

These presenter notes provide information about slide contents and background information for course presenters. An estimate for time needed to present this module is just over 3 hours.



SLIDE 1: USING INTERACTIVE MEDIA IN EARLY LEARNING

This module focuses on using interactive media with children in early childhood settings.

Interactive media is media designed for children to use actively and creatively. To be most effective, it should encourage engagement with other adults and children. Forms include software, apps, television programs, e-books, websites, and streaming media.

In this module, participants will be thinking about choosing software, which used to be installed only on computers. Today, people can also install applications, including games, on tablets and smartphones. People can interact with a website without installing software or use a game console like PlayStation. Hardware such as desktop, laptop, and tablet computers, mobile phones, and gaming devices are necessary to use digital media.

Background

The impact of screen media on young children's development still needs more research. Educators also are concerned about children's use of screen media taking time from critical opportunities to learn from play and social interaction.

Since the use of media has been and remains at times a controversial subject in the early childhood community, instructors of this module and early childhood teachers should be familiar with key statements from national organizations on the use of media in early childhood programs:

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- The joint position statement by the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children’s Media at St. Vincent’s College (*Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8*, http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf).
- The American Academy of Pediatrics’ position (*Media and Children*, <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/Media-and-Children.aspx>).
- The results of a 2015 symposium of the American Academy of Pediatrics (*Growing Up Digital: Media Research Symposium*, https://www.aap.org/en-us/Documents/digital_media_symposium_proceedings.pdf).

Details about these statements are included in slides for this module. Instructors should be aware that the American Academy of Pediatrics is re-evaluating its policies to consider young children’s current media use but has not issued any policy changes. The organization’s current position is to discourage screen time for children under 2 and limit older children’s time to 2 hours daily. (See also *Beyond “Turn it Off”: How to Advise Families on Media Use* <http://www.aappublications.org/content/36/10/54>).

The impact of screen media on young children’s development still needs more research. Educators also are concerned about children’s use of screen media taking time from critical opportunities to learn from play and social interaction.

Reference

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children’s Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Overview

This module will focus on practices to:

- Select and use interactive media with young children in early childhood settings.
- Interact with children as they use media to help meet learning goals.

SLIDE 2: OVERVIEW

The purpose of this module is to help participants think about criteria for selecting media to use with young children in early childhood settings and the roles that teachers can play in fostering learning with media.



By the end of this module, you should be able to:

- Describe criteria for selecting media in early childhood programs.
- Evaluate interactive media for use in early childhood programs.
- Demonstrate effective interactions with children who are engaging with media.

SLIDE 3: OBJECTIVES

By the end of this module, participants should be able to list criteria for choosing interactive media use in early childhood environments, select useful and appropriate media for use with young children, and demonstrate effective practices for interactions with children who are using screen media.

Intentional Teaching Framework



SLIDE 4: INTENTIONAL TEACHING FRAMEWORK

This EarlyEdU Alliance module and EarlyEdU's higher education courses (<https://earlyedualliance.org>) use the Intentional Teaching Framework:

Know—Learn about child development and effective teaching practices.

See—Identify teaching practices and children's responses in videos of your classroom and those of other teachers.

Do—Set goals, plan, and use strategies.

Reflect—Observe your practice, analyze, and plan for change.

Head Start Early Learning Outcomes Framework

	CENTRAL DOMAINS				
	APPROACHES TO LEARNING	SOCIAL AND EMOTIONAL DEVELOPMENT	LANGUAGE AND LITERACY	COGNITION	PERCEPTUAL, MOTOR, AND PHYSICAL DEVELOPMENT
▲ INFANT/TODDLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication	Cognition	Perceptual, Motor, and Physical Development
● PRESCHOOLER DOMAINS	Approaches to Learning	Social and Emotional Development	Language and Communication Literacy	Mathematics Development Scientific Reasoning	Perceptual, Motor, and Physical Development

SLIDE 5: HEAD START EARLY LEARNING OUTCOMES FRAMEWORK

A number of studies have focused on the use of technology to impact children’s language and literacy outcomes and social and emotional development. Many of the studies related to social and emotional development involve more basic technology, such as video playback of social interactions or games that teach basic skills. Some researchers also have studied math learning.

Studies show that some software and educational television can boost preschoolers’ foundational literacy skills, such as identifying letters and their sounds and the beginning and ending sounds of words.

Other domains have been studied less, which doesn’t mean digital media is not effective for supporting outcomes in those areas. It does mean that strong evidence base is lacking to help make selections about technologies that are beneficial to children.

