

The CPB/PBS Ready To Learn *PEG + CAT* Content Study

Preschool children participating in the CPB/PBS Ready To Learn Content Study showed positive shifts in identifying some geometric shapes and in overall math skills on a standard math learning measure.

The purpose of the *PEG+CAT* Content Study was to explore, in a controlled environment, to what extent children can learn mathematics from *PEG+CAT* outside of instructional environments and relationships; how parents¹ perceived the resources; and how well children are able to engage with these resources independently. Below are key findings from the study.

Children's Learning:

- Children's performance improved significantly from pretest to post-test on one shape identification item (identifying a cylinder) on a researcher-developed measure aligned to the *PEG+CAT* study experience.
- For 3 items (related to identifying 3-D shapes), there were non-significant gains in performance between pre- and post-test.
- Children's performance on the standardized assessment (REMA) improved modestly from pretest to posttest. The result is positive (statistically significant) but not conclusive.

Parent Perspectives:

- Nearly all parents reported strong, positive impressions of *PEG+CAT* and viewed the resources as having considerable potential to support children's mathematical learning. A number of parents reported that interacting with the *PEG+CAT* materials appeared to influence children's behavior at home after and in between study sessions, and that children talked about *PEG+CAT* at home.
- Half of the participating parents reported that they worked with their children on activities related to *PEG+CAT* at home.

Children's Engagement

- Children showed signs of positive engagement, like watching intently, counting along, or "interacting" with characters while watching *PEG+CAT* videos and playing *PEG+CAT* games

¹ "Parents" refers to all primary caregivers, no matter their relationship to the child.

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- Children consistently sat still and paid focused attention during video viewing sessions. Their level of engagement with interactive games varied.
- Most children were able to identify and talk about the characters, settings, and other story elements of the videos, but fewer were able to describe the mathematical problem and the solution around which the episode revolved.
- Children were able to engage with the games independently during the majority of sessions, but some form of support was necessary during other sessions.

This study is one of an interrelated series of studies included in the Ready To Learn summative evaluation being conducted by EDC's Center for Children and Technology and SRI Education's Center for Technology in Learning (EDC/SRI).

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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