



Media and Technology

Introduction

We live in a digital world. Television and web programs, video and online games, e-books, streaming media, mobile applications (“apps”), tablets, smart phones, televisions, and computers are just a small sampling of today’s digital media and technology tools, and they are often a large part of our daily routines at home and on-the-go. When families and caregivers use these tools with their children in intentional ways, they can create meaningful learning experiences.

Many digital tools have been created with education in mind. From math to literacy to developing social and emotional skills, families and caregivers can use media and technology to support their children’s learning and development. When these tools are used as jumping-off points for hands-on exploration, children’s experiences become even richer. For example, a child might watch his favorite television character conduct a science experiment and then try the same experiment himself.

Media and technology can also be used to extend children’s interests and to research answers to some of their questions. For example, a child who is excited about cars and trucks might learn more about his favorite vehicles by playing an online game about transportation. Or, a parent or caregiver might engage their child while at the grocery store by using a smart phone to find out interesting facts about their child’s favorite fruit.

Media and technology can also be used as tools for communication. Video chats allow family members to keep in touch even when far apart, and assistive tools such as touchscreens offer children with verbal communication challenges ways to communicate with others and to express their thoughts and feelings.

When children interact with media and technology, it is important for them to know that adults are actively guiding and monitoring their use. Families and caregivers should choose the programs their children watch or interact with, limit children’s screen time, and watch and play along with their children. Adults can then help children to reflect upon their experiences and make connections to real world objects, materials, and events that their children see and engage with every day. When used in an intentional, thoughtful way, media and technology can provide an accessible gateway to learning and growth.

This workshop offers strategies and activities to help parents, families, and caregivers find the learning opportunities that media and technology offer, both at home and on-the-go. Through

discussions, hands-on activities, take-home resources, and the “Media and Technology” video, you’ll find everything you need to:

- Communicate the importance of finding opportunities for learning in everyday experiences.
- Demonstrate how media and technology can be used as learning tools.
- Empower participants to be intentional with their children’s media use.
- Provide strategies for being intentional with media and technology use.
- Suggest ways that media and technology can inspire and support real world learning.
- Suggest ways that media and technology can be used to build upon children’s interests in developmentally appropriate ways.
- Introduce some types of media and technology that can be used as tools in communication.
- Guide participants in reflecting on how they can apply what they have learned with their own children.
- Try out and practice new ideas with participants.

The Media and Technology workshop has been divided into the following sections:

- **Media and Technology in a Young Child’s World**—This section provides information on the positive impact that media and technology can have on a young child.
- **Choosing and Using Media**—This section describes the importance of facilitating a young child’s media use and exposure and offers ideas for building upon media to create rich hands-on learning experiences.
- **Technology At Home and On-the-Go**—This section explores the value of technology as a communication tool and a tool for investigation and highlights ways to make technology use interactive.

As you lead this workshop you’ll be using the “Media and Technology” video, which is 7 minutes and 47 seconds in length. In this video you’ll meet:

- Cora (age 4) and her sister Pepper (age 2) as they use a mobile app as a jumping-off point for science discovery.
- Kendra (age 3) and her sisters Kayla (age 8) and Keyera (age 11) as they dance to a video game along with their mom and dad.
- Yoong (age 4) as he uses video chat to stay connected with his far-away grandparents.
- Twins Teddy and Johnny (age 5) as they use an assistive technology to communicate.

Preparing for the Workshop

- Read the *Parenting Videos Workshop Overview*, found online in this workshop's Resources section, which contains helpful tips and information about the workshop series.
- Make copies of the following *Tips for Parents*, available in English and Spanish and found online in this workshop's Tips section. Have them available for participants to pick up before the workshop begins or distribute them at the end.
 - *Conversations Count*
 - *Media Ideas for Children*
 - *Play Time!*
 - *Screen Time*
 - *Time to Pretend*
- Watch the "Media and Technology" video. Take notes as you watch (and as you read through this guide). Keep a notebook of additional ideas and questions. You know your group best and can adapt the workshop to fit the needs and interests of the participants.
- Do an icebreaker activity to get participants to start thinking about media and technology and how prevalent it may be in their lives. Ask participants to find a partner and then share their favorite digital device and favorite media experience (a digital app, game, social network, etc.) and why it is their favorite. As a large group, invite participants to share something they learned from the experience.