References

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. (2015). *Head Start early learning outcomes framework: Ages birth to five*. <https://eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/pdf/ohs-framework.pdf>

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children’s Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Evaluating Media

SLIDE 6: EVALUATING MEDIA

Teachers often need to evaluate media they want to use with young children in their programs. This section presents points for teachers to consider.



Technology and Me

- Ask your partner to recall a memory of a key encounter with media (e.g., television or computer program, website, or game) as a young child and **why** it was memorable.
- Introduce your partner to the group.
- Share your partner's media experience.

SLIDE 7: LEARNING ACTIVITY: TECHNOLOGY AND ME

The point of this activity is to find out participants' prior experience with technology and media from early childhood.

Participants have their own ideas about technology and experiences with it, and these impact their approach to using media in early childhood programs.

Background

Encourage participants to focus on interactions with screens and to be specific instead of making a general statement like *using the Internet*. See if people can recall a particular website, game, show, or social media site.



- What did you learn from engaging with this media?
- What have you seen young children learn from media?
- How and why did the learning happen?

SLIDE 8: DISCUSSION

Ask participants to share in the large group the answers to the questions on the slide. Guide the discussion so that participants discuss one type of media at a time.

The point of this discussion is to uncover participants' beliefs about what and how children learn from meaningful engagement with technology and to develop participants' understandings of the features of different media and the roles that others can play in fostering learning with media.

Possible takeaways are that screen media and technology can:

- Expose children to places, cultures, and living things that they would not otherwise be able to see.
- Connect children to past events.
- Allow children to document experiences.
- Encourage social interaction.

Teachers in the Lead



In early childhood settings, teachers are often the ones who will **select** the media for children, **use** it in their classroom, **integrate** it in the program, and **evaluate** its success.

SLIDE 9: TEACHERS IN THE LEAD

Select—Some 80,000 apps currently carry the label educational, but little research has been done on their effectiveness. Few organizations review and recommend these apps. So teachers need to educate themselves to make these judgments instead of depending on product marketing.

Teachers should consider the media's impact on children's health and well-being, its developmental appropriateness, and the learning goals that using this technology will help children reach. Other considerations include: costs vs. effectiveness, durability for use with young children, and whether it represents a diversity of cultures with dignity and integrity.

Use—Children appear to progress in using technology tools from exploration to competence (using tools to accomplish a task). Thus, children initially will need time to explore these tools in playful and creative ways.

Effective uses for young children are engaging, empowering, and active or hands-on. The way that children interact with media in an early learning setting shouldn't be very different from how a teacher would teach skills one on one. Technology tools should encourage children to problem solve, listen, create, observe, document, research, communicate, and take turns. Teachers can also look for media that integrates time outdoors or physical activity by documenting nature or encouraging children to move.

Teachers should view screen media with children to extend children's learning.

Integrate—Plan screen media use with curriculum, daily routines, and the environment in mind. Technology integration has the potential to enhance teacher practices, help teachers better assess learning, boost children's outcomes, and connect more with families. Technology becomes integrated when it is a seamless part of the program.

Evaluate—Think about effectiveness in meeting children's learning goals and promoting digital literacy for all children. Some of the advantages of using computers are that the computer can record the child's progress and provide feedback to the teacher on the progress the child is making.

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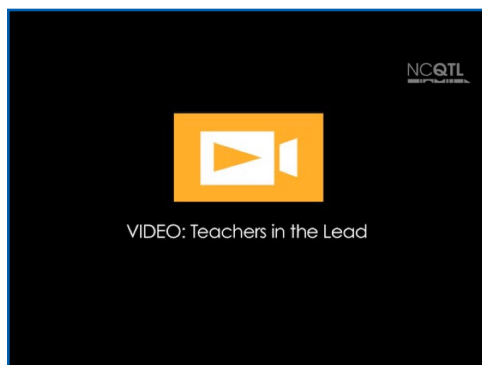
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References

American Academy of Pediatrics. (2015, Oct. 1). *Growing up digital: Media research symposium*. https://www.aap.org/en-us/Documents/digital_media_symposium_proceedings.pdf

National Association for the Education of Young Children and the Fred Rogers Center for early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/ta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>



SLIDE 10: VIDEO: TEACHERS IN THE LEAD

This video features Dr. Bill Penuel, professor of learning sciences and human development at University of Colorado Boulder, speaking on this topic. This video is an excerpt from the National Center on Quality Teaching and Learning's Front Porch series.

