

Preface

All students, regardless of their personal characteristics, backgrounds, or physical challenges, must have opportunities to study—and support to learn—mathematics. (NCTM 2000, p. 12)

The Common Core State Standards for Mathematics (CCSSM) present an opportunity for teachers to receive added support in their efforts to raise expectations for all students, including those from groups that have traditionally been underserved in schools in general and in the study of mathematics in particular (DiME 2007; Martin 2006). The adoption and implementation of CCSSM may make it possible to achieve more equitable outcomes for all students. As it is stated in the discussion of the Equity Principle included in *Principles and Standards for School Mathematics* (National Council of Teachers of Mathematics [NCTM] 2000): “Well-documented examples demonstrate that all children, including those who have been traditionally underserved, can learn mathematics when they have access to high-quality instructional programs that support their learning” (Campbell 1995; Griffin, Case, and Siegler 1994; Knapp et al. 1995; Silver and Stein 1996). This section of *Principles and Standards* goes on to say, “Achieving equity requires a significant allocation of human and material resources in schools and classrooms. Instructional tools, curriculum materials, special supplemental programs, and the skillful use of community resources undoubtedly play important roles” (NCTM 2000, p. 14).

The goal of this book is to illustrate how the teachers of students in grades 3–5 can implement problem solving as they address relevant Common Core standards. This volume can be thought of as one set of instructional tools that can help teachers to achieve equity in their classrooms. The book includes thirty-eight tasks designed to be used by elementary school teachers in grades 3–5, as well as by teacher educators in mathematics methods classes and in professional development. Although we are focusing on grades 3–5 here, it is important to keep in mind how the content standards addressed in this book are positioned within the trajectory of topics from kindergarten to grade 12. Because of this, you will find that we attempt to link what we are doing in the content chapters to what has been previously done in the kindergarten–grade 2 band, and that we anticipate how the work of grades 3–5 will develop further in the grades 6–8 band.

The Common Core State Standards for Mathematics reflect a national effort to consider the needs of students in each grade, how to best support them before a given grade, and how a given grade prepares students for mathematics in subsequent grades. Understanding these standards in their entirety requires discussion among teachers and other educators about what the standards mean and how best to implement them. As teachers begin their journey with CCSSM, discussions in schools might center on what new opportunities these standards present for teachers and students alike. We hope this book will serve as an effective resource that helps teachers to make the most of these possibilities.