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## FOREWORD

n mathematics education, there is a system built around the assumption that only exceptional learners can perform at the highest levels. This assumption contributes to a long-standing practice of schooling that segregates students of different backgrounds into separate experiences on pathways leading to different outcomes. Tracking (or streaming, as it is also known) of students involves segregating students for mathematics instruction based on their perceived ability, intellect, or past performance. The effects of tracking (or ability grouping, as it is sometimes called) correlate with the inequities. That is, who gets tracked into upper-level and lower-level courses, how people get tracked, and the outcomes of tracking reflect and correlate with inequities based on race, ethnicity, language status, and socioeconomic status found in our broader society. It is time to begin the courageous work needed to intentionally and systematically remove the perniciousness of tracking and the curricular and instructional practices that support this system as we move toward creating pathways for success in mathematics for every student.

As a former teacher of mathematics in urban and suburban schools, I have personally experienced and borne witness to the inequitable outcomes in mathematics learning. Too often, these inequitable outcomes result from tracking. Tracking goes hand in hand with labeling students as *highachieving* and *low-achieving*, or worse *low-level* and *high-level* learners, further removing their perceived ability from their actual accomplishments. Such labeling negatively impacts students' disposition toward mathematics. Students perceived as low-achieving or low-level are typically segregated into low-track mathematics, in which mathematics teaching focuses primarily on rote skills and procedures. Mathematics teaching for students perceived as low-achieving their conceptual understanding. Conversely, students segregated into high-track mathematics typically experience mathematics that cultivates their mathematics identities,

conceptual understanding, and critical problem-solving and thinking skills (National Council of Teachers of Mathematics [NCTM], 2018). It is time to recognize and identify tracking as a systemic form of segregation.

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Because of its negative impacts, it is time for schools and classrooms to detrack. NCTM's Catalyzing Change series (2018, 2020a, & 2020b) calls for the ending of the practice of tracking teachers and students into qualitatively different or dead-end course pathways. A significant body of research suggests that students' opportunities increase when schools move to detrack in mathematics. Many different research studies have shown that high-achieving students achieve at the same levels in tracked and detracked groups and all other student groups achieve significantly higher levels in detracked groups (Atteberry et al., 2019; Boaler, 2006; Horn, 2006). Detracking offers increased opportunities for higher achievement and changes in students' perceptions of themselves as mathematics learners. In addition, detracking challenges segregation in mathematics that leads to inequities based on race, ethnicity, language status, and socioeconomic status.

Detracking is often characterized as an attempt to group students heterogeneously to ensure that every student, regardless of race, ethnicity, language status, socioeconomic status, or academic ability, has access to high-quality instruction, curriculum, teachers, and material resources. While at its root, this definition is true, *A Guide to Detracking Math Courses: The Journey to Realize Equity and Access in K–12 Mathematics Education* helps us understand that detracking requires far more than rearranging instructional group patterns. Instead, it requires a holistic effort to shift beliefs, develop policies focused on detracking, implement those policies with fidelity, continuously research and monitor, and build community. *A Guide to Detracking Math Courses: The Journey to Realize Equity and Access in K–12 Mathematics Education* shows us how to do exactly that. It provides pathways for actions to move toward

- shifting beliefs about who is capable of doing and understanding mathematics;
- providing access to rigorous mathematics curricula supportive of students' demonstrating intellectual, cognitive, and cultural diversities; and
- building a community where students, teachers, and leaders feel safe and supported to engage in meaningful ways.

My NCTM president's message in June 2018 challenged the mathematics education community to move toward detracking (Berry, 2018). This book responds to the challenge by addressing the points made in that message:

- Identify, analyze, and evaluate policies, practices, and procedures to assess the impact of tracking in restricting student access to and success in mathematics.
- Provide every student access to a grade-appropriate, academically rigorous, and intellectually challenging curriculum.
- Provide students with targeted instructional time and other instructional supports to support their learning and success with a grade-appropriate, academically rigorous, and intellectually challenging curriculum.

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- Analyze teacher assignments to develop balanced, supportive assignments to provide high-quality, engaging learning experiences.
- Analyze where research-informed equitable instructional practices are implemented and where not and facilitate changes.
- Provide access to mathematics coaches/specialists for ongoing real-time professional development and support, which includes but is not limited to coaching, co-teaching, co-planning, and frequent interactions on teaching and learning.
- Provide teachers and mathematics coaches/specialists with time and space to collaborate on instructional issues and continue their professional learning of both mathematics and mathematics-specific pedagogy. Teachers need opportunities to share strategies, learn new teaching techniques, meet as a department or grade level, and collaborate for improved student learning. (NCTM 2018)

Detracking is a deep commitment and investment in people, curricula, and time to support and engage every student in learning mathematics and increasing their opportunities. Therefore, teachers and leaders must be committed to the actions above when working toward the discontinuation of tracking. This book will help you realize that commitment.

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