Reference

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/ta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Young Children and Media Today

Many children birth to age 8 are using some media:

- Three-fourths of children have access to mobile devices at home.
- The number of children who've used mobile devices went from **38 percent in 2011 to 72 percent in 2013.**

SLIDE 11: YOUNG CHILDREN AND MEDIA TODAY

Three-fourths of children from birth to age 8 have access to mobile devices. From 2011 to 2013, the amount of children in that age range who had used mobile devices rose from 38 to 72 percent.

Children's use of *traditional* screen media such as television is decreasing. Children 8 and under are watching 15 minutes less of television per day and 9 minutes less of DVDs in 2013 than they did in 2011.

Other Statistics

Mobile Devices

The percentages of children under age 2 who've used mobile devices rose from 10 percent in 2011 to 38 percent in 2013. Mobile devices include smartphones and tablets.

Television and DVDs

- Television is still the dominant media used by children birth to age 8 with 58 percent of those children watching television daily compared to 17 percent using mobile devices daily.
- Children spend almost half of a daily 2 hours of screen time watching television.

Digital Divide

A *digital divide* means that only 28 percent of children from low-income families watch educational content on mobile devices while 54 percent of children from higher income families do. Television still is the most used for educational content, especially among children from medium low-income families.

Reference

Common Sense Media. (2013, October 28.) *Zero to eight: Children's media use in America 2013.* <https://www.common sense media.org/research/zero-to-eight-childrens-media-use-in-america-2013/key-finding-1%3A-young-kids%27-mobile-access-dramatically-higher>

Issues of Equity



Young children today need to develop **technology-handling** skills the same way they need **book-handling** skills.

SLIDE 12: ISSUES OF EQUITY

Early childhood educators can provide leadership in advocating for equal access to technology for the children in their programs and their families.

Early *technology-handling* skills correlate with digital literacy the way that *book-handling* skills contribute to early literacy development. Children from lower income families may have little or no access to current technology in their homes, early childhood programs, and communities compared to children from higher income families. Early childhood programs can provide opportunities to explore a variety of technology, including digital cameras, audio and video recorders, and printers.

High-quality interactive media can bring creative and learning advantages, especially when combined with solid curriculum resources and skillful teaching, and help to narrow the *achievement* gap for children from low-income families.

Reference

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

Your Criteria for Using Media



Food for thought: What should we consider when making decisions about interactive media in early education?

SLIDE 13: YOUR CRITERIA FOR USING MEDIA

At the end of this section, participants will have a chance to create a list of criteria.

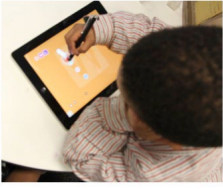
To make informed decisions about the use of technology and interactive media in early childhood settings, teachers need information about these tools and their implications with children. The next few slides will give more information for teachers about what to consider in evaluating technology.

Thoughts about the role of media use in early childhood have changed over the past several years, in part because technology is increasingly everywhere. For most parents and educators, it's difficult to imagine raising young children in an environment where there is no technology at all.

Even very young children are exposed to different kinds of media today. We know from recent surveys that most young children are exposed daily to television and many to other technologies as well. What's striking now is the variety in young children's media diet. A notable feature of today's world is the *pass-back* phenomenon, in which parents pass back a cell phone or tablet to the back of a car to engage young children in a game, often because they believe the game is beneficial, but also as a means to distract them.

Participants' life experiences may alter their perspectives on young children's media use. For example, if participants do not have children, the idea that technology may help busy parents may not be as salient. It is important to recognize that the benefits to parents with young children are only partly related to academic learning, as are fears and concerns.

Guidance on Using Media



- Make decisions informed by knowledge.
- Choose challenging and achievable goals.
- Be intentional.

SLIDE 14: GUIDANCE ON USING MEDIA

What is best practice regarding young children and technology in early childhood programs?

There are three pillars to developmentally appropriate practice. First is the idea that **knowledge must inform decision making**—that is, knowledge of individual children and also of child development and learning. Part of knowing both also entails knowing about the social and cultural contexts of children’s lives, especially the values and goals for children that different cultural communities bring to education.

Though it is important to meet children where they are, early childhood education—as all education does—should challenge and stretch children. **Learning goals should be achievable**, and then once achieved, an effective teacher asks, “What’s next?” in terms of a new, challenging goal for learning.

Finally, and this language appears in the organizations’ joint position statement in several places, **intentionality** is a key principle. That is, teachers should be purposeful about everything they do, from setting up the classroom to planning curriculum, using different teaching strategies, assessing children, interacting with them, working with children’s families, and using media in the classroom.

