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## Abstract

This poster addresses parental attitudes regarding the potential and pitfalls of home media and technology use. We describe how and why parents set limits on media and technology, how they navigate media selection, and how they interact with their children around media and technology. We present findings from three studies of parents and children from low-income households, in which data were collected from paper surveys, focus groups, and in-home interviews. We find that, while parents see great potential in technology as a learning tool, demands on their time and lack of information make it difficult to manage children's experiences. This research was sponsored by the US Department of Education's *Ready To Learn* initiative, which seeks to support early learning and school readiness for traditionally underserved children, ages 2-8.

## Objectives

- To learn about children's technology use on their own and with their parents
- To learn about parents' views of the value of technology for learning

## Theoretical Framework

Recent research has described the prevalence of media engagement and how more new devices are being adopted in contemporary family life (Rideout, 2013; Levine, Steyer, & Henry, 2008; Rideout, Saphir, & Bozdech, 2011; Rideout, 2014). Given this media-rich environment, how is technology used in the home and how are decisions about its use made? Our research complements and builds on others' prior work in this area (particularly, Levine et al, 2008; Takeuchi, 2011; and Chiong, 2009). We provide further context on home technology use, the reasoning behind parents' decisions around technology use in general and for learning in particular, and parents' perceptions of the potential benefits and risks of media and technology use.

## Methods

This poster draws from three evaluation-research studies in which the samples were ethnically diverse and had children enrolled in Head Start or other programs serving predominantly low-income populations.

### Home Study 2012

- Fourteen families, seven in NY and seven in CA
- Families were provided with a laptop, iPad, iTunes credits, Internet/wireless access, and suggestions for use of PBS KIDS resources
- Families completed 2 at-home interviews, 2-7 phone interviews and an activity checklist

### Parent Study 2012

- Survey of parents whose children were enrolled in preschool centers participating in a larger preschool-based pilot study focused on early math
  - 381 surveys were returned from 16 different preschools; 234 were used in data analysis
  - 30% Hispanic/Latino/Spanish, 29% Asian, 25% Black, 9% White, 14% Other
- 14 parents participated in 4 focus groups (3 in English, 1 in Spanish)

### Parent Study 2013

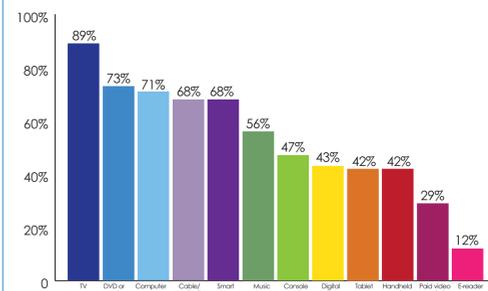
- Survey distributed to parents of randomly selected preschool children from 92 classrooms participating in the randomized control trial.
  - 925 surveys were returned (96% response rate)
  - 64% Hispanic, Latino, or Spanish origin; 19% Chinese; 19% White; 12% Black or African American; 4% Vietnamese; 2% American Indian or Alaska Native

## Findings

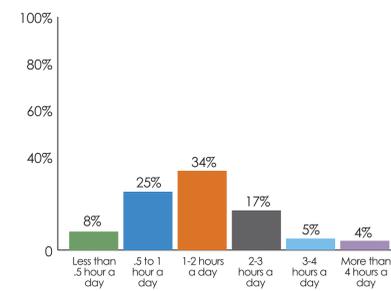
In this poster, we report on four specific categories of findings from all data sources:

- Children's access to and use of technology;
- Parents' aspirations for their children's media and technology use;
- Parents' limiting and or fears related to media and technology use; and
- Examples of joint-engagement of parent-child media and technology use.

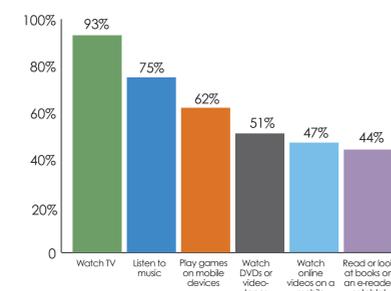
### Access to technology (Parent Study 2013)



### Children's technology use during the week (Parent Study 2013)



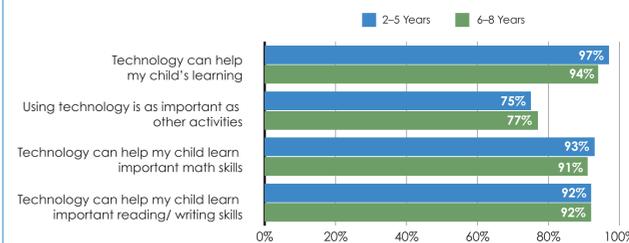
### Children's technology use at least once a week (Parent Study 2013)



## Aspirations

Across our studies, we saw that parents believed in technology's potential for learning and wanted to harness it for their children's benefit.

More than 90% of parents believe technology can help their child's learning, both generally and more specifically for math and reading skills. Three-quarters of parents felt technology was as important for learning math, reading, and writing skills as activities such as reading books or doing homework (Parent Study 2012).



