



TECHNOLOGY TOOLS TO USE

Technology in Early Childhood

RATIONALE OF USING TECHNOLOGY IN PRESCHOOL SETTINGS

Today's children are growing up in a rapidly changing digital age that is far different from that of their parents and grandparents. A variety of technologies are all around us in our homes, offices, and schools. When used wisely, technology and media can support learning and relationships.

Technology and interactive media are here to stay. Young children live in a world of interactive media. They are growing up at ease with digital devices that are rapidly becoming the tools of the culture at home, at school, at work, and in the community. The shift to new media literacies and the need for digital literacy that encompasses both technology and media literacy will continue to shape the world in which young children are developing and learning.

The American Academy of Pediatrics and the White House Task Force on Childhood Obesity discourage any amount or type of screen media and screen time for children under 2 years of age and recommend no more than one to two hours of total screen time per day for children age 2 through 5.

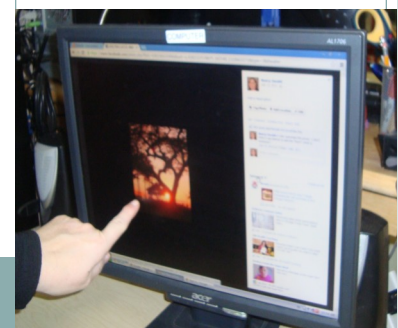
Technology and media are tools that are effective only when used appropriately. In school we use CD Players, Digital Cameras, Voice Recorders, Computers and even short educational videos online in order to expand, enrich, implement, individualize, differentiate, and extend our curriculum.

APPROPRIATE USE OF (INTERACTIVE) TECHNOLOGY

Technology and media are tools that are effective only when used appropriately. The appeal of technology and the steady stream of new devices may lead some educators to use technology for technology's sake, rather than as a means to an end. Technology should not be used for activities that are not educationally sound, not developmentally appropriate, or not effective (electronic worksheets for preschoolers, for example). Passive use of technology and any type of screen media is an inappropriate replacement for active play, engagement with other children, and interactions with adults.



- CD and Cassette Players
- TV Monitor
- DVD and Video Players
- Digital Camera
- Video Recorder
- Voice Recorder
- Computers
- Computer Software such as Microsoft Word
- Educational Games
- Internet with Adult Supervision
- iPad/ iPhone/ Tablet
- iPad / Android Apps
- E-Readers/ e-books





LIMITATIONS ON THE USE OF TECHNOLOGY

Special considerations must be given to the use of technology with infants and toddlers. Screen time estimates should include time spent in front of a screen at the early childhood program and, with input from parents and families, at home and elsewhere. When used appropriately, and keeping screen time recommendations in mind, technology and interactive media have the potential to enhance, without replacing, creative play, exploration, physical activity, outdoor experiences, conversation, and social interactions. Technology should never be used in ways that are emotionally damaging, physically harmful, disrespectful, degrading, dangerous, exploitative, or intimidating to children. This includes undue exposure to violence or highly sexualized images.

We all have a responsibility to model good digital citizenship, defined as developmentally appropriate and active uses of digital tools, media, and methods of communication and learning in safe, healthy, acceptable, responsible, and socially positive ways. Digital citizenship also means working to assure equitable access to technology and interactive media experiences. The healthy cognitive, social, emotional, physical, and linguistic development of the whole child is as important in the digital age as ever. Access to technology tools and interactive media should not exclude, diminish, or interfere with children's healthy communication, social interactions, play, and other developmentally appropriate activities with peers, family members, and teachers.

“Computers can be useful machines, especially when they help people communicate in caring ways with each other”

Interactive media

refers to digital and analog materials, including software programs, applications (apps), broadcast and streaming media, some children's television programming, e-books, the Internet, and other forms of content designed to facilitate active and creative use by young children and to encourage social engagement with other children and adults.

Non-interactive media

include certain television programs, videos, DVDs, and streaming media now available on a variety of screens. Non-interactive technology tools and media are not included in the definition and description of effective and appropriate use in this statement unless they are used in ways that promote active engagement and interactions. Non-interactive media can lead to passive viewing and overexposure to screen time for young children and are not substitutes for interactive and engaging uses of digital media or for interactions with adults and other children.

PROS OF USING TECHNOLOGY

The technology boom has produced a generation of computer-literate offspring. These kids navigate touch-screen cell phones, play virtual games and use laptops with ease - all before they enter kindergarten. How do computers help the development?

Cognitive Development

Computers provide children with intellectual opportunities only available in the world of technology. Software allows them to explore, make decisions and solve problems, expanding their cognitive development. The most beneficial software encourages curiosity in young children and is highly interactive. According to the Northwest Regional Educational Laboratory, preschoolers who use computers become better equipped with conceptual skills and problem solving. The best results of computer usage are obtained when supporting activities are engaged in with a caring adult.

Building Fine Motor Skills

Fine motor skills continue to be developed throughout childhood. Using a computer keyboard or mouse aids in building skills essential for manual dexterity. When preschoolers learn to manipulate a small mouse, they exercise the tiny muscles in their hands and fingers -- muscles used for handwriting or buttoning, for instance. Cameras and tape recorders require a similar dexterity for optimal effect.

Fun Learning

Children learn best when they are having fun. Their days are filled with play, where they soak up essential life skills. In placing computers, digital cameras or voice recorders in the preschool classroom, a high interest environment is provided for children to explore. Using age-appropriate computer software, recording voices or photographing each other provides mind-expanding experiences for preschoolers. Technology play should be provided as a beneficial complement to old-fashioned childhood play in order for young children to reap the real benefits.

Language and Literacy

One of the major advantages of technology in preschool is in the development of language and literacy. Computer use with adult supervision encourages children to narrate their actions on screen and develop language fluency. The social interaction between peers when they play together encourages high levels of communication between them. Children with developed language skills are empowered to express their feelings and thoughts. Tape recorders are also a valuable addition to the classroom. They allow children to listen to music and follow along with recorded books, supporting early literacy.