# 2012 Preschool Pilot Study of PBS KIDS Transmedia Mathematics Content

Over the course of a 10-week CPB-PBS *Ready To Learn* pilot study of two mathematics curriculum supplements, one rich in PBS transmedia and hands-on activities, the other using only traditional hands-on activities, the Education Development Center, Inc., (EDC) and SRI International (SRI) collected information through classroom observations, logs kept by participating coaches and teachers, surveys of teachers' attitudes and beliefs about math, and direct measures of children's mathematical knowledge and self-regulation. We found as follows:

### Findings

### Preparation and Coaching

 As with many interventions, the implementation of both supplements required a significant amount of planning and preparation on the part of teachers (accounting for 25% of coach visits).

### Activities and Classroom Routines Across Conditions

- Preschool teachers sometimes struggled with multistep, multipart activities of the supplements, and frequently reported not completing all of the activities.
- Some preschool teachers and children became bored or frustrated with repeated activities as part of the spiral curriculum design.

### Integration of PBS KIDS Videos and Digital Games in the Transmedia-Rich Condition

- PBS Kids videos, interactive whiteboard games, and the Computer Center used in the transmedia-rich supplement featuring familiar characters, songs, and engaging narratives were well received by teachers and children.
- The lack of a "walled-garden" design of the PBS KIDS Lab website allowed children to easily navigate away from the target games or out of their Web browsers entirely.

#### Teacher Attitudes and Beliefs

- After implementing the supplements, more preschool teachers in the PBS KIDS transmedia-rich condition than the comparison condition reported as follows:
  - They felt like a "mathematics person."
  - They felt like they taught mathematics as well as they taught other subjects.





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## **Findings**

- After implementing the supplements, some preschool teachers in the PBS KIDS transmedia-rich condition reported feeling more confident, while other teachers reported feeling less "confident in their ability to facilitate students' communication about mathematics."
  - However, this pattern was not as evident in the comparison condition, where we only observed more teachers reporting feeling less confident.

## Children's Mathematical Knowledge and Self-regulation

• Children in both conditions improved on measures of their mathematics skills and selfregulation from pre- to postimplementation, though there was no significant difference between the two conditions.

## Interested in more?

For readers interested in a more detailed look at these findings, including: illustrative examples, recommendations, and a detailed description of research methods, the full-length report and executive summary for this study are available:

## cct.edc.org/rtl

There you'll also find other current and past *Ready to Learn* summative research studies. And, to speak with the evaluation research team, please contact:



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