

# MATH TEACHING PRACTICES

#### The Relationship of Teacher-Child Interactions in Preschool Play to Young Children's Mathematical Abilities

Center for Early Childhood Education, Eastern Connecticut State University (Producer). (n.d.). *The relationship of teacher-child interactions in preschool play to young children's mathematical abilities*. [Video]. Retrieved from http://www.easternct.edu/cece/math\_play\_study\_video.html

This 11-minute video describes a study which shows that the way teachers talk with preschool children as they play impacts their mathematical learning.

### Engaging Young Children in Mathematics: Standards for Early Childhood Mathematics Education

Clements, D. H., Sarama, J., & DiBiase, A-M. (Eds.) (2004). *Engaging young children in mathematics: Standards for early childhood mathematics education*. Mahwah, NJ: Lawrence Erlbaum Associates.

This seminal collection of articles by a diverse group of experts provides summaries of research and recommendations for teaching mathematics in preschool and kindergarten.

# **Teaching Math to Young Children: Practice Guide**

Frye, D., Baroody, A. J., Burchinal, M., Carver, S. M., Jordan, N. C., & McDowell, J. (2013). *Teaching math to young children:* A practice guide (NCEE 2014-4005). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website http://whatworks.ed.gov

This evidence-based practice guide provides recommendations for teaching mathematics to young children. It includes information on early math content areas and instructional strategies.

# **Cultural Aspects of Young Children's Mathematics Knowledge**

Gubermann, S. R. (1999). Cultural aspects of young children's mathematics knowledge. In J. Copley (Ed.), *Mathematics in the early years* (pp. 30–36). Washington, DC: National Council of Teachers of Mathematics/National Association for the Education of Young Children.

This review of the literature on cultural and linguistic variations in children's mathematical learning calls for culturally relevant mathematics instruction that builds on children's everyday experiences. A version of this chapter is also available online at http://files.eric.ed.gov/fulltext/ED438892.pdf

# Spotlight on Young Children and Math

- Koralek, D. (Ed.) (2003). *Spotlight on young children and MATH*. Washington, DC: National Association for the Education of Young Children (NAEYC).
- This series of articles from the NAEYC publication *Young Children* offers comprehensive information and resources on teaching early mathematics.



### Early Childhood Mathematics: Promoting Good Beginnings

National Association for the Education of Young Children (NAEYC), & National Council of Teachers of Mathematics (NCTM). (2010). Early childhood mathematics: Promoting good beginnings. Retrieved from http://www.naeyc.org/files/naeyc/file/positions/psmath.pdf

This position statement on high-quality, accessible math education for young children includes a chart with examples of typical mathematical knowledge and skills for preschool children, plus sample ways that teachers can promote math learning across math areas.

#### Math is for Everyone: Strategies for Supporting Early Mathematical Competencies in Young Children

Notari-Syverson, A., & Sadler, F.H. (2008). Math is for everyone: Strategies for supporting early mathematical competencies in young children. *Young Exceptional Children*, *11*, 2–16. doi:10.1177/1096250608314589

This article focuses on teaching math through everyday activities. The authors describe instructional strategies and adaptations to address individual children's learning needs.



For more information, contact us at: NCQTL@UW.EDU or 877-731-0764 This document was prepared under Grant #90HC0002 for the U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start, by the National Center on Quality Teaching and Learning. SUMMER 2014