Many parents noted the importance of being comfortable with digital tools given technology's prominence and that having technology at school is crucial for academic success. One parent said:

"Technology is the future so it's very important that [children] just get used to learning how to use it and doing different things with different technologies."

Parents were comfortable with use of technology not just for learning, but also for entertainment purposes. Parents in the 2012 Home Study wanted their children to learn from technology use, but in selecting content for children, they often allowed children to seek enjoyable content. Educational uses of media, for example to support reading and math, were secondary.

## Children's access to and use of technology

As in other, similar studies, families in our studies have high levels of access to technology, and children make much use of technology. However, the technology is not necessarily up-to-date and the Internet connections are not always fast and reliable. Ninety percent of families said they had Internet access, though only 49% said it was high-speed access (Parent Study 2013). Access to technology was not equally distributed across our families; lower mother's education levels were associated with less technology in the household (Parent Study 2013).

## Limits and Fears

Parents across all three studies expressed common fears and worries about media and technology.

	Strongly Disagree	Disagree	Agree	Strongly Agree
Most of the time, I (or another adult) decide what shows, channels, websites, or video games my child may view or play. (N=875)	5%	6%	40%	42%
Most of the time, I (or another adult) decide what technology devices (computer, iPad, phone, etc.) my child may use. (N=865)	5%	7%	40%	42%
Most of the time, I (or another adult) decide when my child may use technology. (N=864)	5%	6%	40%	42%
Most of the time, I (or another adult) decide how much time my child may spend using technology. (N=870)	5%	4%	38%	48%

In the 2013 Parent Study, 22% of parents expressed the need for technology limits based on a need for balance in a child's life. Parents mentioned concerns about time with friends and family (4%), for outside play (7%), and for imaginative play (2%).

"Because if I don't limit it, she could spend all day watching TV instead of using her imagination, writing, learning to draw or cut."

Parents worry that children will be exposed to age-inappropriate content, such as violence or bad language (16%). They are concerned about technology addiction (8%). Finally, they have health concerns, believing that tech use could adversely affect physical activity levels (5%) or vision (9%).

"I believe that too much [technology use] makes him over-stimulated. He has a harder time calming down, especially after playing video games."

Our closer contact with Home Study families suggested that the limits parents described were usually loose and aspirational rather than fixed and followed. Descriptions of media use indicated greater use than stated limits.

## Joint Engagement

Children often use technology with others, primarily parents (74%) and siblings (56%), but also other children (21%), grandparents (16%), or other adult relatives (19%).

Fifty-four percent of 2013 survey respondents indicated that their children used technology on their own. Parents have a variety of competing priorities for their time when their children are using technology—cooking or doing household chores (73%), caring for other children (16%), working (15%), talking with family or friends (13%), or watching/playing something separately from their child (11%).

### How parents use technology with children (Parent Study 2013)

Watch TV shows, movies or videos with my child	68%
Answer questions my child has about the content he or she is watching/playing	62%
Set limits on my child's use of technology	58%
Ask questions to check that my child is learning	58%
Talk with my child about what he or she is watching/doing with the technology	51%
Make connections between the shows/games my child watches/plays and things we do in our daily life	38%
Help with technology problems while my child is watching/playing (for example, if the game "freezes" or the	37%
Set up shows, digital games, apps, or other technology for my child	36%
Make connections between the shows/games my child watches/plays and things I know he or she is learning at school	36%
Encourage my child to use technology	35%
Play digital games or apps with my child	33%

## Study limitations

### Parent Study 2012 and Parent Study 2013

- Rely on self-report via paper-and-pencil surveys and focus groups
- Limited to parents whose children attended centers participating in our pilot and RCT efforts

### Home Study

- Does not show how families use technology "in the wild" since we provided materials
- Small sample of English- and Spanish-speaking families
- Required parents to think retrospectively during interviews about technology use, although researcher observations during in-home interviews provide some counterpoint

## Conclusion

Our mixed method studies of parents of children attending Head Start or other preschools serving predominantly low-income families allow us to better understand the beliefs and attitudes of this group of parents towards media and technology in general, and in particular toward their young children's use of technology for learning. On the whole, our survey findings concur with other large-scale surveys of parents (Rideout et al 2010; Levine et al 2008): that children have access to, and use, a variety of technologies. Our focus groups and in-home study add a qualitative look into families' decision-making processes, goals, and practices.

We found that children use technology primarily for entertainment, but also for educational purposes. Parents believe in technology's potential for learning both content such as math or reading skills, as well as technological literacy which they believe their children will need for success. However, parents are also concerned that their children may overuse technology or encounter age-inappropriate content. They want their children to lead balanced lives that include outdoor play, play with friends, time with family, and technology use. As such, parents limit their children's total time with technology and the content they may watch or play. Often, these limits are flexible, changing in response to both parent and child needs and desires. Parents and other adults frequently use technology with their children, often asking and answering questions about content.