

# Technology & Young Children

## TECHNOLOGY IS READILY AVAILABLE AND HERE TO STAY.

Adults and children are spending an increasing number of hours each day using technology. “Screen time” has expanded from mainly television in the 1950’s to computer, Internet, smart phones, tablets, e-Books, and technology-based toys, such as pretend cell phones and laptops, Wii, hand-held video games, and digital cameras for preschoolers.<sup>1</sup> Today, most households have more than 10 screens in the home.

Applications or “Apps,” which consumers access from a variety of mobile devices, now entertain and educate our youngest children<sup>2</sup>. In fact, there are more than 800 Apps marketed specifically for toddlers (500,000 apps in the Apple App store and 380,000 Apps in the Android Market).



## IS TECHNOLOGY APPROPRIATE FOR YOUNG CHILDREN?

There are many educational benefits of the expanded technological offerings for young children. In fact, Apps can teach great things -- at low or no cost. If used intentionally and appropriately, technology can support learning and skill development in the following areas<sup>3</sup>:

- Basic reading skills
- Language acquisition
- Vocabulary acquisition
- Labeling novel objects
- Pro-social behaviors
- Math Content
- Music Content

## WHEN DOES TECHNOLOGY OFFER THE BEST BENEFITS?

The potential benefits of technology can be realized, if key factors are taken into consideration<sup>4</sup>:

- **Age.** Preschoolers see the most educational benefits from technology – they are capable of understanding the content presented and connect it to their real-life experiences.
- **Co-Viewing.** Just as with books or games, young children learn the most from technology when a parent or teacher is engaged in the viewing, asking questions about what is happening, and talking about what might happen next.
- **Interaction.** Children learn by doing. Technology that supports and reinforces hands-on experiences and exposure to real people and real objects offers the best chance for learning.
- **Repetition.** When adults review and reinforce the presented content, learning and understanding dramatically increases. Conversing with children—even when they are infants—is stimulating a child’s brain and preparing it for learning, speaking, and reading new words.
- **Access.** Children have access to the objects or experiences observed through the use of technology.

## HOW MUCH IS TOO MUCH?

While there are benefits, it is easy to go overboard with technology. Too much screen time has been linked to:

- Obesity
- Inactivity
- Aggression
- Decreased attention span
- Fewer interactions with parents and other children
- Less creativity and free play

The American Academy of Pediatrics advises that parents limit young children’s total media time to no more than 1 to 2 hours per day, and try to avoid TV viewing for children under age 2. A good rule of thumb: the total hours of active play should exceed or equal the amount of screen time.

## DID YOU KNOW?

- 90% of young children use electronic media – whether watching a TV show or playing Apps.
- Average daily TV viewing for children age 0-2 is associated with lower language & visual motor skills by age 3.
- 58 percent of the children’s Apps contain advertisements, even though just 15 percent disclosed this before download.
- Use of TV and other electronics before bed disrupts sleep.
- All technology is not equal. Do research to determine the best “Apps” for young children.

<sup>1</sup> Jen Fitzgerald, “Child’s Play: Should Preschoolers Engage with Technology or Good-Old Fashioned Fun?” *Preschool Matters*, National Institute for Early Education Research, 30 June 2011 <<http://preschoolmatters.org>>.

<sup>2</sup> “Mobil Apps for Kids: Current Privacy Disclosures and Disappointing,” Federal Trade Commission, February 2012.

<sup>3</sup> Dr. Audrey Berger Cardany, “Who Benefits from screen media for young children?” *Early Childhood Research Forum* 20 January 2012.

<sup>4</sup> Cardany