- Gather the supplies you need for the Trying It Out activities, including pencils, pens, markers, crayons, paper, and sticky notes, as well as refreshments. You will also need small paper plates (two per participant) for the “Media Chips” activities.
- If you are providing a series of workshops, have a flyer ready with future topics, dates, and times.

Section One: Media and Technology in a Young Child's World

Leading Your Group

Begin by touching upon some of the ways that digital tools can be an exciting and meaningful part of a young child's life. You can mention:

- Nothing is more important to your child's growth and development than the interactions he has with you and the world around him.
- Media and technology can lead to and enhance learning, but they should not be used in isolation. Instead, they should be used with adult guidance to support the learning that happens through hands-on experiences (such as splashing in a puddle or chasing a shadow). Children learn best when they have opportunities to explore using all of their senses as well as opportunities to interact appropriately with technology.
- As your child interacts with media and technology, there are some things to keep in mind:
 - You lead the way when it comes to your child's use of technology. View programs, games, and apps before your child does. Choose those that will be most beneficial to your child's learning and development.
 - Your child can benefit from screen time when it is purposeful, supervised, and interactive. For children ages 3–5, limit screen time to under two hours per day. Current research suggests no screen time for children under the age of 2.
 - Children will learn best from media when it is linked to hands-on experiences in the real world. (If possible, mention a positive example of media use that a participant shared during the icebreaker activity.)

Chat and Share

Ask participants to think about the ways that media and technology are a part of their children's lives. This will help participants to reflect on the potential impact—both positive and negative—that media and technology can have. You can ask:

- How and where do your children engage with media and technology?
- How do you think media and technology are helpful to your children?
- How do you choose the media and technology your child will interact with? Do you have any concerns about your child's use of media and technology? If so, what are they?

NOTE: Write down any additional questions that you would like to include. Is there an anecdote from your own life that you can share? Add that, too.

Watching and Learning

Watch the entire “Media and Technology” video together. (You will have an opportunity to return to various segments of the video throughout the workshop.) Before you watch, tell participants:

- In this video, you'll see young children engaging with digital games, mobile apps, tablets, and computers. As you watch, notice the different ways they interact.
- Notice how each family's use of technology is similar to or different from your own family's use.

Reviewing and Reflecting

Lead a conversation about what participants noticed in the video. You might ask:

- What kinds of technology did you see children using?
- How were the different types of technology being used? What do you think children were learning from these uses?
- What did you see in the video that you might like to try out at home?

Trying It Out

Digital Tools Table. Create a Digital Tools table to encourage participants to think about the media and technology their children are already using and how they engage with it.

- Explain, *We are going to create a table that we can refer to throughout our workshop. It will include information on the devices your children interact with and the digital media they engage with. We'll use this table to help guide our discussions and make them relevant to your lives.*
- Say, *We've talked about some different types of technology and saw some examples in the video. You've also mentioned some of the devices your children interact with. Do your children engage with any other types of technology devices? Let's list all of them in our table.*
- Write all the devices that are mentioned (such as smart phones, tablets, televisions, computers, etc.) in a visible place such as a white board, chalkboard, or on a large sheet of paper, creating the beginnings of a table.
- Encourage participants to think about how their child uses or does not use each device written in your table.
- Give participants a stack of sticky notes and have them write down the different digital media activities that their children engage in. Say, *Now write down the different things that your children do on these devices. Be as specific as possible. Write down the names of the shows she watches and the games she plays. So, you might write "My child watches Between the Lions every morning." Or, "My child loves to play the online game PEEP and the Big Wide World 'Hide and Peep.'"*
- When they have finished, ask participants to put their sticky notes under the appropriate category (for example, "Plays *Between the Lions* online game" would go under "Tablet" if that is the platform on which the child plays the game).
- Have participants examine the table. Ask questions about media and technology experiences that appear multiple times. (For example, if several participants mention that their children like to play the same game, you can ask, *What do your children like about this game? What do you like about this game? What are some things your children might learn from this game?*)

