Welcome to CHD103

This course is about the ever-evolving world of technology and digital media and the ways in which digital devices are reshaping modern childhood and early childhood education. Participants will learn about children's media usage and the latest research on the effects of digital media on early childhood development. In addition, this course provides early childhood professionals with recommended practices for both regulating and integrating technology in the early childhood environment.

Course Objectives:

By taking notes on the handout and successfully answering assessment questions, participants will meet the following objectives as a result of taking this course:

- Identify types of digital media
- Identify key findings and statistical trends from notable studies on children and digital media
- Define and identify the significance of the digital divide
- Recognize the benefits and risks of digital media in the lives of children
- Recognize recommendations from the American Academy of Pediatrics regarding children's media use
- Recognize how technology is integrated into learning standards for young children.
- Identify recommended practices from child development experts regarding media usage and young children
- Identify examples of appropriate ways to incorporate digital media in early learning environments

During this course, participants are expected to reflect and write about topics related to their own learning and teaching experiences in relation to course content.

References:


National Association for the Education of Young Children. (2012). Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8 http://www.naeyc.org/content/technology-and-young-children


What Is Digital Media?

Important Fact

Digital media refers to:

The National Association for the Education of Young Children (NAEYC) provides the following list in its 2012 position statement, Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8:
Why Is This Topic Important for Early Childhood Educators?

Stats and Research
Sesame Workshop’s "Snapshot of Key Findings"

• Children have more access to all kinds of digital media and are spending more time during the day with them than ever before.
• Television continues to be the form of digital media children engage in most.
• Mobile devices are the next generation of technology for children under the age of 8.
• Not all children have access to newer digital technologies, nor do all children use media in the same ways once they do own them.
• Family income continues to be a barrier to some children owning technology, even as the price of devices falls.
• Lower-income, Hispanic, and African-American children consume far more media than their middle-class and white counterparts.

The Common Sense Census: Media Use by Kids Age Zero to Eight by Common Sense Media
Key Finding: Mobile media have become a nearly universal part of children’s lives

Key Finding: The amount of media children use remains the same, but how they use media is shifting

Key Finding: New technologies are making appearances in children’s lives

Key Finding: Screen time amounts differ in homes based on income and education level

Key Finding: Parents are concerned about elements of media use but also think it is beneficial for learning and creativity

Key Finding: Parental concerns about media use vary depending on race/ethnicity

Key Finding: Recommendations from pediatricians are not being followed

Key Finding: Parents are not aware of pediatricians’ recommendations related to media use

Key Finding: The digital divide is shrinking, but it still exists

The digital divide refers to:

Key Finding: Time spent reading books has remained steady

Reports such as the Common Sense Census: Media Use by Kids Age 0-8 help experts address many of the concerns that arise with the use of media devices.
The Common Sense Census: Media Use by Tweens and Teens by Common Sense Media

Tweens refers to:

Teens refers to:

Key Finding: Entertainment media use in teens and tweens (not including schoolwork or homework)

Key Finding: Media "diets" vary widely

Key Finding: Boys and girls have different media preferences and habits

Key Finding: TV and listening to music are the most popular entertainment media

Key Finding: Screen time can be broken down into different categories

Key Finding: Media multitasking during homework is common among teens and tweens

Key Finding: Tweens and teens are turning to mobile devices for media consumption

Key Finding: Digital inequality is evident among tweens and teens

Key Finding: Parent communication about media use focuses more on content than amount

Key Finding: The amount of time spent with media differs based on family income, race/ethnicity, and parent education level

Benefits of Children’s Media Use

According to the Partnership for 21st Century Learning, there are specific skills and knowledge that students need to acquire in school to be successful members of the workforce. In addition to the traditional content that schools have taught for decades, additional skills include:

1.

2.

3.

Important Fact

According to the Partnership for 21st Century Learning, information literacy refers to the ability to:

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Important Fact

According to the Partnership for 21st Century Learning, *media literacy* refers to the ability to:

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Important Fact

According to the Partnership for 21st Century Learning, *technology literacy* refers to the ability to:

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Potential Benefits for Infants and Toddlers

Benefits for Preschoolers

Benefits for School Aged Children

Benefits for Individuals with Special Needs
Risks of Children’s Media Use

The American Academy of Pediatrics (AAP) looked at all the available info and took the following stance, which parents and educators would be wise to take into consideration when deciding how and when to use digital media:

*The first two years of your child’s life are especially important in the growth and development of her brain. During this time, children need positive interaction with other children and adults. This is especially true at younger ages, when learning to talk and play with others is so important.*

*Until more research is done about the effects of screen time on very young children, the American Academy of Pediatrics strongly discourages television viewing for children ages two years old or younger and encourages interactive play.*

Media Impact on Development

Risk of Obesity

Impact on Sleep

Exposure to Inappropriate Content

Exposure to Violence

Self-Identity and Attitudes toward Others

Cyberbullying

Privacy and Safety Concerns

The AAP included the following recommendation for parents to address these concerns:

*Have ongoing communication with children about online citizenship and safety, including treating others with respect online and offline, avoiding cyberbullying and sexting, being wary of online solicitation, and avoiding communications that can compromise personal privacy and safety.*

American Academy of Pediatrics Digital Media Guidelines

Recommendations for Young Children

The AAP offers the following screen time recommendations for children under the age of 6:
Avoid digital media use for children under the age of 18-24 months (except for video chatting)
For children over 18-24 months, engage in high quality digital media together with children – no solo media use at this age
For children 2-5 years of age, limit screen time to 1 hour per day
Avoid screens 1 hour before bedtime
Keep bedrooms and mealtimes screen-free
Test apps and games prior to children’s use – avoid violence and face paced games
Help children apply content from games and apps into real world scenarios – make connections between concepts in games and children’s lives

Recommendations for Older Children and Adolescents
The AAP recommends that families create a:

Additional recommendations from the AAP for digital media use include:

- Communicate with children about their media use, online citizenship, safety, and privacy
- Turn off televisions during mealtimes and times when no one is actively watching a program
- Establish media-free times
- Avoid media devices in bedrooms
- Avoid use of media during homework time

Preparing All Children for a Digital World

English Language Arts Standards

According to the CCSS, children who are college and career ready:

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Math Standards

Digital Media and Early Learning Standards
Addressing the Digital Divide in Early Learning Environments

In the RAND Corporation perspective paper Using Early Childhood Education to Bridge the Digital Divide, authors note:

Just as basic text literacy opens the door to a world of information and provides opportunities for learning, technology literacy grants access to the digital world and all of the learning opportunities it affords.

An effective facilitator could be:

According to NAEYC, technology literacy for early childhood educators includes:

**NAEYC Digital Media Recommendations**

Above all, the use of technology tools and interactive media should not harm children.

Developmentally appropriate practices must guide decisions about whether and when to integrate technology and interactive media into early childhood programs.

Professional judgment is required to determine if and when a specific use of technology or media is age appropriate, individually appropriate, and culturally and linguistically appropriate.

Developmentally appropriate teaching practices must always guide the selection of any classroom materials, including technology and interactive media.

Appropriate use of technology and media depends on the age, developmental level, needs, interests, linguistic background, and abilities of each child.

Effective uses of technology and media are active, hands-on, engaging, and empowering; give the child control; provide adaptive scaffolds to ease the accomplishment of tasks; and are used as one of many options to support children’s learning.
When used appropriately, technology and media can enhance children’s cognitive and social abilities.

Interactions with technology and media should be playful and support creativity, exploration, pretend play, active play, and outdoor activities.

Technology tools can help educators make and strengthen home–school connections.

Technology and media can enhance early childhood practice when integrated into the environment, curriculum, and daily routines.

Assistive technology must be available as needed to provide equitable access for children with special needs.

Technology tools can be effective for dual language learners by providing access to a family’s home language and culture while supporting English language learning.

Digital literacy is essential to guiding early childhood educators and parents in the selection, use, integration, and evaluation of technology and interactive media.

Early childhood educators need training, professional development opportunities, and examples of successful practice to develop the technology and media knowledge, skills, and experience needed to meet the needs of their students.

**Technology in the Classroom: Recommended Practices**

After looking at a number of research studies and position statements related to technology use with young children, the authors recognized a distinct set of agreed upon guiding principles:

**Relationships**—

Co-viewing and active parent engagement—

Social and emotional learning—

Early childhood essentials—

Content, context, and quality—

Media creation—

Family engagement—

Adult habits—

Teacher preparation—

Media mentors—
Digital Media Activity Ideas

Digital Media to Build Relationships

Digital Media and Emotional Learning

Digital Media and Creativity

Try This!

Digital Cameras in the Classroom

- If possible, programs can invest in inexpensive digital cameras for children’s use to document their worlds. A digital camera can be a great way to motivate a child to go and explore the great outdoors, especially for children who are otherwise skittish about getting dirty or looking for bugs and activities like that. With a camera, they have a new reason to go find that bug. In turn, the photos a child takes can be used for countless extension activities by a creative teacher.
- To get the most from a digital camera, you will also need a computer. A printer may also be needed if you don’t have a way to view the images on a screen (beware that color ink can be expensive – but black and white images are also appropriate).
- A teacher can use a camera to create class photo albums, bulletin boards, interactive games, etc.

Digital Media and Documentation of Learning

Digital Media to Explore the World

Digital Media to Encourage Health and Fitness

Digital Media and Parent Engagement
According to Mr. Rogers, here are some questions to ask yourself:

Does the technology activity:
1. Create a sense of worth?
2. Create a sense of trust?
3. Spark curiosity?
4. Have the capacity to foster you to look and listen carefully?
5. Encourage the capacity to play?
6. Allow for moments of solitude?

**Helping Children Become Digital Citizens**

Common Sense Media:

**Vision Statement on Media Quality:** Empowered families in charge of their digital choices.

**Vision Statement on Culture and Democracy:** Technology that puts people before profits.

**Vision Statement on Digital Citizenship:** A future where every kid is a digital learner, leader, and citizen.