

PBS KIDS Mathematics Transmedia Suites in Preschool Homes

A Report to the CPB-PBS Ready To Learn
Initiative

Betsy McCarthy, Ph.D.
Linlin Li, Ph.D.
Michelle Tiu

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Highlights of the Findings

During the summer of 2012, WestEd conducted a study of the PBS KIDS Mathematics Transmedia Suites in preschool homes as part of the *Ready To Learn* Initiative developed by the Corporation for Public Broadcasting (CPB) and the Public Broadcasting Service (PBS) with funding from the U.S. Department of Education. The focus of the study was on the efficacy of three PBS KIDS transmedia suites (*The Cat in the Hat Knows A Lot About That*, *Curious George*, and *Sid the Science Kid* and their accompanying parent support materials) in increasing preschoolers' mathematics skills and enhancing their parents' ability to support their children's mathematics learning in the home environment. Transmedia suites are comprised of thematically linked content presented across media platforms.

The results from the study indicated that:

- The three mathematics-related PBS KIDS transmedia suites that were developed as part of the *Ready To Learn* Initiative, along with their corresponding parent support materials available on PBS KIDS Lab, helped parents support their child's mathematics learning over the course of the eight-week intervention.
- The intervention was positively associated with gains in children's knowledge and skills in numerical sense, as measured by the standardized, nationally normed Test of Early Mathematics Ability, third edition (TEMA-3) assessment. Children who were exposed to the PBS KIDS transmedia suites and related support materials in the summer of 2012 outscored their comparison group peers on the TEMA-3 by 4.82 problems, a statistically significant result.
- The three mathematics-related PBS KIDS transmedia suites, along with their corresponding parent support materials available on PBS KIDS Lab, provided parents with a platform to involve themselves in their children's mathematics learning. In general, the parents played more than five games per week with their children, indicating a high level of engagement in their children's play with PBS KIDS transmedia games and the supporting hands-on home activities.
- The intervention assisted families with understanding children's mathematics development, helped them to create conditions at home to promote mathematics activities, and helped them apply PBS KIDS online mathematics games to support children's mathematics learning.
- Parents' awareness of their children's mathematics development significantly increased over the course of the intervention.
- Parents were highly involved in supporting their children's mathematics learning. They viewed themselves as facilitators and/or teachers when working with their children. They also felt empowered to teach their children with the support provided by the intervention program, and subsequently became more aware of their children's abilities, interests, and difficulties in regard to mathematics. Parents were interested in the project, felt guided and supported throughout the intervention, and were willing to be involved in their children's learning.