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# Portable Screen Time and Young Children: What the Research Says

*Presented by:*

*Kim Vigil, PhD*

*Raye Educational Services, LLC*

*Kimberly Vigil, PhD*

# Dr. Vigil's Background

Education Consultant and Mindfulness Instructor

PhD in Education with an emphasis in early childhood

MEd in Curriculum and Instruction (one in early childhood and another in secondary education)

Adjunct Faculty member at Grand Canyon University

16+ years in education across multiple grades and different capacities

Arizona certified Early Childhood teacher

Parent of 5! 😊

# Gratuitous Picture of Dr. Vigil's children 😊

The Vigil Children

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# Game Time!

How much time does the average child spend on screens each day?

# Introduction: Screen Time Use

2012: Portable screens were 20% of children's screen time (Pea et al., 2012)

2014: Portable screens increased from 10% to 38% in children under the age of 2, and from 39% to 80% in children ages 2 to 4 (Lerner & Barr, 2014)

2018: Children just over 3.5 watched about 1¼ hours on weekdays, and over 1¾ hours on weekends (Tang et al., 2018).

# Objectives

1. Participants will be able to identify three facets of screen time, explaining the relevance of each to the screen time equation.
2. Participants will be able to identify the four pillars of quality programming, and actively search out quality programming to be applied in their respective practices.
3. Participants will be able to explain and implement a chronological approach to the implementation of screen time.

# Group Brainstorm

What are the impacts of portable screen time?

# Impacts of Portable Screen Time

## **Pro's:**

*Portable screens can aid in learning  
(Koh et al., 2013; Larabee et al., 2014)*

## **Con's:**

*Portable screens can displace other  
quality language and learning  
interactions  
(Radesky et al., 2015)*

# Impacts of Portable Screen Time

Research pertaining to content and portable screen time is limited  
(Lerner & Bar, 2014)

Research pertaining to portable screen time and behavior is non-existent  
(Radesky et al., 2015)

# Findings of Dr. Vigil's Study

**Greater use of portable screens was predictive of decreases in attention.**

This is important because:

1. Very few other studies have addressed portable screens
2. Executive function is linked to greater pro-social skills, fewer behavior challenges and improved academic performance (Cuevas & Bell, 2014; Kraybill & Bell, 2013; Willoughby et al., 2012)

# Findings of Additional Research

Television programming resulted in immediate deficits in executive function (Lillard et al., 2015):

Study 1: Executive function decreased with fast-paced fantastical show

Study 2. Executive function decreased with fast-paced fantastical educational show

