

# PBS KIDS Transmedia Suites Gaming Study

## EXECUTIVE SUMMARY

REPORT TO THE CPB-PBS *READY TO LEARN* INITIATIVE



September 2012

# EXECUTIVE SUMMARY

## CONTEXT FOR THE STUDY

The CPB-PBS *Ready To Learn* initiative, funded by the U. S. Department of Education, brings engaging, high-quality media to young children who may be at risk for academic difficulties due to economic and social disadvantages. The initiative aims to deliver early mathematics and literacy resources on new and emerging digital platforms such as tablet computers, interactive whiteboards, and smartphones, as well as better-established technologies such as computers, video displays, and gaming consoles, and to create learning experiences that leverage the unique capabilities of these various technology platforms.

## STUDY OVERVIEW

The 2012 PBS KIDS Transmedia Suites Gaming Study is an important part of the multiyear *Ready To Learn* (RTL) summative evaluation initiative by Education Development Center, Inc., (EDC) and SRI International (SRI) for the Corporation for Public Broadcasting (CPB) and the Public Broadcasting Service (PBS). The study explored student engagement in transmedia gaming by examining contexts of use and analyzing patterns of use during game play by children. Building on ongoing gaming research in the education community as well as within prior *Ready To Learn* studies, we investigated how children and educators made use of PBS KIDS transmedia designed to support learning across a range of subject areas, including mathematics, language and literacy, and science.

## METHODS AND SAMPLE

The study was designed to take advantage of the opportunity to observe children and educators working with PBS KIDS transmedia over time. Researchers made two visits to two selected demonstration station sites over a period of several weeks and collected observation and interview data during both visits. We visited a variety of institutional settings, including summer learning programs, a city park, and community-based organizations.

The study used qualitative data-collection methods including observations and interviews with two different target populations: educators and parents/caregivers. In addition, brief informal interviews with children were incorporated during observation periods.

Data collection took place in two phases in order to allow for a period of time to pass during which children and educators working with them would have time to become familiar with specific PBS KIDS transmedia properties and also to allow for the development of a comfort level with the technology.

## FINDINGS

Findings from the study are organized into five sections: (1) children's PBS KIDS transmedia experiences in partner settings, (2) settings' influence on children's PBS KIDS transmedia experiences, (3) children's experiences with PBS KIDS transmedia content, (4) changes in children's use of PBS KIDS transmedia, and (5) educators' approach to PBS KIDS transmedia.

Key findings are as follows:

- Children perceived PBS KIDS transmedia and digital games to be fun and engaging, though they usually could not identify the learning content within a game and may have needed adult facilitation to recognize the learning goals embedded in a transmedia game.
- The game play environment, including technical supports and logistics, played a substantial role in determining the kind of experience children had with PBS KIDS transmedia. Settings where adult support and engagement was minimal allowed children free rein, and this factor may have resulted in minimal time spent on a specific game or task. Settings where adults were engaged with children and addressed the game content were more likely to support prolonged focus on a particular game activity and more likely to result in children understanding the learning goals of a game.
- Parents and educators reported that PBS KIDS transmedia games from PBS's KIDS Lab provided both educational content and an opportunity to practice 21st-century skills. Children made connections to the characters and narratives within the games, and these served to support engagement.
- PBS KIDS transmedia game design can encourage sustained engagement by providing increased challenges as play proceeds and by facilitating children's log-in ability so that each return to a game does not require a return to the game's first level of play.
- Different social and technical accommodations are needed in PBS KIDS transmedia game environments to successfully support different levels of development in children's cognitive, social, and motor skills.

# RECOMMENDATIONS AND IMPLICATIONS FOR FUTURE STUDIES

Researchers also identified the following recommendations that can support future development and use of PBS KIDS transmedia games. These address game content and structure, user interface issues, and support for integrating these tools into a learning context. We suggest the following:

- Future PBS KIDS transmedia games should include multiple levels and increasing amounts of challenge in their design.
- PBS KIDS games for all ages of children need to be designed to support repeated visits and ongoing play.
- Log-in process should be reexamined and redesigned to support young children's independence.
- PBS KIDS games need to have an end point or goal so that they do not continue without end.
- Educators require professional development to make effective use of PBS KIDS transmedia, because the majority of educators are still unfamiliar with the integration of digital tools into learning activities, and because many educators are not trained to be confident technology users.
- Models of PBS KIDS transmedia use need to be created and shared with educators so that a range of implementation approaches and strategies that support effective use will be available.
- Continued research examining how best to support teachers to use PBS KIDS transmedia effectively, how to structure transmedia games to engage children and ensure that the game's academic content is evident and transfers out side of game play, and how to determine the most suitable environments for transmedia, will support ongoing development and improvement of PBS KIDS digital content for children.

## About EDC/CCT

Education Development Center, Inc. is a global nonprofit organization that develops, delivers, and evaluates innovative programs to address urgent challenges in education, health, and economic development. EDC manages more than 300 projects in 35 countries. For more than 25 years, EDC's Center for Children and Technology has been at the forefront of creating and researching new ways to foster learning and improve teaching through the development and thoughtful implementation of new educational technologies.

## About SRI/CTL

SRI International is an independent, nonprofit research institute conducting client-sponsored research and development for government agencies, commercial businesses, foundations, and other organizations. SRI's Center for Technology in Learning (CTL) evaluates large-scale technology innovations, designs assessments that enhance teaching and learning, develops tools to help students master complex ideas, builds online communities of learners, and offers strategic learning consulting services.

## Principal Investigators

Shelley Pasnik

[sp@edc.org](mailto:sp@edc.org)

Carlin Llorente

[carlin.llorente@sri.com](mailto:carlin.llorente@sri.com)

## Support Provided By



The contents of this document were developed under a cooperative agreement from the U.S. Department of Education (Award Number U295A1005). However, these contents do not necessarily represent the policy of the U.S. Department of Education and you should not assume endorsement by the Federal Government.