuate power imbalance and disregard the need to breathe and pause and reflect.	<ul style="list-style-type: none"> <li>● To create "equity," schools put students into advanced courses without pre-requisite skills.</li> <li>● Acceleration is more important than learning; Faster is better.</li> <li>● Teachers focus on getting through curricula, not on ensuring student conceptual understanding.</li> <li>● Students are accelerated without mastering content, so math becomes their most-hated subject.</li> </ul>

We then invited participants to respond to the question “What is the culture of math in our district?” via a virtual bulletin board (using the app at Padlet.com) for BIPOC participants and another board for White-identifying participants. After recording their responses, participants viewed the other group’s Padlet and engaged in a fishbowl discussion, in which up to 8 participants at a time turned on their cameras to opt in while others observed, cameras off). Participant responses on both Padlets and in the whole-group fishbowl demonstrated interracial/ethnic agreement that the prevailing culture of mathematics in the district was deeply rooted in white supremacy. Table 1 summarizes participant descriptions (both BIPOC and White leaders agreed) of the district mathematical culture linked to the WSC characteristics they typify.

**Critically Reflecting on How WSC Operates in the District and Beyond**

It was clear from their reflections at this summer kickoff session that our bi-monthly school-year sessions with math leaders needs to involve continued study of WSC and how it shows up in our work. Doing so would provide the opportunity to address several key levers of inequity in mathematics education: district and state assessments, pacing, and course pathways.

Not even a global pandemic would convince national, state and local leaders to forego the usual battery of high-stakes, accountability-driven assessments in the disciplines of language arts and mathematics. Despite being named as “the most effective racist weapon ever devised to objectively degrade Black and Brown minds and legally exclude their bodies from prestigious schools” (Boston Coalition for Educational Equity, 2020, para. 13), standardized tests found themselves delayed rather than waived. This decision to defer yet proceed with administration of local and state assessment timelines forced district specialists to condense and contort the curriculum into a version that distilled only the most essential (read: *tested*) mathematical concepts. Building leaders lamented the lack of time to develop students’ conceptual understanding, the questionable validity of giving tests online and using their data to make decisions about student progress and course placement.

We utilized the angst about assessment timelines and presented our team’s assessment of how the characteristics of WSC were at play in these decisions (Table 2). Our goal was to help leaders be able to name these characteristics in their own practices and their school policies. After again modeling how to name aspects of WSC in a situation germane to their leadership, we asked building leaders to employ Wink’s (2011)

**Table 2**

*Characteristics of WSC Present in Decisions about Mathematics Assessment and Course Pacing*

WSC Characteristic	How It Showed Up in Assessment and Course Pacing
Quantity Over Quality	<ul style="list-style-type: none"> <li>● Things that can be measured are valued.</li> <li>● Number of included standards promotes breadth over depth.</li> <li>● Sacrificing conceptual for procedural knowledge.</li> </ul>
Priorities and Timelines	<ul style="list-style-type: none"> <li>● Fear of consequences for not sticking to established timelines despite student progress toward goals.</li> </ul>
Sense of Urgency	<ul style="list-style-type: none"> <li>● Decisions are made quickly rather than thoughtfully and inclusively.</li> <li>● Sacrifice relationships for (perceived) results.</li> </ul>
Individuality & Objectivity	<ul style="list-style-type: none"> <li>● Desire for individual recognition and credit.</li> <li>● Prioritizing linear thinking.</li> <li>● Invalidating those who show emotion.</li> </ul>

reflective process to another timely leadership challenge: recommendations for student placement in math courses for the upcoming school year. As noted by leaders in our summer session, the process of recommending students for math classes is steeped in white supremacy. In small groups, they discussed responses to the following: (a) Which WSC characteristics show up in our processes and decision-making about student placement? (b) What is the impact on students and their math identities? Their math pathways?