Above all, use of technology tools and interactive media in early childhood settings should not harm children by limiting healthy development in other areas or exposing them to inappropriate images or health risks.

Developmentally appropriate does not just mean that development presents limits to what children can do and how they can learn from technology. Sometimes, it provides a basis for extending ideas of what is possible. In fact, many designers are attempting to make ideas and skills more accessible to children, when they develop educational technologies.

Reference

National Association for the Education of Young Children and the Fred Rogers Center for early Learning and Children’s Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

Joint Position Statement

"Technology and interactive media are tools that can promote effective learning and development when they are used intentionally by early childhood educators, within the framework of developmentally appropriate practice, to support learning goals established for individual children."

NAEYC and Fred Rogers Center, 2012, p. 5

SLIDE 15: JOINT POSITION STATEMENT

A joint position statement by the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media provides guidance to early childhood educators and may be useful also to families.

This statement builds on early childhood educators' knowledge about the typical development of young children of different ages and the routines, activities, interactions, and curriculum effective in promoting their skills. Early childhood educators can use technology and interactive media to optimize for young children's cognitive, social, emotional, physical, and linguistic development.

The statement discourages passive uses of media for children between ages 2 and 5 in early childhood programs.

Reference

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf



Integration

- Think of technology you use every day to accomplish something.
- Write a brief paragraph describing how you use the technology. Imagine that the reader has no experience with this technology.

SLIDE 16: LEARNING ACTIVITY: INTEGRATION

Materials: *Integration* handout, paper, pens

Participants will think about ways they integrate technology into their own lives. This could be a GPS watch or an email. Technology designers often write *scenarios* to help them envision how tools will blend into a learning environment.

Once each person has written a paragraph, ask them to find a partner and read their summary.

Ask the whole group:

- What might integration of technology look like in a preschool classroom?
- What kinds of classroom routines do you imagine technology could help support? (Taking attendance might be an answer, but there are other answers participants could give.)



Integrating Technology

Think about these questions as you watch the video:

- Why do the speakers integrate technology into their curriculum?
- What does it mean to: *Structure the technology to support children...Wherever they are developmentally?*

SLIDE 17: INTEGRATING TECHNOLOGY

This video gives an example of integrating technology into the curriculum of an early childhood program. *The Building Blocks* curriculum by Drs. Doug Clements and Julie Sarama, both researchers at the University of Denver, is one of the most extensively researched curricula that integrates technology. It teaches young children math concepts and skills.



SLIDE 18: VIDEO: INTEGRATING TECHNOLOGY

In this video, Dr. Julie Sarama, a researcher at the University of Denver, discuss the way the early learning math curriculum *Building Blocks* integrates technology. This video is an excerpt of the video *Real to Reel: Building Blocks* produced by the National Center on Quality Teaching and Learning.



Video Debrief

What did you notice?

- Integrating technology in the curriculum gives children another way to learn concepts.
- You can use technology to individualize according to children's needs.

SLIDE 19: VIDEO DEBRIEF

This is an animated slide to allow participants to generate answers before they appear on the slide.

Possible Uses of Digital Media



- Drawing
- Digital forms of block games that build early reading skills
- Storytelling
- Manipulating objects

SLIDE 20: POSSIBLE USES OF DIGITAL MEDIA

Children can use digital media to help meet a wide variety of learning goals. Children can use screen media to draw, arrange digital letter blocks, which can be easily lost in classrooms, to spell words, create stories, and put together shapes to form new shapes and build objects. If used well, screen media can also help children build executive function and problem-solving skills and improve their ability to follow directions.

Some of these applications are similar to what children would do with teachers face to face. These activities offer more opportunities for interactivity than watching video or playing canned digital games. Other ideas for adult interaction include using an interactive whiteboard that allows writing as a form of interaction. Teachers can pause and play videos.

The content and use of media matters more than the platform or time spent with it.

References

American Academy of Pediatrics. (2015, Oct. 1). *Growing up digital: Media research symposium*. https://www.aap.org/en-us/Documents/digital_media_symposium_proceedings.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Infants and Toddlers



In general, recommendations for media use are:

- Interactions with adults
- Age-appropriate content
- Limited time

SLIDE 21: INFANTS AND TODDLERS

Responsive adult-child interactions are key for infant and toddler development in many areas. The National Association for the Education of Young Children and the Fred Rogers Center **recommend no use of passive media** for children younger than 2 in early childhood programs. There is no documented connection to learning outcomes for infants and toddlers based on their passive viewing of media.

