

Foreword

“Is it a learning disability or a teaching disability?” This crucial question faces educators when they confront concerns about student performance in mathematics. This issue is a significant one that teachers must examine as they consider how K–12 students with disabilities are developing mathematical knowledge.

The changes in how students with disabilities are included in regular classrooms for mathematics instruction, and in such prevention-based models as response to intervention (RTI), have been dramatic. RTI is based on the assumption that all students receive high-quality mathematics instruction and a high level of assistance when they do not do well. On the basis of a progression from a high-quality curriculum followed by targeted interventions, teachers are expected to move students in focused ways to greater success with mathematical ideas. However, pinpointing these interventions and the related diagnostic assessments is a daunting challenge. Unlike the area of reading, where a stream of research supports the use of particular approaches, mathematics interventions that successfully promote mathematics understanding are neither well researched nor easily found as professional development options.

Achieving Fluency: Special Education and Mathematics presents the understandings that all teachers of mathematics need to play a role in the education of students who struggle: those with disabilities and others who simply received weak instruction in the past or—for whatever reasons—lack essential foundational mathematics knowledge to succeed. This book offers a way for us to delve into what has previously been a silent topic—one that educators and researchers in mathematics education do not often explore. As you read the chapters, you will note the explicit and systematic mathematics instruction that will capitalize on students’ strengths and offer the flexibility of thinking to develop mathematically literate citizens. This resource, rather than just a collection of activities, should be by the side of all teachers of mathematics as a foundation for thinking deeply about teaching and learning for students who often do not receive the needed level of support for their success. (See the discussion questions in chapters 5–9.)

Achieving Fluency: Special Education and Mathematics serves teachers and supervisors by sharing increasingly intensive instructional interventions for students who struggle with mathematics on the essential topics aligned with the National Council of Teachers of Mathematics Curriculum Focal Points, the new *Common Core State Standards*, and the mathematical practices and processes that overlap the content. These approaches are particularly useful when initial interventions prove ineffective. For a preventive approach, teachers can align these strategic instructional tools with individual student needs by using a variety of formative assessments.

Too often, educators connect the approaches illustrated in this text only with students with disabilities. But these tools can also be particularly powerful when strategically applied to all students in the ongoing process of developing mathematics knowledge.

Effective teachers work daily to help students develop mathematical understandings. *Achieving Fluency: Special Education and Mathematics* can help with the often-challenging work of increasing essential content knowledge by furnishing structure and guidance for implementing appropriate, effective interventions for all learners.

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