Our fall session ended with a private reflection in which we forecasted the shift from naming inequities to now reflecting on them more critically and using these reflections to drive action: (a) Critically Reflect: What role do I play? How have I (unknowingly) supported or perpetuated racism and WSC?; (b) Internal/Interpersonal Action: What norms of WSC would I like to challenge in myself? In how I interact with others?; (c) Institutional Action: What norms of WSC are present in my classroom / department / school practices? How can I challenge them?

Our winter session with building leaders focused on naming and reflecting on how the levels of racism (internal, interpersonal, institutional) and White supremacy present in school-based decisions regarding mathematics instruction. We shared detailed examples of school-level mathematical policies and practices that represent the characteristics of WSC and each level of racism (see Appendix C). Small groups used guiding questions to unpack the intent of these policies and practices, and more importantly, their racial-differential impact. We then challenged math building leaders to identify a point of entry to address one instance of internal, interpersonal, or institutional racism over which they had some degree of influence. Finally, we utilized racial affinity groups to process their brainstormed points of entry.

## Taking Anti-Racist Action to Challenge White Supremacy Culture

Jennifer's story sheds light on the pervasive nature of white supremacy in our district math culture and its leaders. Hiring leaders who share racial or cultural identities of our students may be moot if we fail to dismantle the racism baked into classroom, school, and district mathematical policies and practices. We collected year-end evaluation data from building leaders in which we asked them to reflect on our shared journey toward critical consciousness, and being able to name, critically reflect upon, and finally, take (anti-racist) action. Table 3 highlights building math leader responses that provide insight into their *conscientization*.

As the school year came to a close, Christina again reached out to math leaders, urging both district and building math leaders to be courageous:

I wrote an open letter to you to share my personal experience with racism during the time of racial injustice and social unrest within a global health pandemic. I have never been so exposed and vulnerable than I was through that letter and forum. That was the start of my equity journey with you. My mission, which I hope has become our mission, was to address institutional racism within our district and mathematics education. There have been many challenges on this journey. However, I have not allowed that to silence me. Each time we delved deeper into our equity work, you embraced it and wanted more time to learn and apply.

We currently continue this work with math building leaders to answer the question: How can I actualize anti-racism through my work as a math instructional leader? Being able to identify and engage in action to dismantle racism and white supremacy will be a true testament to our leaders developing critical consciousness. We ourselves have not formulated an answer to this question and will instead engage leaders in ongoing co-construction of individual and collective answers.

**Table 3**  
*Year-End Evaluation of Building-Level Leader Learning*

Response	I used to think...	But then I learned...	So I will...
1	that this is something really hard to bring up.	there are baby steps to get us there.	begin some PD at least once a month to bring up conversations.
2	I was walking on broken glass and needed to stay quiet as a middle-aged white man.	I need to be an active advocate and ally.	work with my department to help them engage in productive change.
3	all schools in our system offered a very similar experience for their students.	students, families and teachers don't always believe this is true.	work hard to pave a pathway for all students to receive the same opportunities that they would get in any school, regardless of socioeconomic status, race, family life, culture, race, etc.
4	math and anti-racism were not really connected.	that they are very much connected and show many ways that there is institutionalized racism in our system.	be an advocate for all students and continue conversations with teachers to recognize when racism is occurring and how to stop it.
5	that because I built relationships with students and looked at the data of my Black and Brown students constantly that I was doing good work.	I have not done enough for my students to truly be anti-racist.	I have more to do with my students in and out of my classroom to ensure that I am doing what is best to be anti-racist in every aspect of my teacher world and my personal world.
6	there wasn't much I could do in my role to be actively anti-racist.	certain practices and policies that I have interpreted as "business as usual" are actually rooted in white supremacy culture.	examine practices and policies within my control (and hopefully some that are not!) with an anti-racist lens and make changes accordingly.