Yet, mobile and touch-screen technologies are changing the way our youngest children interact with sound, ideas, and pictures. Any use of screen media with infants and toddlers—some appropriate uses may be reading e-books with an adult, using interactive apps, looking at digital photos, communicating with loved ones via web interfaces like Skype—should be limited and involve adult-child interactions.

Several child advocacy and public health organizations have discouraged all screen time for infants and toddlers in early childhood programs. These groups are concerned with child development and health issues such as obesity. Groups that have advocated for no screen time for children under the age of 2 include the American Academy of Pediatrics and the White House Task Force on Childhood Obesity.

The American Academy of Pediatrics met in a 2015 symposium and acknowledged that many children under age 2 are already using screen media (as noted in slide 11, Common Sense Media found that 38 percent of children younger than 2 use mobile devices) but interactions with parents and caregivers are more educational.

References

American Academy of Pediatrics. (n.d.) *Media and children*. <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/Media-and-Children.aspx>

National Association for the Education of Young Children and the Fred Rogers Center for early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

Zero to Three. (2016, Jan. 7). *Five myths about screen media and young children infographic*. <https://www.zerotothree.org/resources/383-5-myths-about-young-children-and-screen-media-infographic>

Infants Learn from Caregivers

- Infants learn most effectively through **responsive interactions with caregivers**.
- From 12 to 24 months, children can begin learning some language from screens but still learn better from interactions.

SLIDE 22: INFANTS LEARN FROM CAREGIVERS

Clearly, the youngest children learn best from two-way interactions. The more that screen media imitates live two-way interactions, such as video chat, the more educational it will likely be.

In a study, passive video experiences did not improve the language development of children ages 24 to 30 months.

Reference

American Academy of Pediatrics. (2015, October 1). Growing up digital: Media research symposium. https://www.aap.org/en-us/Documents/digital_media_symposium_proceedings.pdf

Consider Amount of Time



Early childhood educators must balance opportunities for learning with the potential for misuse and overuse of media.

SLIDE 23: CONSIDER AMOUNT OF TIME

The amount varies by organization, but many organizations concerned with children's health and development recommend 1 hour or less quality screen time for preschool-aged program during a full-day early childhood program. Other groups recommend only 30 minutes a week for each child while in child care. Screen time is the total amount children spend in front of all screens, including tablets, computers, mobile phones, digital cameras, video players and recorders, and handheld gaming devices.

The challenge is to make informed choices about technology that enriches children's learning while managing screen time and its potential misuse and overuse as new devices and interfaces emerge that have ever increasing appeal to young children. Media should enhance children's learning in the classroom and should not replace other learning experiences.

References

National Association for the Education of Young Children and the Fred Rogers Center for early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Opportunity to Individualize



Teachers can use digital media specifically with:

- Dual language learners
- Children with special needs
- Children who need extra motivation

SLIDE 24: OPPORTUNITY TO INDIVIDUALIZE

Early childhood educators who integrate technology and interactive media appropriately and skillfully can provide opportunities for all children to learn. Teachers can use technology to individualize for children's needs, including for those who are learning more than one language, children who need extra practice learning skills, and children who need additional challenges.

Through digital experiences, educators can help children access stories and music in home languages and explore cultures and places that are meaningful for children. Media can offer more scaffolding for dual language learners in learning new vocabulary and concepts, particularly in domains like math and science.

Technology can also reduce distractions or heighten sensory input for children who need help with that to reach learning goals. Assistive or adaptive technologies can support children with special needs in the areas of independence and inclusion in programs. Educators need to match the appropriate technology and its use with each child's preferences and capabilities.

References

National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/ta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>



Adaptation Using Technology

Think about these questions as you watch the video:

- What were the steps for introducing technology to support a child's learning?
- How did the teaching team use media to meet a specific child's needs?


SLIDE 25: ADAPTATION USING TECHNOLOGY

These are questions that participants can consider while watching the video.



SLIDE 26: VIDEO: ADAPTATION USING TECHNOLOGY

This video features a classroom teacher describing an experience using technology to help a child write her name.




Video Debrief

What did you notice?

- The teaching team tried several modifications and found success using an iPad.
- They were able to offer activities at the child's ability level, then gradually increase her skill until she could write her name.

SLIDE 27: VIDEO DEBRIEF

This slide is animated so that participants can generate answers before ones appear on the slide.



