

Introduction

Mathematics teachers can stand for hope and transformation, shaping the intellectual and emotional growth of their students. Within the intricate tapestry of mathematics education, there exist pivotal moments—some deliberate, others serendipitous—where individual teachers wield the power to create more just and equitable classrooms and schools. The critical moments described in this book, often hidden beneath the surface of daily pedagogy, have the potential to unravel long-standing inequities and ignite a flame of empowerment for all students.

This book embarks on a compelling journey, exploring the authentic experiences of mathematics teachers who have confronted injustices—moments that not only defined their professional journeys but also contributed to a more inclusive and equitable future. From diverse contexts and backgrounds, contributors invite us to witness the struggles, revelations, and breakthroughs that culminate in their quest for justice and equity in mathematics education. Accompanying these teachers' narratives, researchers contribute illuminating commentaries that situate each critical moment within research. Through their insightful perspectives, we come to understand how these individual instances connect to macrolevel inequities ingrained in our educational systems.

Chapter Structure

The subsequent chapters contain critical moments individual teachers have faced by describing instances when mathematics teachers intentionally create more just and equitable classrooms or schools. Each narrative, written from the perspective of a math teacher, is accompanied by a commentary or response from a researcher's perspective. This commentary helps readers place authors' narratives within the broader research body to identify the critical moments and their connections to macrolevel injustices. Further, the contributors provide resources, such as books, videos, and articles, which support classroom teachers and professional learning communities (PLCs) that face similar challenges, want to shift their practices, or learn more about the various ways to disrupt inequities in their respective contexts. Research and practice should have a relationship that informs each other. This book provides an authentic connection between research and practice that will help instruction and interactions in mathematics classrooms.

Synthesis of Contributor Chapters

Navigating Critical Moments: A Guide for Mathematics Educators to Disrupt Injustice includes six chapters in which contributors identify and expand on critical moments when they make difficult but brave decisions to disrupt unjust structures or attitudes in the classroom or school that affect students learning mathematics. In Chapters 1–2, we present a framework that helps the reader identify injustices, generally and in mathematics education at various levels and consider ways they can disrupt injustices in their context.

In Chapter 3, Tandra Fulton shares a time when she provided a young Black male an opportunity to enroll in an advanced math class due to his strong mathematics competency. She describes how she developed his confidence in mathematics while realizing he was trying to persevere through a challenging home life. Her story reminds us there are many ways teachers can support Black male students in mathematics classrooms.

In Chapter 4, Esther Song and Lateefah Id-Deen illuminate how a teacher made a choice to discuss a student's negative comment about his mathematics ability due to his race. Esther used that moment to have a classroom discussion that disrupted negative stereotypes and affirmed Black students' ability to do mathematics.

In Chapter 5, Emily Bogush highlights an unexpected conversation during an equity-focused professional development workshop with a colleague who shared negative generalizations about his students. She concludes that, even if it is one interaction, there is always an opportunity to speak with colleagues, challenge harmful assumptions, and gain a deeper understanding of their beliefs and practices.

In Chapter 6, Evan Taylor critically reflects on his intersectional identity as a Black cisgender man who continually navigates patriarchy as he supports young Black girls in mathematics classrooms. He describes the importance of reflection, which can shape and reshape instructional practices, specifically his interactions with Black girls.

In Chapter 7, Kendrick Savage and Tashana Howse examine how an African American male's statement in his mathematics class not only revealed his invisibility, but also revealed his white teacher's inability to address his racialized comment. They explain how an African American male teacher grappled with responding to this moment while realizing his own challenging experiences mirrored this student.

In Chapter 8, Michelle Lo and Teresa Dunleavy describe how a first-year teacher debated how to respond to a political statement made by a student during math class after another student contacted her to share the harm it caused. Students' voices and agency prompted the creation of the restorative circle regarding the harm inflicted on queer students and students of color in the class. The situation challenges the notion that mathematics and teaching are apolitical spaces and demonstrates the need to make room for courageous conversations.

Taken together, these six chapters are examples of critical moments that explain how teachers disrupt injustices. We conclude the book with templates that will help mathematics teachers craft their narratives, individually or collectively, and identify pivotal moments that hold the potential to disrupt injustices. We hope this book offers unique insights to amplify the importance of authentic connections between research and practice to describe and name injustices.

Connecting to Catalyzing Change

National Council of Teachers of Mathematics (NCTM) published the Catalyzing Change series across the K–12 grade bands. The purpose of these books is to ensure that stakeholders continually engage in critical conversations around key issues to make certain that our students have high-quality mathematics learning experiences.

One challenge that the Catalyzing Change series highlighted, which directly connects to the aims and scope of this book, is dismantling structural obstacles that stand as barriers to positive mathematics experiences for students (NCTM, 2018). The chapters in the Catalyzing Change series identify challenges that continue to perpetuate unjust structures for students from underrepresented backgrounds in their classrooms or school. The books named some of those structural obstacles, which include tracking students into qualitatively different or dead-end mathematics course pathways, with some students being denied access to engaging and rigorous mathematics, and teacher tracking that leads to increased isolation and burnout for early career teachers.

We are aware that dismantling structures to create more diverse, equitable, and inclusive mathematics learning environments is not an easy task. So, we focus on educators' journeys as they navigate the resistance that comes from moving toward systemic change. Ultimately, it is the responsibility of institutions and organizations to address inequalities that affect our students. However, we want educators to hear how they can claim their power and disrupt injustices.

Explanation of Key Words

We list additional helpful definitions and commentary about deliberate word choices below. We will refer to them throughout the book.

Table 1. *Key Words for Reference*

KEY WORD	DEFINITION
BIPOC	BIPOC refers to the acronym for Black, Indigenous, and people of color.
POC	POC refers to the acronym people of color.
White	Since 2020, media publications have addressed the title case in which the term is used. Some continue to use lowercase to acknowledge past anti-Blackness. Others have decided to use upper case. We have decided to use lowercase in this text (Daniszewski, 2020).
Racism	The act of directly or indirectly devaluing one or more ethnic or racial group while uplifting and privileging another (Battey & Levya, 2016).
Sexism	Ideas of females not being suited to do math dates back to 1970s research, although there are notable women as far back as the early 1700s. These ideas and stereotypes persist today (Brown & Stone, 2016).
Bias	Perceptions that are either in favor of or against a person's or group's ability and performance. Both teachers and students can have unfair perceptions (Copur-Genetrurk et al, 2019).
Privilege	Benefits or advantages afforded to a particular group based on societal dominance. These benefits may be subtle such as receiving a less severe consequence for the same behavior (Battey & Levya, 2016). For example, a Black student is given detention while a white student gets a verbal warning from the teacher.

Ultimately, the concepts listed above are all connected. Biases start as undetectable and automatic associations such as “Asians are good at math” and “girls are not logical thinkers” follow. When those biases remain unexamined, privileges are afforded for

groups perceived as superior in the form of recommendations for acceleration, fewer consequences for negative behavior, feedback that shows a teacher believes in them, and countless others. In this book, we begin to uncover how racism, sexism, and other social constructs influence math classrooms and ourselves as educators. With this understanding, we invite mathematics educators to do the deep and meaningful work of disrupting injustice.