Foreword

Unless you are an early childhood educator, you really can't comprehend just how difficult the job is. Like most experts, a gifted early childhood teacher makes the work look so easy—pull out some toys and play—that's it, right? In *Exploring Mathematics Through Play in the Early Childhood Classroom*, Amy Parks has given us a window on how intellectually complex a play-based program can be. And it comes at exactly the right time, when, in a cruel twist of fate, we are seeing that years of selling the importance of early childhood programs has resulted in incredible investment in high-quality programs and the very practices that made early childhood unique going by the wayside. In our accountability culture, the public seems to have set up a wall between the notions of play and learning, with most elementary schools ending up as play deserts. The trend is seeping into preschool as parents and policymakers look for academic activities that make their investments likely to pay off.

Through painstaking fieldwork across multiple years, Parks has documented how children infuse mathematics into their play while playing their way into mathematics. Her rich descriptions of their interactions and photographs of children in play help us see the powerful thinking with common classroom materials. These descriptions shine a light on the potential learning embedded in children's play that might be missed by an adult unfamiliar with high-quality early childhood practices and a solid understanding of early mathematics.

Equally important, Parks pairs these portraits with descriptions of the kinds of work that teachers can do to support mathematical learning. She maps the terrain of mathematics for young children, exploring different domains of knowledge and linking them to materials, instructional strategies, and dispositions that have the potential to enrich mathematics understanding. Key to this process is her ability to show how play-based teaching is not merely a matter of preparing the environment and stepping back, nor is it a teacher performing as an adult with

knowledge. Instead, play-based teaching and learning requires careful preparation of the environment that respects children's autonomy while supporting their discovery of new learning contexts. It also identifies the situations that require the deft hand of a more-competent learner to stretch a child into her zone of proximal development, or when structured instruction might catalyze new and different interactions.

And she does all of this in a way that makes you think, "Wow, this was here the whole time and I didn't even see it." It makes early mathematics real, doable, and relevant, even for the most math phobic among us. It can be the antidote for teachers who struggle to justify their commitment to play. And it will make you look taller and 10 pounds lighter. Well, the last one isn't true, but it represents a wonderful example of Vygotsky's idea that "in play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself" (1978, p. 102). In our always-wanting-to-get-ahead world, a mode of instruction that gets the student to work above his average should be compelling. The metaphor holds for teachers as well, with play providing opportunities to learn about their students that are outside of the ordinary.

Exploring Mathematics Through Play in the Early Childhood Classroom is one of those books that I wish I had written. It is smart, readable, relevant, and authentically focused on children. Thanks Amy Parks. We're all going to be taller because of you.

—Elizabeth Graue