### References

- Adichie, C. N. (2009). *The danger of a single story*. [Video]. <https://www.youtube.com/watch?v=D9Ihs241zeg>
- Boston Coalition for Educational Equity. (2020, October 22). *Read Ibram X. Kendi's testimony in support of the working group recommendation to #SuspendTheTest*. [Press release]. <https://bit.ly/3N96xaQ>
- Hammond, Z. (2014). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin Press.
- Kendi, I. X. (2020). *The American nightmare*. <https://bit.ly/3N6uM9L>
- Laing, S. S. (2020). *Dual pandemics: Finding pathways to heal and repair* [Webinar]. University of Washington. <https://bit.ly/41RDeh8>
- McLaren, P. (1998). Revolutionary pedagogy in post-revolutionary times: Rethinking the political economy of critical education. *Educational Theory*, 48(4), 431-462.
- Milner IV, H. R. (2012). But what is urban education?. *Urban education*, 47(3), 556-561.



Okun, T. (2021, September 11). White supremacy culture. <https://bit.ly/45zJfBK>

Rosales, J., & Walker, T. (2021, March 20). The racist beginnings of standardized testing. National Education Association. Retrieved September 14, 2021. <https://bit.ly/3H6v7FB>

TODOS: Mathematics for ALL. (2020). *The mo(ve)ment to prioritize antiracist mathematics: Planning for this and every school year.* <https://bit.ly/3j5Yvip>

Warren-Grice, A. (2021). *A space to be whole: A landscape analysis of education-based racial affinity groups in the U.S.* Black Teacher Project. <https://bit.ly/442iR2w>

Wink, J. (2005). *Critical pedagogy: Notes from the real world.* Pearson/Allyn & Bacon.

### **Discussion And Reflection Enhancement (DARE) Post-Reading Questions**

1. How do the characteristics of WSC show up for you personally? Professionally?
2. How does WSC show up in mathematical policies and practices?
3. What role do you play in perpetuating WSC?
4. In what ways does your mathematics program foster or perpetuate internalized racism? Interpersonal racism? Institutional racism? Structural racism?
5. What does anti-racism look like in district-level mathematics leadership?
6. How can we develop building level math leaders' ability to teach and lead in ways that are anti-racist?
7. Before I read this article I used to think...., but then I learned from reading the article...., so now I will....

**Appendix A**

<b>A Tale of Two Mothers</b>		
<b>Theme</b>	<b>Katrina Rucker Black Instructional Specialist Wife, mother of two boys</b>	<b>Catherine Malchodi White Instructional Specialist Wife, mother of two boys</b>
Black son faces punishment while white son seen as quirky individual	While in elementary school my older son was seated next to a student who was on the autism spectrum (he was not aware of this). The young lady repeatedly spoke aloud to herself, which was distracting to my son (who was also struggling with the early onset of anxiety). When he shushed her, she reported it to the teacher who sent him to the office where he was assigned a lunch detention for bullying. He then ate lunch in the main office for nearly the next two weeks. No one noticed until he brought it to my attention. I reached out to the principal, who stated that he was only assigned one day of detention and was surprised that he had been eating in the office each day. She indicated that he could return to the cafeteria the next day. No follow up conversation between the adults in the school and my son took place. He finished the rest of his time in elementary under the impression that the principal did not like him because she thought that he was a “bad” student.	My younger son has always had a very “spirited and unique personality” and was voted most likely to be a famous person/celebrity in class superlatives. He tends to “speak his mind” and will not allow other students to tease or bully his friends without stepping in to “voice his opinion”. I have been told that he doesn’t always use the most appropriate language when responding, but that his heart is in the right place. He also enjoys “helping out during class” and is often asked to pass out papers, deliver notes to the office, or help other students. He tends to get fidgety after sitting in class for a long time and this seems to really help him to settle in and focus. Last year, my son was accidentally mistaken for a girl by his principal during a school assembly and she later called him down to apologize in person and gave him a handwritten apology note. I have always felt that his school really took the time to get to know him and have always looked out for his best interests.
Racialized adult responses to students’ early manifestation of anxiety	My son has struggled with severe social anxiety. This began to surface in 6th grade, when he became a selective mute. A condition that causes a child to become unable to speak while in school, yet completely normal at home. None of his teachers brought this to my attention, however, I figured it out myself while attending an afterschool event when I noticed a change in his behavior. I inquired about the behavior and was told that the team would have a “kid talk” and follow up with me. My request was made in January, but I was not granted a meeting until May. The condition and his grades had gotten much worse by then.	My older son has struggled with anxiety and depression. This began to surface as early as kindergarten and his teacher was incredibly flexible with his schedule so he could attend outside food therapy sessions as well as celebrate his successes with it by allowing us to host an end of the year pizza party for the class. His food aversions would surface throughout his elementary school years and the teachers would always be accommodating in terms of allowing him to stay in at lunch/recess or to go to the nurse as needed. They would reach out and let us know if he seemed a little anxious about something so we would know what was going on. He felt very connected to his teachers and would often stop by to visit them before or after school.
Racialized adult responses to students’ formalized	My son was diagnosed with social anxiety and was given a 504-plan [plan under Section 504 of the Rehabilitation Act of 1973 that prohibits discrimination against public school students	My older son was later diagnosed with ADHD and supports were put in place to elevate his learning environment with preferential seating, frequent reminders, check-ins, etc. We met with

