

## How Young Children Learn from Screens

Technology in Early Childhood (TEC) Center  
Erikson Institute

### TEC Center resources and opportunities

**TEC Center:**

**Main website:** [www.teccenter.erikson.edu](http://www.teccenter.erikson.edu)

**Twitter:** [www.twitter.com/TEC\\_Center](http://www.twitter.com/TEC_Center)

**Facebook:** [www.facebook.com/teccenter.erikson/](http://www.facebook.com/teccenter.erikson/)

**Youtube:** [www.youtube.com/user/eriksonteccenter](http://www.youtube.com/user/eriksonteccenter)

**Professional Development:** [www.teccenter.erikson.edu/services/](http://www.teccenter.erikson.edu/services/)

**Educator Tips and Lesson plans:** [www.teccenter.erikson.edu/category/in-practice/](http://www.teccenter.erikson.edu/category/in-practice/)

**Research:** Contact us at [ALauricella@erikson.edu](mailto:ALauricella@erikson.edu) with subject line "Research Interest"

**Erikson Institute:**

**Summer Institutes:** [www.erikson.edu/continuing-education/learning-institutes/](http://www.erikson.edu/continuing-education/learning-institutes/)

**MSECE STEM Concentration Degree and Certificate programs:**

[www.erikson.edu/graduate-education/masters-degrees/online-master-science-early-childhood-education/concentration-early-childhood-stem/](http://www.erikson.edu/graduate-education/masters-degrees/online-master-science-early-childhood-education/concentration-early-childhood-stem/)

### Can children learn from screens?

#### Learning from Screen Media

- High quality educational media (Fisch & Truglio, 2001)
- Characters are important (Lauricella et al., 2013)
- Narrative is critical (Fisch, 2006)
- Repetition & predictability help (Barr et al., 2007)
- Co-viewing with an adult is great (Strouse et al., 2013)
- Opportunities for extra, repeated practice (Pitchford, 2014)

#### How to Help Children Learn: Takeaways

- Look for trusted sources ([PBS Kids Games](#), [PBS Kids Video](#), [SesameStreet.org](#))
- Look for content that has a simple narrative that supports the learning lesson
- Find opportunities for adult (or older sibling) engagement
- Use the technology to support a specific outcome or provide extra practice/new exposure to content

### What makes learning from screens hard for children?

Learning from media is **HARD** (Smith, Anderson, & Fisher, 1985)

- We have to learn how to process and understand information from a screen
- Scene changes, cuts, and zooms only exist in digital media content- not in our real world
- Sound and visual effects have meanings that we learn about through experience
- Processing media content requires keeping a lot of information in mind

#### Evidence that children have to learn to learn from a screen

- New research with infants, preschoolers, and adults used eye tracking to examine eye movements while watching clips from (Sesame Street Kirkorian, Anderson & Keen, 2012)

#### Do not assume comprehension

- Even though children look like they are understanding... they may not be comprehending.

Inquire and ask questions!

### Children & Tablet Technology

We are still learning, but:

- Some evidence of reading and math learning from apps (Masataka, 2014)
- But, Infants, toddlers, and preschoolers seem to learn more from video than touchscreen (Aladé, et al., 2016; Choi et al., 2016, Kikokian et al., 2016)

### Gaming and Learning

Opportunities

- Gaming is fun
- Increased engagement
- Continuous desire to play
- “Chocolate covered broccoli”

Concerns

- Educational games sometimes lose the fun
- Narrative may be minimal
- Educational content is too overt
- Feels too quiz-like/forced

### How to Help Children Learn from tablets: Takeaways

- Minimize distractions within the app (hotspots)
- Engaging narrative and characters to increase engagement
- Encourage interaction and adult support during and after interactive app use
- Use the technology to support a specific outcome or provide extra practice

## Considerations for virtual learning during the COVID-19 Outbreak

### Children and screens now

- These times are new for every single one of us
- Children need their basic needs, like safety, met first
- Technology can be one tool, among many others

### 5 Takeaways

1. Use technology to support/maintain relationships
2. Choose tools intentionally
3. Keep use short and focused
4. Encourage repetition of content using different formats
5. Integrate consistent characters/puppets into lessons, activities, digital experiences