Criteria for Media Use

- Thinking about your experiences, knowledge of child development, and information from this module, write a list of key points to consider in choosing media for an early childhood classroom.
- Find a partner and share lists.

SLIDE 28: LEARNING ACTIVITY: CRITERIA FOR MEDIA USE

Materials: *Criteria for Media Use* handout, paper, pens

Here are some possible points that participants may identify about media:

- Is it developmentally appropriate (no violence, easy to use...) for this age and group of children?
- Is it a creative use (writing, drawing, etc.)?
- Will it help meet children's learning goals?
- Can children use it in interactive ways?
- Does the program have the hardware to support it?
- Is it durable for young children and cost effective?
- Does it mimic the way adults might interact with children in learning a skill?
- Does it help children stay motivated when they need a lot of repetition?

Reference

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Using Media Together

SLIDE 29: USING MEDIA TOGETHER

The practice of consuming media with others has long been a strategy for parents who want to mitigate the possible negative effects of media on children. *Co-viewing* increases the chances that children will also learn from media. Researchers have found that adults and peers who view media with children do contribute to children's learning, though these interactions don't explain all the learning that takes place. Instead, it's better to think of social partners as augmenting or enhancing learning from video and other media. All media use is social, in that it always takes place in social situations, either explicitly or implicitly.

Reference

Takeuchi, L., & Stevens, R. (2011). *The new coviewing: Designing for learning through joint media engagement*. New York, NY and Seattle, WA: The Joan Ganz Cooney Center at Sesame Workshop and LIFE Center. http://www.joanganzcooneycenter.org/wp-content/uploads/2011/12/jgc_coviewing_desktop.pdf

What Is Co-Viewing?

"**Joint media engagement (JME)** refers to spontaneous and designed experiences of people using media together. JME can happen anywhere and at any time when there are multiple people interacting together with media. Modes of JME include viewing, playing, searching, reading, contributing, and creating, with either digital or traditional media..."
(Stevens & Penuel, 2010)

(Takeuchi & Stevens, 2011, p. 9)

SLIDE 30: WHAT IS CO-VIEWING?

Co-viewing is a term that defines ways that adults can engage with young children to help them learn from digital media. It has a rich history in educational research.

The concept of *joint media engagement* (another name for co-viewing) as defined in the report *The New Coviewing* refers to spontaneous and designed experiences of people using media together. It can happen anywhere and everywhere. It has different *modes*, including viewing together, playing together, searching, reading, contributing, and creating. It can support learning by providing resources for making sense and making meaning in a particular situation, as well as for future situations.

Teachers should keep in mind when selecting media that small screens can be harder for adults to watch with children.

Reference

Takeuchi, L., & Stevens, R. (2011). *The new coviewing: Designing for learning through joint media engagement*. New York, NY and Seattle, WA: The Joan Ganz Cooney Center at Sesame Workshop and LIFE Center. http://www.joanganzcooneycenter.org/wp-content/uploads/2011/12/jgc_coviewing_desktop.pdf

Why Co-Viewing?

Joint media engagement **ties technology to other aspects of a child's life.**

When a teacher, parent, or sibling talks to a child about a shared media experience and encourages a child to expand on it, opportunities for learning grow.

SLIDE 31: WHY CO-VIEWING?

Shared media viewing allows adults to expand a child's learning from media. This idea is attributed to Gerald Lesser, a Harvard psychologist who was a longtime chief advisor to the television series Sesame Street. Research has found this statement also applies to adult-child interactions with other forms of media in addition to television.

Co-viewing can be especially important to dual language learners, who may have challenges grasping language and dialogue in media.

Reference

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>



Joint Media Engagement

- Write down an experience of shared media use that helped you learn.
- What was the mode of engagement?
- How did social partners help you learn?
- Find a partner and share.

SLIDE 32: LEARNING ACTIVITY: JOINT MEDIA ENGAGEMENT

Materials: Flip chart or white board, pen

The point of this activity is to connect the idea of joint media engagement with participants' personal experiences. Hopefully, participants will uncover different modes of engagement. Ideas are: movies, video games, television, videoconferencing, and social media.

After sharing in pairs, encourage participants to consider what is common to the different experiences. Ask the whole group: Can they generalize about roles that social partners play in supporting learning when they watch media together? Are there also roles that social partners could play that inhibit learning? If so, what are they?

Make sure that participants generate examples from the different modes of engagement: viewing together, playing together, searching, reading, contributing, and creating. If one mode has no example, see if anyone can think of one.

Post examples as participants generate them on a board or poster paper for all to see.