Study 3: Executive function decreased with slow-paced fantastical show

# Findings of Additional Research

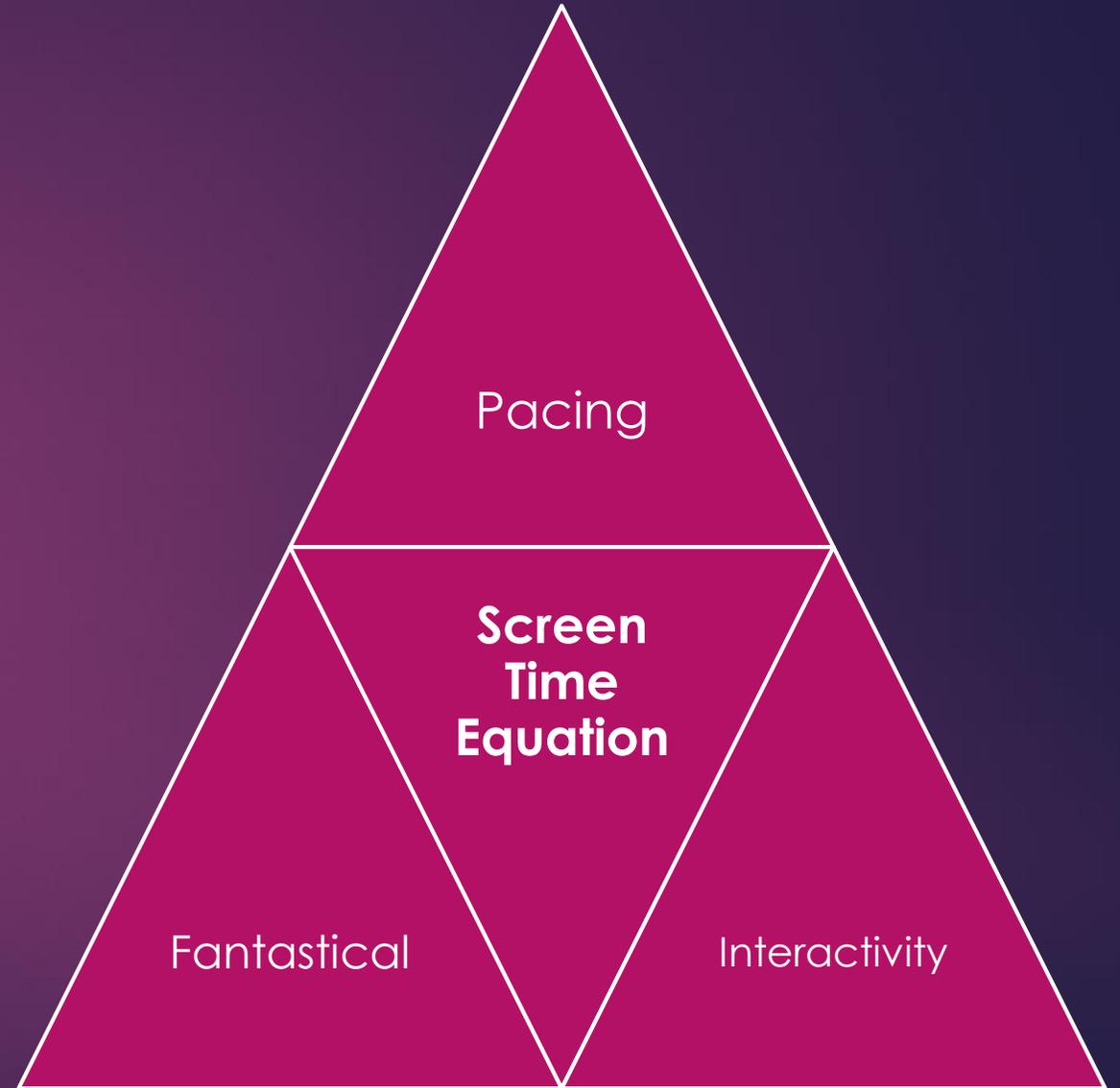
Interactive programming on portable devices can benefit executive function (Huber et al., 2018):

1. Interactive educational apps were more beneficial to executive function than just an educational show
2. Interactive educational apps were beneficial in spite of their fantastical nature

# Three Facets of Screen Time

(Objective 1)

1. Fast-paced programming decreased executive function
2. Fantastical programming decreased executive function
3. Interactivity may mitigate the fantastical component



# Quality Programming

(Objective 2)

Educational programs should contain a learning goal (Hirsch-Pasek et al., 2015; Radesky et al., 2015) and be...

1. mentally activating,
2. engaging,
3. socially interactive,
4. contain meaningful learning (Hirsch-Pasek et al., 2015).

# Identifying Quality Programming

(Objective 2)

## 4 Pillars of Educational Programming

1. mentally activating,
2. engaging,
3. socially interactive,
4. contain meaningful learning  
(Hirsch-Pasek et al., 2015)

AND

[www.commonsemmedia.org](http://www.commonsemmedia.org)

(Radesky et al., 2015; Swartz, 2017)

# Quality Practice of Screen Time

Screen time should be...

1. interactive between the user and the screen

(Hirsh-Pasek et al., 2015; Hsin et al., 2014; Lerner & Barr, 2014; Lieberman et al., 2009)

2. interactive between the user and the parent, caregiver or teacher

(Hirsh-Pasek et al., 2015; Hsin et al., 2014)

# Implementing Screen Time

(Objective 3)

Screen time should be implemented using a...

Chronological Approach  
(Stiller et al., 2018)

- very young children (birth -2) are not exposed to any screen time
- limited screen time with content monitoring and no bedroom media use for young children (3-4)
- applying these same practices with older children and adolescents

# Implementing Screen Time

(Objective 3)

Chronological Approach  
(Stiller et al., 2018)

1. Introduction of technology is delayed altogether for very young children
2. Today's technology is, "intuitive"  
(Swartz, 2017, p. 141)

# Implementing Screen Time

## Family Media Use Plan (Swartz, 2017)

1. [www.healthychildren.org/MediaUsePlan](http://www.healthychildren.org/MediaUsePlan)
2. Sets parameters for the use of screen time in the home
3. Disallows screens in children's bedrooms and limits screen time
4. Disallows screens during meals and the hour prior to bedtime

# Objectives

1. Participants will be able to identify three facets of screen time, explaining the relevance of each to the screen time equation.
2. Participants will be able to identify the four pillars of quality programming, and actively search out quality programming to be applied in their respective practices.
3. Participants will be able to explain and implement a chronological approach to the implementation of screen time.