Section Two: Choosing and Using Media

Leading Your Group, Part 1

Talk about the importance of guiding a child's media use. As you discuss, draw on supporting examples from the Digital Tools table. Focus on how participants can direct and support their child's media experiences. Provide ideas for how participants can be in charge of what and how

much media their children view and how they can make the viewing interactive. You can mention:

- Select media with intention. Choose the media before your child engages with it, know why you want her to watch it, and set viewing times. Select content that she will learn from and content that will spark her interest. Let her know when it's time to stop by setting a timer or doing a "time check" (for example, tell her, "You have two minutes left.")
- Help engage your child by letting him know some of the things he will be seeing before he watches. You might say, "You can watch one episode of *Curious George*. You're going to see George fly a kite! Then we'll go fly a kite, too!" He'll be excited to move away from the TV after watching if he knows that a fun hands-on adventure awaits.
- When possible, watch media with your child in an active way. As you watch together, ask open-ended questions—questions that encourage your child to respond with more than just a "yes" or "no." For instance, ask, "What do you think will happen next?" or "What did the boy do with the seed that we also did with seeds today?" This will help your child to think about what she is watching, inspire new exploration, make connections, and build her language skills, too.
- Make viewing interactive to make the experience richer. Encourage your child to sing, dance, and move as he watches and join in with him, just as Kendra's family did in the video.

Chat and Share

Ask participants to think about ways that they support their child's interactions with media. This will encourage them to share strategies that work with one another. You can ask:

- In looking at our Digital Tools table, what media do you feel best about your child viewing?
- How do you support your child as she watches programs or plays games?
- What do you do with your child afterward?

NOTE: In your notebook, write additional questions that you would like to include. Is there an anecdote from your own life that you can share? Add that, too.

Watching and Learning

Watch a portion of “Media and Technology” together. Begin at 1:23 as Cora and Pepper begin their *PEEP and the Big Wide World* online game and end at 2:23 as their mother mentions setting media time limits.

Reviewing and Reflecting

Lead a conversation about what participants noticed in the video. You might ask:

- Cora and Pepper’s game teaches them about directionality, ramps, and rolling. What are some ways that Cora and Pepper’s mother supports their game play? How do you think they benefit from her support?
- One way that the girls’ mother gets involved is by limiting their media use. In the video, she mentions that if it were up to her girls they would play games on the tablet for a much longer period of time than is recommended. Do you experience this with your children?
- Cora and Pepper’s mom limits their media use. Families can use timers, time checks, and visual aids like signs to do this. Are there other ways you can think of to limit media use? What strategy might you try with your child?

Trying It Out

Media Chips: Part 1. Guide participants to begin creating a tool to help limit media use.

- *Say, As we discussed, it is very important to monitor and limit children’s media use. It can be helpful if you are clear with your child about how much media she will be allowed before she interacts with it.*
- *Hold up two paper plates and explain, We are going to turn these paper plates into “media chips”—a tool you can use with your child to set and help them understand viewing limits. You’ll make two chips. You can decide what each chip is worth and your child will trade the chips in for media time. For example, if your child likes to watch Between the Lions, each chip might be worth one episode. When the chips are gone, media time is over.*
- Give each participant two paper plates. Have participants draw pictures of technology (a television, computer, tablet, etc.) on the front of each plate or “media chip.” Explain that you’ll be adding something to the other side of the chips in your next activity.

