Reviewing the Family Math Literature

RECOMMENDATIONS FOR POLICY

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 policy.

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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POLICY



EXPAND NON-SCHOOL-BASED EFFORTS

INCORPORATE FAMILY MATH INTO EARLY MATH CURRICULA

IMPLEMENT

LOCAL EFFORTS TAILORED TO COMMUNITIES

PROMOTE PATHWAYS TO SHARE IDEAS

ENSURE

RESOURCES ARE

INCORPORATE

FAMILY ENGAGEMENT INTO PROFESSIONAL DEVELOPMENT

RECOMMENDATIONS

Expand non-school-based efforts. Provide funding to integrate math into community spaces (like museums, libraries, and grocery stores) and connect families with community resources. Partner with individuals in the community already connected to families.

Incorporate family math into curricula to support early educators in promoting family engagement by 1) emphasizing early math skills that predict later achievement; and 2) ensuring alignment between the math concepts learned in school and at home.

Ensure that work is implemented at the local level to reflect family and community context. What are the shared cultural practices or community settings that can be utilized to promote family math? What are the unique needs to consider, such as languages spoken or limited resources? How can supports or resources be adapted to fit the cultural contexts and values of families?

Develop avenues such as online platforms, workshops, or conferences for those involved in family math to share ideas.

Create initiatives focused on under-resourced communities. Situate no- or low-cost family math events or installations in underserved communities. Consider opportunities to enlist the support of local organizations or businesses.

Include family engagement in professional development to help practitioners view parents as partners in education, in order to empower families in supporting children's learning.