

P R E F A C E

On September 12, 2006, the National Council of Teachers of Mathematics released *Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics: A Quest for Coherence* to encourage discussions at the national, state, and district levels on the importance of designing a coherent elementary school mathematics curriculum focusing on the important mathematical ideas at each grade level. The natural question that followed the release of *Curriculum Focal Points* was “How do we translate this view of a focused curriculum into the classroom?”

Focus in Grade 5, one in a series of grade-level publications, is designed to support teachers, supervisors, and coordinators as they begin the discussion of a more focused curriculum across and within prekindergarten through eighth grade, as presented in *Curriculum Focal Points*. Additionally, teacher educators should find it useful as a vehicle for exploring mathematical ideas and curriculum issues involving the grade 5 mathematics curriculum with their preservice teachers.

The members of the planning and writing team, all active leaders in mathematics education and professional development, created this grade-level book as a framework for lesson-study-type experiences in which teachers deepen their understanding of the mathematical ideas they will be teaching. This book describes and illustrates instructional progressions for the mathematical concepts and skills of each fifth-grade Focal Point, including problems for students and powerful representational supports for teaching and learning that can facilitate understanding, stimulate productive discussions about mathematical thinking, and provide a foundation for fluency with the core ideas. We also discuss common student errors and misconceptions, reasons the errors may arise, and teaching methods or visual representations to address the errors. Because instructional progressions cut across grades, we have included some discussion of related Focal Points at grades 3 and 4 so that we can describe and clarify prerequisite knowledge and show how the grade 5 understandings build on what went before. To a lesser extent, we describe how the instructional progressions progress to grade 6 and beyond.

Whether you are working with your colleagues or individually, we hope you will find the discussions of the learning paths, representations, problems, and lines of reasoning valuable as you plan activities and discussions for your students and as you strive to help your students achieve the depth of understanding of important mathematical concepts necessary for their future success.

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Grade 5 Planning and Writing Team