# Recommendations for Educators

Consider all 3 facets of the screen time equation

Consider the 4 pillars of educational programming/verify education programming via [www.common sense media.org](http://www.common sense media.org)

Use interactive programming

Use technology devices for developmentally appropriate activities

Partner with families to empower them with best practices

# Recommendations for Parents

Implement a Chronological Approach to  
screen time

Verify educational programming via  
[www.common sensemedia.org](http://www.common sensemedia.org)

Institute a Family Media Use Plan  
[www.healthychildren.org/FamilyMediaUse](http://www.healthychildren.org/FamilyMediaUse)

Questions  
Comments  
Concerns  
Complements



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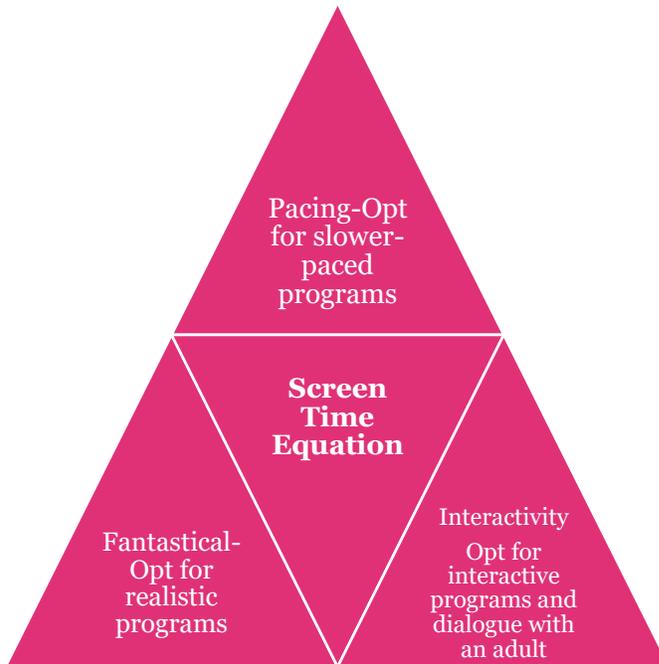
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# Screen Time Recommendations for Educators



## Consider all 3 Facets of the Screen Time Equation

1. Fast-paced programming decreased executive function
2. Fantastical programming decreased executive function
3. Interactivity may mitigate the fantastical component

## Consider the 4 Pillars of Educational Programming

1. Mentally activating
2. Engaging
3. Socially interactive
4. Contain meaningful learning

## Use Interactive Programming

1. Interactive with the screen
2. Interactive with a parent/caregiver/peer/teacher

## Use Technology Devices for Developmentally Appropriate Activities

1. Use portable technology devices themselves within the context of developmentally appropriate activities
2. For example, iPad cameras can document plant growth over time, or the video camera function can document Reader's Theater for later sharing and reflection

## Partner with Families to Empower them with Best Practices

1. Hold a Family Night and share the Screen Time Equation and 4 Pillars of Educational Programming with families
2. Model the use of [www.common sense media.org](http://www.common sense media.org) in finding quality programs and apps



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*Kimberly Vigil, PhD*

## Recommendations for Parents

### Implement a Chronological Approach to Screen Time

1. **Delay screens for very young children, birth to 2 (with the exception of video chatting with family/friends).**
2. **Very limited screen time with content monitoring and no bedroom use for young children, 3-4.**
3. **Continued limited screen time with content monitoring and no bedroom use for older children and adolescents.**

## Institute a Family Media Use Plan

[www.healthychildren.org/FamilyMediaUse](http://www.healthychildren.org/FamilyMediaUse)

1. **Sets parameters for screen time use in the home.**
2. **It should disallow screens in bedrooms and limit screen time.**
3. **It should also disallow screens at meal times and 1 hour before bed.**