

HOW PUBLIC MEDIA GETS AMERICA'S CHILDREN LEARNING

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Ready To Learn Research

Many families across the U.S. are not able to find, afford, or reach high quality learning experiences. Pandemic-related upending of the early learning landscape has exacerbated lack of access to early learning opportunities. Results from **three RCTs** suggest that educational public media can play a significant role in supporting learning at a large scale through high-quality and research-based educational content.



PBS KIDS program *Molly of Denali* teaches children about informational text.

In a pair of randomized control trials, researchers examined whether access to *Molly of Denali* resources—including video, digital games and printable activities—supported children's ability to use informational text.



PBS KIDS program *Cat In The Hat Knows A Lot About That!* teaches children about science and engineering practices and includes video, digital games and hands-on activities that can be downloaded to complete off-line.

Results from this study indicate that engagement with *Cat in the Hat* resources had **medium to large positive impacts** on children's learning of specific science and engineering concepts and practices.

In addition, parents whose children participated in the study intervention group reported their **children engaged in more science** activities, and reported their child **used more study-related vocabulary** such as cause, effect, measure, build and vibration, than parents in the control condition.

The study also suggests that children in the intervention group were able to **transfer learning** from a digital environment to a hands-on experience.



PBS KIDS program *PEG+CAT*, promotes children's mathematics and approaches to learning (ATL) skills. Target skills included patterns, geometry (2- and 3-D shapes), ordinal numbers and counting, and measurable attributes and spatial relationships. Target ATL skills included problem solving, perseverance, and self-regulation.

- Children who used *PEG+CAT* in this study had **statistically significant improvements in the mathematics** skill areas of ordinal numbers, spatial relationships, and 3-D shapes
- Parents and caregivers in the *PEG+CAT* condition reported a **higher frequency of joint parent-child technology use**, more joint gameplay, and more conversation connecting digital media and daily life
- *PEG+CAT* parents and caregivers reported **significant increases in their confidence** to support math learning for their children

For access to these and other Ready To Learn studies visit: <http://CCT.EDC.ORG/RTL>

Results from both studies indicated that access to *Molly of Denali* resources **improved first-grade children's ability to solve real-world problems** using informational text. Further, younger children benefited more from access to *Molly of Denali* resources, and children who used *Molly of Denali* resources for longer periods also learned more.

Children's use of *Molly of Denali* resources during the nine-week study was not extensive: researchers found that children only used them for about an hour a week. Yet the effect size of this **"light-touch" intervention was equivalent to the growth in reading skills a first grader typically experiences over three months.**