<p>Disability accommodations</p>	<p>with disabilities] and placed in all supported classes. He immediately complained that the behaviors of many students became distracting to him and his grades suffered. Despite his selective mutism, he was often told that he needed to ask the teachers for modifications and request his accommodations. As a result of his rapid decline, I was consistently urged to put an IEP in place without an explanation for doing so and how this would change the necessary accommodations and support.</p>	<p>the staff and determined that he would benefit from a 504 plan and that seemed to really provide the support he needed without overwhelming him. His teachers were very responsive and always looked out for him.</p>
<p>Racialized adult perceptions of student expressions of their anxiety</p>	<p>My son was always quiet in school. He was often overlooked and allowed to struggle. He eventually began to shield himself from the world by wearing his hood. He also shut out distracting and anxiety inducing noises by wearing earbuds. Despite his IEP [an Individual Education Program that provides specialized instruction for students with disabilities] which stated that he was allowed to do so as a coping mechanism, he was repeatedly reprimanded by his teachers which led to further anxiety attacks.. When anxious, he shuts down and is unable to speak. A teacher described him as “angry.”</p>	<p>My older son tended to be more quiet and reserved in school and teachers always praised him for being sensitive and kind. They seemed to understand how his anxiety would occasionally make him appear more withdrawn in social settings and were able to connect with him. I was often told that he had an “old soul” for such a young child and what a pleasure it was to get to know him.</p>

## Appendix B

### *Levels of Culture Reflection: Mathematics*

**Surface Culture:** This level, the leaves, is made up of observable and concrete elements of culture such as food, dress, music, games, literature, stories, and holidays.

#### **Mathematical Surface Culture Questions**

- What kinds of math courses were you enrolled in in school - honors, on-level, remedial?
- What do you remember about the racial or gender makeup of the students in your mathematics courses? The instructors?
- How did you know you were learning or achieving in your math courses?
- Did you have access to a tutor? Did you serve as a tutor for others?
- What was the most advanced math course you completed?

**Shallow Culture:** This level, the trunk, is made up of the unspoken rules around everyday social interactions and norms, such as respect, courtesy, attitudes toward elders, concepts of time, personal space, nonverbal communication, eye contact, ways of handling emotion, and gestures/animations.

#### **Mathematical Shallow Culture Questions**

- What messages or attitudes were shared by your family members about mathematics?
- What family stories about school, academics, or mathematics are regularly told or referenced? What message do they communicate about core values?
- What motivated you to complete (or not) your math homework? Did you work on it until it was done, or devote a given number of minutes to it and then stop?
- What types of emotion do you associate with mathematics - joy, fear, satisfaction, frustration?