Possible Talk Moves

- **Point out screen activity** that is central to the program's learning goals.
- **Have conversations** that connect children's lives to what is on screen.
- **Check understandings** by asking children what they think and to talk about it.
- **Provide or focus on language** related to the media activity.

SLIDE 33: POSSIBLE TALK MOVES

A *talk move* is a strategic teacher interaction that encourages student engagement, thinking, and communication.

When using screen media, teachers can direct the attention of a group of children, particularly on a large screen, to one focal point, which allows for a rich conversation. They can connect children's lives with what they are doing on a screen. They can check understandings and provide explanations as needed.

References

Richert, R. A., Robb, M. B., & Smith, E. I. (2011). Media as social partners: The social nature of young children's learning from screen media. *Child Development, 82*(1), 82–95. <http://ccl.ucr.edu/wp-content/uploads/2015/08/RichertRobbSmith2011.pdf>

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>



Spelling "Pig"

Think about these questions as you watch this classroom video:

- What does the teacher do as she interacts with the child?
- How does the child respond?
- What else could the teacher do that would be effective?

SLIDE 34: SPELLING "PIG"

Here are some questions for participants to consider as they watch the classroom video.

SLIDE 35: VIDEO: SPELLING "PIG"

In this National Center on Quality Teaching and Learning video, a Head Start teacher interacts with a child using a tablet.



VIDEO: Spelling "Pig"

NCQTL



Video Debrief

What did you notice?

- The teacher directs the child's focus to the learning goal, spelling *pig*, by asking questions.
- The child is engaged and responds to the questions and does the activity.
- The teacher could ask open-ended questions.

SLIDE 36: VIDEO DEBRIEF

This slide is animated so that participants can share ideas and look at possible answers one at a time.

An example of an open-ended question is: What would you like to spell (assuming the media offers the opportunity to for the user to choose a picture to spell the name)?

Bringing It All Together

SLIDE 37: BRINGING IT ALL TOGETHER

This last section of the module emphasizes the importance of continuing to learn about new technologies that may be useful in early childhood classrooms, plus practices to engage families in working together regarding young children's media use. Optional assignments offer participants opportunities to practice evaluating possible media for the classroom and interacting with children who are using screen media.

Professional Development

Educators can grow in their use of digital media if they have opportunities to:

- **Keep learning about emerging technologies** and their successful use in children's learning.
- **Share experiences with using media** in their programs.

SLIDE 38: PROFESSIONAL DEVELOPMENT

A number of studies show that early childhood educators struggle to integrate technology into their program. On-site coaching can be helpful. Teachers often need both technical and educational support to use technology effectively.

References

National Association for the Education of Young Children and the Fred Rogers Center for early Learning and Children's Media. (January 2012). *Technology and interactive media as tools in early childhood programs serving children from birth through age 8*. http://www.naeyc.org/files/naeyc/PS_technology_WEB.pdf

U.S. Department of Health and Human Services, Administration for Children and Families, Office of Head Start. *Front Porch Series: Young Children's Learning with Digital Media*. Washington D.C., January 23, 2012. <https://eclkc.ohs.acf.hhs.gov/hslc/tta-system/teaching/Broadcast%20Calls/LearningWithDig.htm>

Family Engagement



- Ask parents to share about their child's media use.
- Explain to families how and why their children are using interactive media to meet their learning goals.

SLIDE 39: FAMILY ENGAGEMENT

Teachers who integrate technology into an early childhood classroom also will need to be able to anticipate and address the questions and concerns of parents and other educators. Of particular concern is that digital media might become a substitute for active play and interaction with other children and adults.

Teachers should be able to clearly state how they are using media with children and the benefits for individual children. They should also be sensitive to families' positions on media use for their child, particularly in the child's early learning program.

Organizations that focus on children's health and well-being recommend that caregivers and parents work together to limit preschool-aged children's screen time to 2 hours a day. The American Academy of Pediatrics met in 2015 and broadened its messages, acknowledging that screen use has become prevalent in today's society, even for many young children. The Academy highlighted that media is just another environment that has negative and positive possibilities, that children still need interactions with adults, and that the content of media matters. Research is increasingly finding that screen media is just another form of media like books or music. The focus is shifting from amount of time to quality of content.

Teachers and families can also broaden the use of technology tools to share information. Teachers can use technology to showcase children's work, such as photos and narratives of children's buildings, that can help explain the purpose of children's activities.

