Move your students to higher levels of mathematical reasoning

## **COGNITION-BASED ASSESSMENT & TEACHING** Building on Students' Reasoning

For many students, traditional instruction is so distant from their needs that each day they make little or no learning progress and fall farther and farther behind curriculum demands. In contrast, Cognition-Based Assessment offers a framework to support teaching that enables ALL students to understand, make personal sense of, and become proficient with mathematics. 99

—Michael Battista

All teachers want their students to deeply understand the mathematics they teach and to become "mathematical thinkers" and the Common Core State Standards call for just this kind of understanding. But how can we progress through the year with confidence, knowing that every student is successfully developing that mathematical understanding?







Designed to work with any curriculum, Cognition-Based Assessment and Teaching will enable you to better understand and respond to your students' learning needs and help you choose instructional activities that are best for them. Michael Battista offers a powerful, learning-progressions model for maximizing each student's progress— helping students who are behind catch up, preventing future failures from occurring, and helping students who are ready move quickly ahead. Cognition-Based Assessment and Teaching will help you with all three tiers in RTI.

Battista's approach emphasizes three key components that support students' mathematical sense making and proficiency:

- Determining students' levels of sophistication in reasoning
- Assessing and monitoring the development of students' understanding of core ideas
- Differentiating instruction to meet individual students' learning needs

Using a research-based framework that describes the development of students' thinking and learning in terms of levels of sophistication, a "cognitive terrain" that includes ascents and plateaus, Battista shows how teachers can build on their students' reasoning with instruction that keeps them moving ever upwards.

Six different content areas make up the *Cognition-Based Assessment and Teaching* series, each available separately:

## Addition and Subtraction:

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