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Mathematics in the home: homework practices and mother-child interactions doing mathematics.

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Parents are a largely untapped resource for improving the mathematics performance of American children, which lags behind the performance of children from other nations. The purpose of the research reported here was to assess homework practices in the home, and to examine interactions between mothers and their 5th grade children as they worked challenging mathematics problems (pre-algebra equivalence problems). Results indicated that children spent on average 23 min per day on mathematics homework, with an average of 8 min of help from parents. Videotapes of mother-child interactions indicated that mothers varied considerably in the quality of the mathematics content that they conveyed while teaching, and in the quality of their scaffolding of the material for the child. As expected, mothers who themselves had more mathematics preparation performed better in conveying mathematical content and in scaffolding. Mothers with more mathematics self-confidence also performed better. The results suggest that children face inequities in the parental resources available to them for math learning; these inequities might be remedied by school-family partnership programs. (Abstract)

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