Leading Your Group, Part 2

Now discuss ways that participants can use media as a jumping-off point for a hands-on exploration. Build your conversations and suggestions around examples of media that are included in the Digital Tools table. You can mention:

- After viewing media content with your child, help him make connections to his life to give meaning to what your child has seen, engage his imagination, and build his creativity.
- Carry themes from the program or game into learning adventures in and around your home. For example, if your child is playing a game about water, look for examples of water in real life—flowing through the bathroom faucet, as ice cubes in his drink, or in puddles outside. If the characters in a program were cooking, ask him if he'd like to be your assistant chef in the kitchen as you make lunch. If the characters were rescuing an animal, get out his stuffed animals, a backpack, and other props so that together, you can pretend to rescue animals, too.
- Use drawing and writing to extend the learning. For example, after your child has watched a television program, encourage her to draw a picture of her favorite character, or ask her to “write” a new adventure for this character. She can dictate the words as you write them down or, if your child is writing, she can be the scribe.

Chat and Share

Ask participants to think about how they can use media as a jumping-off point for hands-on learning. This will encourage them to learn from each other's strategies. You can ask:

- What types of activities does your child like to do after he has watched a show or played a game?
- Thinking about the media experiences in our Digital Tools table, has anyone used media as a jumping-off point for a hands-on learning experience? What did you do?
- What new ideas do you have for how you might make connections between the media your child engages with and his real life experiences?

NOTE: In your notebook, write additional questions that you would like to include. Is there an anecdote from your own life that you can share? Add that, too.

Watching and Learning

Watch a portion of “Media and Technology” together. Begin at 2:24 as Cora and Pepper build a ramp and end at 4:24 as Kendra dances with her mom.

Reviewing and Reflecting

Lead a conversation about what participants noticed in the video. You might ask:

- Cora and Pepper's mom mentions that their *PEEP and the Big Wide World* game helps to inspire and frame a hands-on exploration with ramps. What do you think the girls learned as they played the game and then built ramps? How did the media help to inform their hands-on discoveries?
- After viewing her program, Kendra was inspired to have a pretend tea party. How have your children been inspired by the programs they've watched and the digital games they've played?

Trying It Out

Media Chips: Part 2. Guide participants to finish creating a tool to help use media as a jumping-off point for hands-on learning.

- Ask the group to think of types of activities they might do after watching a show or playing a game in order to further explore the themes of that show or game, for instance, "write a story," "act it out," "conduct an investigation," "make something," etc.
- Write this list of activity ideas on the board or on a large sheet of paper.
- Have participants turn their "media chips" to the blank side and draw pictures to represent these different activities.
- Explain, *When your child is done watching a show or playing a game, talk about the experience and then look at the plate together. Encourage your child to choose an activity that he'd like to do. For instance, you might ask your child, "Do you want to build a house like George did in the show?" or "Do you want to draw a picture of something George did?" or "Do you want to act out what you saw George do?" etc.*
- Invite participants to share their media chips with the group. Ask participants to talk about ways they might use the chips with their child.

Section Three: Technology At Home and On-The-Go

Leading Your Group, Part 1

Begin by discussing some of the many things that children can learn from interacting with different types of technology, for example, apps and different communication devices. You can mention:

- Apps, tablets, computers, and smart phones can be used as tools to enhance a child's explorations or lead to real-world, hands-on learning.
- It is your job as a parent or caregiver to select the digital content that your child uses. Before you have your child interact with a new technology, practice using it on your own so that you know how to use it correctly. This will allow you both to get the most out of the experience.
- Use technology to build upon your child's interests and to expose her to things she may not see otherwise. For example, if your child is interested in pandas, you might share with her a "Panda Cam" app that streams live video of pandas in a zoo.
- Download apps for on-the-go learning. Mobile technology makes learning accessible almost anywhere. Identify apps that are appropriate for your child's age and development—because young children are still developing their fine motor skills, certain hand and finger movements could be too challenging for them. (For suggestions, see the parent tip sheet *Media Ideas for Children*.)
- Use video chat programs to connect face-to-face with relatives and friends who may live far away. A grandmother who lives in another country might not be able to put your child to bed, but she can read her a story over a video chat. (Programs such as Skype, FaceTime, and Google+ Hangout have tutorials and FAQs available online.)
- Use keyboards and mobile phones to help build your child's math and literacy skills. Name a letter and see if she can find that letter on your keyboard or phone. Hold up three fingers and ask her to point to the number that tells how many fingers you are holding up.
- Expose your child to music with mobile devices and computers. Try listening to children's music from different countries to help your child learn about other cultures and traditions.
- Pair technology with hands-on experiences to support specific learning and communication challenges. You might download a game about letter sounds; then, while out and about, go on a letter hunt and make a letter's sound as you spot it.
- Use mobile technology to your advantage. When you're in control of the content your child is engaging with, it's okay to hand it over or pass it back at opportune times (such as in long lines, at restaurants, or on car rides). As much as possible, interact with your child while he is using the device.

Chat and Share

Ask participants to look at the Digital Tools table and identify the devices they like to use most with their children. This will encourage them to begin reflecting on the benefits of these devices. You can ask:

- Are there any devices in this table that you are unfamiliar with? Can the person who mentioned this device tell the group a bit about it?
- Of the devices included in our table, which is your favorite to use with your child?
- What do you like about this device?
- What do you think your child gains from using this technology?

NOTE: In your notebook, write additional questions that you would like to include. Is there an anecdote from your own life that you can share? Add that, too.

Watching and Learning

Watch a portion of “Media and Technology” together. Begin at 4:25 as Yoong has a video chat with his grandparents and end at 7:03 as Teddy points to his dad’s name on the assistive technology.

Reviewing and Reflecting

Lead a conversation about what participants noticed in the video. You might ask:

- In the video, we saw ways that technology can be a powerful tool for communication. Do your children use video chat like Yoong? What is the experience like? What do you think they gain from the experience?
- Do any of your children use assistive technology like Teddy and Johnny? What do they use? How has this technology had an impact on your life and on the lives of your children?
- What technology do you want to introduce to your children that they may not have used before?

Trying It Out

Tech Talk. Help participants discover ways to build communication skills as their children interact with technology.

- Mention, *As we saw in the video, many technology devices have been created to help us communicate. But even if an app or game was not created for this purpose, we can still use it to help our children build language and communication skills.*
- Explain, *One way to do this is by asking questions as your child interacts with technology. By asking questions and facilitating a connection between your child's experiences with technology and experiences she has out in the world, you help her to describe and make observations and comparisons. Asking your child questions will deepen her experiences with technology.*
- Together, play an online game with participants. For example, play three or four rounds of the game *PEEP and the Big Wide World* "Flower Power." (Find it at [http://resourcesforearlylearning.org/educators/activity/1368/.](http://resourcesforearlylearning.org/educators/activity/1368/))
- After playing, break participants into small groups and have them generate three questions they could ask to deepen a child's understanding of the game. Provide examples such as "How many flowers should we put here?" "How many flowers does Quack have now?" "Who has more flowers?"
- Next, encourage groups to generate three questions they could ask to link the game to a child's daily experiences. Provide examples such as "When are times that you share?" "Who do you share with?" "What do you like to share?" "If I have two crackers and want to give you the same amount, how many crackers would I give you?"
- If time allows, generate a list of questions that might apply to some of the games on your Digital Tools table.
- Encourage participants to copy down the list of questions and refer to it when their child engages with technology.

Wrapping Up

End your session with an activity to help participants bring new knowledge home.

Make It Meaningful

Encourage participants to think of ways they will build upon their child's favorite show, game, or app to create a rich learning experience.

- Break participants into small groups. Instruct participants to take down from the Digital Tools table one or two sticky notes with media activities they are familiar with.

