Partnering With Parents: Devices and Apps to Support Elementary Children Reading

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ABSTRACT

Contributing to a decade of national research on device ownership and app usage, this study provides evidence of how children from 120 homes across 46 classrooms use apps and portable technology to support their reading development. Parent survey data reveals 99% of children use technology to support reading in the home, primarily on iPad and laptop devices. Apps used most frequently include Istation, YouTube, and PBS Kids Video. To gather parent perceptions and depth of children’s technology use, 13 individual interviews were conducted with parents from the same sample. Parents preferred their child read with print books, yet parents allowed their child to use portable technology, in response to their child’s interest in technology and general pressure to keep pace with technology skill demands. The finding that nearly all children in this study supported reading skills with portable technology in the home demonstrates the need to foster partnerships between parents and teachers that builds on children’s technological knowledge and use to deepen learning between home and school.

KEYWORDS

Elementary Children, Home, iPad, Learning Technology, Mobile Learning, Parents, Perceptions, Reading

INTRODUCTION

Ninety-one percent of homes with elementary-aged children have a portable technology ownership device, such as a smartphone or tablet (Rideout & Katz, 2016). This high rate of technology ownership, combined with the understanding that learning to read begins in the home (Morris et al., 1996) sparks curiosity about whether children may be using portable technology as a tool to support reading development in the home. In this study, portable technology is defined as any device that a child can transport and use to support reading development (e.g., smartphone, tablet, LeapPad).

Children’s technology use may differ between home and school environments, indicated by the finding that technology use in the home effects how children approach using technology in the classroom (Murphy, DePasquale, & McNamara, 2003). More recent research of 43 children between four -and -six-years old investigated children’s perceptions of the purpose of technology devices, and findings show that half perceived the iPad as a learning tool, compared to one-third who saw the iPhone as an educational device (Eisen & Lilliard, 2016). Because children appear to possess

DOI: 10.4018/IJICTE.2019100105

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conflicting perceptions about the purpose of specific technology devices, the investigation of how children may be using portable technology to support reading development in the home is necessary.

Additional apprehension about reading development is fueled by children’s stagnant reading proficiency scores. The 2015 National Assessment for Educational Progress Reading exam reported approximately 36% of fourth-grade students perform at or above the proficient level in reading, consistent with 2013 scores (Nation’s Report Card, 2015). In accordance with the U.S. Education Office of Educational Technology brief (2016), which emphasizes advancing educational technology in teacher preparation, teachers need to partner with parents to strategically integrate technology within the home and school. Based on these findings of children’s technology perceptions, stagnant reading scores, and the need to advance educational technology in teacher preparation, this study seeks to investigate how children’s home use of technology could inform teachers’ technological pedagogical knowledge (Mishra & Koehler, 2006) to improve reading instruction. Findings from this study can be leveraged to provide parents and teachers with explicit strategies for supporting reading with specific technology devices and apps.

LITERATURE REVIEW

To date, educational research on children supporting their reading skills with technology apps and devices has been limited, small-scale, exploratory, and qualitative in nature, with foci on classroom use (Hutchison, Beschoner, & Schmidt-Crawford, 2012; Toppel, 2014). Reading and educational technology researchers have called for a broader understanding of the way children support their reading development with portable technology (Burnett, 2009), particularly for the need to inform teachers and parents with appropriate digital reading strategies (Harrison & McTavish, 2016). In response to the exponential growth of portable technology and concerns about how children may be using these tools, this study identified apps and devices elementary children use in the home to support reading development.

NATIONAL INVESTIGATIONS OF TECHNOLOGY OWNERSHIP AND USE IN HOMES WITH CHILDREN

Since the release of smartphones and tablets, there has been exponential growth in the learning apps available on technology devices (Hirsch-Pasek et al., 2015). Despite the extensive availability of learning apps, little research has investigated specific reading apps elementary children use in the home to support their reading development (Burnett, 2009). Most research on children and technology in the home is situated in a national context with foci on ownership (Rideout & Katz, 2016). Nonetheless, the following examination of national studies helps establish a broad understanding of the landscape of children and their access to technology in the home, while the national findings also situate the need for the research investigated in this study.

One study tracked device ownership in homes with children between birth and eight-years-old (n = 1,463) from 2011 to 2013, and revealed rapid growth in technology adoption (Rideout, Saphir, Pai, Rudd, & Pritchett, 2013). Rideout and colleagues’ (2013) revealed that in 2011, eight percent of homes owned a tablet while 41% had a smartphone in the home. However, by 2013, 40% owned a tablet compared to 63% with smartphones. Findings from the same study also revealed that half of the children were using mobile apps, with parents reporting their children spending equal time using learning and game-related apps. Of the children using apps, parents also relayed that one-third of their children used portable technology for reading. Another national survey, similar to the one just described, included children between two and 10-years old (n = 1,577), and in only one year, 55% of homes now reported tablet ownership (Rideout, 2014). The same study found nearly half of children spent between four and five minutes daily reading a book on a technology device.
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