**Deep Culture:** This level, the roots, is made up of tacit knowledge and unconscious assumptions that govern our worldview, such as notions of fairness, definition of family, spirituality, competition, cooperation, decision making, and connection with nature.

#### **Mathematical Deep Culture Questions**

- What did your family or community lead you to believe a mathematician looks like?
- Were you led to believe that certain students “belonged” in certain mathematics courses? Did you think you belonged?
- What core beliefs drive you as a mathematics educator?

### Appendix C

*Examples of Mathematical Policies and Practices that Reflect WSC and Racism (Session Slides)*

	Experiences of White & Asian Students	Experiences of Black & Brown Students	Question for Math Leaders
Institutional Racism/WSC	<ul style="list-style-type: none"> <li>● Placement decisions driven by the idea that “more is better” (compacted courses). Defer to parent pressure about student course placement (<i>fear of open conflict</i>)</li> <li>● Provide access to sophisticated and substantive math</li> <li>● Give students the benefit of the doubt; lack of success → more support, not judgment around work ethic, improper placement</li> </ul>	<ul style="list-style-type: none"> <li>● Placement decisions driven by the desire to provide more access to accelerated courses (noble intent with troubling impact). Feeling that staff know what is best for students (paternalism)</li> <li>● Given more rote or basic tasks to gain “necessary skills” that are seen as gateway to “higher math”</li> <li>● Default is often enrollment in interventions (double period, Math 180); blame work ethic, improper placement</li> </ul>	<ul style="list-style-type: none"> <li>● How has institutional racism shown up in your setting?</li> <li>● What district or school level policies are at play?</li> <li>● What is the intent of these policies? Do they yield the intended impact? If not, why?</li> </ul>
Interpersonal Racism/WSC	<p>Messages to Students:</p> <ul style="list-style-type: none"> <li>● Myth of the “model minority” → Asian students are supposed to “be good” at math</li> <li>● Course placements support this myth- White and Asian students placed into courses with peers in the same racial/ethnic group despite their interest or abilities</li> <li>● Grade-level course is not a viable option for White and Asian students</li> </ul>	<p>Messages to Students:</p> <ul style="list-style-type: none"> <li>● “If you can’t handle it, we’ll have to move you back” (to grade level course)</li> <li>● “You can always move back....”</li> <li>● “It’s okay to retake it in high school. At least they’re getting exposure now”</li> <li>● “I know what’s best for these students” (and parents defer because of cultural beliefs and /or feeling intimidated by the educational system)</li> </ul>	<ul style="list-style-type: none"> <li>● What messages are conveyed to students about their math achievement?</li> <li>● What is the intent of these messages? What is their impact on students?</li> </ul>
Internalized Racism/WSC	<p>White/Asian- Internalized Superiority / Dominance</p> <ul style="list-style-type: none"> <li>● “The faster I solve the problem, the smarter I am” (<i>individualism &amp; competition</i>)</li> <li>● “Only students like me belong in this (accelerated) course”</li> <li>● “This course and pathway will impact my whole future” (pressure to excel at a young age to ensure later success in college and career)</li> <li>● “I’m <i>supposed</i> to be good at math. Why don’t I get it?” (<i>perfectionism</i>)</li> </ul>	<p>Black/Brown- Internalized Inferiority / Racism</p> <ul style="list-style-type: none"> <li>● “I can’t do it fast, so I must not be good at math”</li> <li>● “Students like me don’t belong in this course” (should be in grade level course)</li> <li>● Disassociate with math to preserve identity:             <ul style="list-style-type: none"> <li>○ “I’m not a math person”</li> <li>○ “I don’t care about math”</li> <li>○ “Math isn’t important to me or my future”</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>● What is the long-term impact of these internalized messages on both Black/Brown and White/Asian students?</li> </ul>