

Early Childhood Mathematics

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Most teachers, parents and community members are very aware of the importance of early experiences in literacy. Parents start reading to their children as babies, and most preschool and primary schools have home reading programs. Yet early mathematics learning does not receive the same attention, and less is known about what mathematical experiences are important. There are likely many reasons for the lack of attention, but of significance are the cultural perceptions that mathematics is difficult and that young children are not capable of mathematical thinking. Mathematics is seen as abstract, and teaching children anything other than rote counting before they enter school is often deemed unnecessary and possibly even inappropriate. Recently, however, research and media have emphasized the importance of early mathematics to address a variety of concerns, such as ensuring future school success, closing knowledge gaps based on socioeconomic status and contributing to the global scientific society. While these concerns may be politically prestigious, perhaps the most important reason for attending to early mathematics is simply the recognition that young children are capable of significant mathematical thinking and learning. Providing opportunities for children to learn and do mathematics is not just to ensure their future success in school, close any perceived achievement gap or help them get good jobs decades later in life—mathematics, just like language and literacy, is a way of thinking, sense-making, describing and participating in the world. Giving children opportunities to engage in sufficiently challenging mathematics allows them to experience, participate in and make sense of their present-day environments.

Early mathematics teaching is not the same in each classroom or from lesson to lesson. There are no rules or prescriptions for teaching. It need not be student centred or teacher directed. However, excellence in teaching draws on and extends children's knowledge and interests, helps children develop a vocabulary of mathematics, and allows children to make conjectures, formulate problems, and engage deeply in mathematical questions, problems and ideas.

For this special issue of *delta-K* we invited manuscripts on teaching and learning mathematics with young children (pre-K to Grade 3). We asked for papers that provided classroom-tested activities and teaching strategies, offered insight into children's thinking and problem-solving strategies, addressed challenging classroom issues and shared findings from classroom-based research. In the articles selected for this issue we see teachers and researchers engaging with young children in a variety of ways that demonstrate children's capabilities, interest and understanding of significant mathematics.