Reviewing the Family Math Literature

RECOMMENDATIONS FOR PRACTICE

Efforts to promote family math have been gaining momentum. To lay a firm foundation for the growth of this movement, we took a critical look at both what the research says and what practitioners observe about family math engagement. Based on our review of empirical literature and our interviews with educators and professionals working in community settings, we present recommendations for practice.

SUMMARY OF FINDINGS

- Family math needs to go beyond counting and number to include spatial reasoning and patterning.
- Family math efforts need to address families' attitudes and beliefs about math.
- Families who can most benefit from support—those with limited resources, math anxiety, or other barriers to engagement—are often underserved.
- Family engagement efforts must recognize sociocultural differences in how families engage in math.
- Research primarily linked achievement to structured math activities, while
 practitioners recommend embedding math into everyday life. However, it may
 be possible for practitioners to help parents include elements of structured
 math in informal activities.
- Research on family math interventions shows promising avenues to promote family math engagement, but this line of research is in its infancy and has yet to address some challenges practitioners describe.

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Correspondence concerning this work may be addressed to:
Sarah H. Eason, Purdue University, 1200 W. State Street, West Lafayette, IN 47907. Email: season@purdue.edu

PRACTICE

RECOMMENDATIONS



EMPHASIZE
MATH IS MORE THAN
COUNTING

BUILD ON
HIGH
EXPECTATIONS

ENCOURAGE
MATH IN FAMILIES'
EVERYDAY ROUTINES

POINT OUT
MATH IN PLAY AND
BOOK READING

MAKE
ADULT-ONLY EVENTS
ENGAGING AND LOWPRESSURE

SUPPORT
PARENT-TO-PARENT
FAMILY MATH
OUTREACH

Help families recognize that math is more than counting. Provide guided activities on other aspects of math and help parents see why they are important. Help parents understand how to engage young children in developmentally appropriate ways.

Make connections between early math experiences and children's later school success in order to strengthen parents' expectations and beliefs about the importance of math.

When emphasizing math engagement in everyday, routine activities, provide examples for children of all ages. Encourage families to find the math in what they are already doing.

Point out math opportunities in play and book reading that parents engage in with children. Identify apps and web-based resources with ideas for how to talk about math.

Develop adult-only events that provide engaging opportunities to try out math activities in a low-pressure, distraction-free setting. Ensure that parents are able to attend by providing separate, simultaneous activities for children.

Connect with other community-based partners to maximize the reach of family math events, drawing on the distinct resources of schools and community settings, such as community centers hosting and promoting events organized by schools.

Implement strategies for parent peer-to-peer outreach, such as parent ambassadors, to broaden school-to-home communication strategies and reach more families.

Collaborate with parents and family members to develop culturally-responsive and relevant events and resources.