Do You Know
The Use of Digital Technology in Early Learning

With the rise of digital technology (television, computers, tablets, etc), the usefulness of these devices has proven limitless. There are concerns, however, that overuse can have substantial harm to children, particularly those under age 5. So how do we use digital technology responsibly at home and in the educational setting?

Recently the American Academy of Pediatrics (AAP) released new guidelines for digital technology as it pertains to children. This is the first revision since the guidelines were initially developed in 1999 and revised in 2011. While some high quality programming can be beneficial, it must be done in moderation and not used in place of playtime, especially creative play. Use for children under 18 months of age should be discouraged including the use of e-books since these have animation that can distract attention from the focus of reading.

Technology at Home

The AAP encourages a family to create a Family Media Plan with the following suggestions:

➢ Avoid the use of screen media, other than video-chatting, for children younger than 18 months of age

➢ Parents of children 18 to 24 months of age who want to introduce digital media should choose high-quality programming and should watch this programming with their children to help them understand what they're seeing.

➢ Limit screen use to 1 hour per day of high-quality programming for children 2 to 5 years of age. Parents should co-view media with their children to help them understand what they are seeing and to apply it to the world around them.

➢ For children ages 6 and older, place consistent limits on the time spent using media, the types of media, and make sure media does not take the place of adequate sleep, physical activity and other behaviors essential to health.

➢ Designate media-free times together, such as dinner or driving, as well as media-free locations at home, such as bedrooms.

➢ Have ongoing communication about online citizenship and safety, including treating others with respect online and offline.

Technology at School

The US Department of Education and the US Department of Health & Human Services have released a joint policy on the use of technology in early learning. In this brief, the Departments have composed 4 guiding principles.

Guiding Principle #1: Technology for Learning : Technology can be a great tool to help children learn to read, design, problem solve, expand their knowledge, interact with other students miles away, and of course play. The use of technology should be limited to learning and meeting developmental objectives.

Early learning settings: Technology in early learning settings should integrate into the learning program and should be used in rotation with other learning tools such as art materials, writing materials, play materials, and books. Technology should give early learners an opportunity for self-expression without replacing other classroom learning materials. Care should be given to limit passive use (i.e. watching movies or videos) and encourage active use (i.e. painting programs, writing, video chatting, etc.)

Guiding Principle #2: Technology should be used to increase access to learning opportunities for all children: Care should be given to ensure that all students have equal access to technology and see potential for all groups. Research shows that children in lower income families tend to use technology more passively thus limiting their potential. Children in lower income families may face barriers that limit access in the home environment. Special attention must give given to ensure these children are given equal opportunities and adult support to use technology actively.

When used appropriately, technology has the potential to help learners of all ages and abilities fully engage in learning by providing greater access to curriculum and improving learning outcome. Children who are English Learners may find programs that help translate their native language to English which can help boost their language skills. Additionally, technology can be used to assist students with disabilities and this use should be encouraged. There are many applications, programs, devices, and materials that can boost math, writing, and communication skills for students with disabilities. For those children who have an IEP or IFSP, care must be taken to assess assistive technology.

Guiding Principle #3: Technology may be used to strengthen relationships among parents, families, early educators, and young children: Digital technology can help enhance relationships between parents and schools by allowing quick access to grades, communications, and work samples. Parents can see information about their child in real time rather than waiting for mailed report cards and notes to be sent home. Caution must be taken that technology does not replace face-to-face conversations or inhibit social communications.

Guiding Principle #4: Technology is more effective for learning when adults and peers interact or co-view with young children: Research shows that children learn more when there is involvement by adults, home, or at school. Adult guidance can increase active use rather than passive use as the adult asks questions about the content, view and/or participate together, and engage the child in an activity afterwards that builds on the technology used.

A Word of Caution

With the rise of the use of digital technology, care must be taken to protect the child's identity, exposure to mature content, tracking of use by cookies or cache, advertising, and in-app purchases. Adults should monitor all use of digital technology and become familiar with security features such as firewalls.

Additional Information

http://tech.ed.gov/files/2016/10/Early-Learning-Tech-Policy-Brief.pdf
http://blogs.edweek.org/edweek/early_years/2016/10/pediatricians_group_sets_guidelines_on_electronic_media_use_by_young_children.html?cmp=eml-enl-eu-news2