# Early Childhood

A PEATC
Do You Know
Factsheet for Virginia's Parents

- The use of digital technology is prevalent in our society for communication, entertainment, applications, programs, and more
- Technology refers broadly to both hardware that enables connectivity and devices (including television and handheld devices such as smartphones and tablets), content (including digital media such as apps, games, software and television programming), and assistive technology devices.
- The American Academy of Pediatrics strongly discourages use of electronic media before age 2
- Electronic media exposure should be of high quality programming

# Do You Know
## The Use of Mobile Media Devices in Early Childhood

The usefulness of digital technology devices such as television, computers, tablets, and video games has proven limitless as their popularity has risen. Children are beginning to use these devices at very young ages. Approximately 97% of children have used a mobile device and by age 4 and 75 % of children have their own laptop, tablet, or smartphone. (Kaball et. A. (2015), *Exposure and use of mobile media devices by young children.* Pediatrics, 136(6), 1-9). There are many benefits to these devices and applications; however, there must be limits and a clear understanding of how to appropriately use such devices.

There are many benefits to the technology devices that so many of us use today. To begin with, these devices are easily accessible and portable. There are countless applications that can be downloaded for education and pleasure. Children of various ages and stages of development can manipulate the information on most digital technology devices with little training or guidance. Many devices come with accessibility tools to help those with disabilities to change fonts, lighting, and recognize voice command for ease of use.

Despite the many benefits that come with digital technology use, there are still concerns that we all need to aware of. Some studies have found that the overuse of technology can pose the risk of substantial harm to children, particularly those under age 5. With the ease of portability comes the danger of technology devices becoming an "electronic babysitter". It can be so easy to hand a fussy toddler a device for a few moments of peace. Streaming videos can provide constant entertainment, but these videos provide no educational value. Just as caregivers monitor their children in and outside of the home, they must ensure they watch for dangers online. This can include but is not limited to loss of privacy, loss of interest in playing with real toys and/or people, and maturity of the content in which they are seeing. Lastly, extended amounts of screen time, particularly with VR headsets, can lead to vision issues in small children.

There are thousands of apps in the iTunes and Google stores, so how does one determine the educational content? There are no monitoring organizations reviewing apps and games to determine what meets the label of being "educational". We must be mindful that the application's purpose meets the following criteria:

1. **Active Learning-** The description of the app should tell what it does and its purpose.
2. **Feedback-** The app should have sustained engagement in the learning process and levels that build on each other to master skills.
3. **Meaningful Learning-** Child should be able to solve problems or demonstrate proficiency.
4. **Social Interaction-** Solitary activities can be good, but there should be social interaction with other players, physically or virtually to help develop skills.

5. **Limitation of Graphics-** E-books should limit graphics to keep focus on content of the story and engage the child to answer questions based on the information.

## So how do we use digital technology on mobile media responsibly?

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 of digital technology 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.

If mobile media is going to be used by young children, the following items should be taken into consideration:

1. **Access**-Plan out how long the child will be allowed to use the device. Use screen time as a reward for being active or participating in household chores. Don't allow the device to become the only toy the child requests to play with. Limit use of videos and video streaming services in addition to traditional television time.

2. **Monitor**- Actively help select apps to be used while monitoring them for content and maturity. Watch for pop-up ads asking for personal information and be sure to erase the cookies and cache after each use. Use firewalls and passwords to protect information and to lock access.

3. **Movement**-Ensure the child gets up and moves around. Check out apps and video games that encourage children to move about.

4. **Be Social**-Look for apps like FaceTime that engage the child in social interactions with others.

5. **Read Along**-Read the story on E-book with the child. Ask questions for understanding and comprehension of material.

6. **Balance**-Make sure there is equal time for face-to-face communication, bodily movement, and downtime from the use of screens. Plan activities outdoors and away from electronics. Involve the child in sports, the arts, and/or community activities.

7. **Educate-**Look for apps and games that have a purpose. Research the educational value to determine if the child is actually learning something or just wasting time. Read reviews before downloading content.

As with everything in life, great things come in moderation including the use of mobile media. Proper use of mobile media devices, apps, and games can have beneficial results if used in a safe and monitored manner. We research toys before we give them to children, the same caution should be used with electronic entertainment.

## Additional Information

**Center on Technology and Disability:** http://www.ctdinstitute.org/

**National Association for the Education of Young
Children**: http://www.naeyc.org/files/naeyc/file/positions/PS_technology_WEB2.pdf