- Then have each participant choose an activity from their “media chips” that they would like to try with their child after the child interacts with the media.
- Still in small groups, have participants discuss why they think this would be a good activity to pair with the shows or games they selected.
- Gather as a large group and have some participants share their ideas.
- Before participants leave, say, *You’ve formed a new community here at this workshop. I encourage you to share contact information and keep in touch. You can be a wonderful source of support and information for one another.*

As you say goodbye to your group, remind participants that media and technology can be a rich source of learning when coupled with real world hands-on experiences. You can mention:

- Media and technology are everywhere and can lead to wonderful learning when paired with hands-on experiences.
- Technology and media are already part of your everyday world. The digital tools you already have, such as smart phones, computers, and tablets, can become important learning tools for your child.
- Many television and web programs, online games, apps, and other media have been created with children’s education and development in mind. Many have not, however, which is why it is important that you be an active participant in your child’s use of media technology.
- You are in charge of your child’s media use. Preview the media, try out the technology beforehand, and make media choices based on the needs and interests of your child. This will help to ensure she has rich educational experiences with the programs that she watches and the games that she plays.
- Sit down with your child and interact with him as he explores different media and technology.
- Make media viewing interactive by dancing along, singing along, and asking lots of questions as your child watches or plays.
- When the game or television show is over, try having a hands-on adventure that further explores the themes of the show or game.

If possible, leave time so participants can mingle and chat with one another, talk with you individually, and browse the handouts you've brought.

Massachusetts Guidelines for Preschool Learning Experiences

The Media and Technology workshop has been designed to meet the Massachusetts Early Learning Guidelines for Preschool Learning Experiences. The purpose of these guidelines, developed by the Massachusetts Association for the Education of Young Children for the Department of Early Education and Care (EEC) in 2003, is to provide a comprehensive view of the development of preschool aged children while documenting the experiences that support this development and school readiness. The guidelines are for families as well as early education and care professionals.

For more information about the guidelines, including definitions of terms, visit <http://www.mass.gov/edu/birth-grade-12/early-education-and-care/curriculum-and-learning/>.

This workshop aligns with the following guidelines:

Learning in English Language Arts

Children will be able to:

- Participate actively in discussions, listen to the ideas of others, and ask and answer relevant questions.
- Communicate personal experiences or interests.
- Listen to and use formal and informal language.
- Use their own words or illustrations to describe their experiences, tell imaginative stories, or communicate information about a topic of interest.
- Generate questions and gather information to answer their questions in various ways.
- Listen to, recognize, and use a broad vocabulary of sensory words.

Learning in Mathematics

Children will be able to:

- Explore and describe a wide variety of concrete objects by their attributes.
- Organize and draw conclusions from facts they have collected.

- Explore and identify space, direction, movement, relative position, and size using body movement and concrete objects.

Learning in Science and Technology/Engineering

Children will be able to:

- Ask and seek out answers to questions about objects and events with the assistance of interested adults.
- Identify and use simple tools appropriately to extend observations.
- Record observations and share ideas through simple forms of representation such as drawings.
- Explore and describe a wide variety of natural and man-made materials through sensory experiences.
- Investigate and describe or demonstrate various ways that objects can move.
- Explore and identify simple machines such as ramps, gears, wheels, pulleys, and levers through play experiences.

Learning in History and Social Science

Children will be able to:

- Identify and describe cause and effect as they relate to personal experiences and age-appropriate stories.
- Engage in activities that build understanding of words for location and direction.

Learning in Health Education

Children will be able to:

- Build body awareness, strength, and coordination through locomotion activities.
- Discuss various aids and accommodations used by people for the activities of daily life.
- Use eye-hand coordination, visual perception and tracking, and visual motor skills in play activities.

Learning in the Arts

Children will be able to:

- Respond to a variety of musical rhythms through body movement.
- Participate in simple sequences of movements and dance to various kinds of music.
- Sing a variety of songs within children's vocal range, independently and with others.
- Use dramatic play, costumes, and props to pretend to be someone else.