References

American Academy of Pediatrics. (n.d.) *Media and children*. <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Pages/Media-and-Children.aspx>

Brown, A., Shifrin, D., & Hill, D. (2015, September 28). Beyond *turn it off*: How to advise families on media use. *AAP News*. 36(10). <http://www.aappublications.org/content/36/10/54>

Lytle, S. (2016, Feb. 23). *Ask I-LABS Outreach: What's the Big Deal about Screen Media?* <http://ilabs.washington.edu/i-labs-news/ask-i-labs-outreach-whats-big-deal-about-screen-media>

Key Points for Families

When children are using screen media:

- Interact with them to enhance their learning.
- Choose video chats as one effective form of interactive media for children 2 years and older.

SLIDE 40: KEY POINTS FOR FAMILIES

It is important for teachers to acknowledge cultural and educational differences among children and families and to support parents' role in making decisions regarding their children's media use. Parents may need support in assessing developmentally appropriate and educational media use, particularly information about resources to help make assessments about apps described as educational. Parents often describe feeling overwhelmed about the number of media choices and having limited guidance about specific options.

Useful websites for families in evaluating media content are: Common Sense Media, Children's Technology Review, Center for Digital Games, Center on Media and Child Health, and Too Small to Fail.

As mentioned previously, some organizations that study and make recommendations on young children and media are shifting their focus to identifying quality content and less on the amount of time spent. Teachers can encourage families to think about selecting media the same way they would choose appropriate books to read with their children and to think about screen media as just another way people can spend time together.

Teachers do have an opportunity to support parents in limiting children's media use and thus help children develop self-regulation skills and allow for time learning and interacting in other ways.

References

American Academy of Pediatrics. (2015, Oct. 1). Growing up digital: Media research symposium. https://www.aap.org/en-us/Documents/digital_media_symposium_proceedings.pdf

Lytle, S. (2016, Feb. 23). Ask I-LABS Outreach: What's the Big Deal about Screen Media? <http://ilabs.washington.edu/i-labs-news/ask-i-labs-outreach-whats-big-deal-about-screen-media>



Conversations with Families

Form small groups and discuss:

- What are key points to share with families as they make decisions about media and their children?
- What do you want to find out from families?
- How can you communicate that you want to work together?

SLIDE 41: LEARNING ACTIVITY: CONVERSATIONS WITH FAMILIES

This exercise can help participants prepare for conversations with families about media at use at home and in an early childhood program. This also helps participants prepare for the video assignment where they will record an actual conversation with a family on this topic.



SESSION SUMMARY

- Select and use interactive media intentionally in early childhood programs.
- Interact with children using media to extend their learning.
- Engage parents to partner with teachers to support children's effective media use.

SLIDE 42: SESSION SUMMARY

Before you bring up the animated points one by one, you might ask participants what their key takeaways are from this module.

The main points of this module are for participants to select and use interactive media intentionally in early childhood programs, to interact with and encourage interaction with children who are using screen media, and to work together with parents to use media in developmentally appropriate ways that help children reach learning goals.



ASSIGNMENT

Review of Interactive Media

- Pick a digital game for young children that you want to try and review.
- Try out the game.
- Write a reflection about your experience playing it and the learning potential of the game.

SLIDE 43: ASSIGNMENT: REVIEW OF INTERACTIVE MEDIA

Materials: *Review of Interactive Media* assignment

For this assignment, educators should pick games that are intended to promote learning. Teachers could also use and review interactive media that is in their classroom to learn more about its capabilities.

Sites to look for educational games for young children on tablets or laptops are: Google Chrome web store (<https://chrome.google.com/webstore/search/children>), Common Sense Media (<https://www.commonsensemedia.org/>), PBS Kids (<http://pbskids.org/>), and First 8 Studios, (<http://first8studios.org/gracieandfriends/cityskate.html>)



VIDEO ASSIGNMENT

Interacting Together

1. Choose media that you are introducing in your program or one that children are already using, and make a plan to interact with children who are using it.
2. Film yourself interacting with children while they use media.
3. Review and reflect on the experience.

SLIDE 44: VIDEO ASSIGNMENT: INTERACTING TOGETHER

Materials: *Using Interactive Media* assignment

This is an optional video assignment, one of the hallmarks of EarlyEdU courses. The aim of the assignment is for participants to record themselves interacting with a child to extend that child's learning while using screen media.

SLIDE 45:

This concludes this EarlyEdU Alliance module on using interactive media in early childhood programs. See the EarlyEdU Alliance's website at <http://www.earlyedualliance.org> for more information about higher education courses on early childhood teaching practices.



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