



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.
- American Academy of Pediatrics strongly discourages use of electronic media before age 2
- Electronic media exposure should be of high quality programming

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Do You Know Growing Trends in Digital Technology

Technology is constantly evolving. Room size computers with limited abilities that emerged in the 1930's brought about the evolution of the desktop computer and then came the laptop. Suddenly we were not chained to a single location anymore. We were free to move about.

The first cellphone was produced in 1970's and started its own technological revolution. The first cellphone started as a device on which calls were made from person to person without landline connections. Then came the technological advancement of text messaging. We began to have conversations not with language itself, but actual written words. Since then, cellphones have evolved into smaller, lighter, cheaper, and more complex devices known as smartphones. These smartphones are able to run multiple apps simultaneously, act as a camera for instant photos, and keep our busy lives in check with calendars, organizers, and social media.

Then on April 3, 2010, the way we viewed technology was immensely changed with birth ofthe iPad. The iPad has made technology ~~was~~ lighter, faster, and able to meet our constant need for information. Now we find ourselves facing possibilities we've never thought possible. This includes the transfer of information, and access of data, entertainment, and educational uses. The uses for technology ~~is~~ are limitless.

What drives change in technology?

1. **Ease of use**-We continually seek to make work simpler so we can focus on other things in our lives. Schedules are updated instantly so we can squeeze in a few more minutes at the gym or with our family. GPS apps can plan our trip to the minute and watch for hazards on our journey, ensuring a safer trip.
2. **Constant need for information**-We are creatures of habit and we want to learn. Programs such as Google and Siri bring us instant access to millions upon millions of data in real time, not hours spent in libraries pouring over outdated reference books.
3. **Social creatures**-We have a need to connect with people. Social Media apps such as Facebook and Twitter make it easy to connect with long lost family and friends. We share everything from recipes to pictures of pets, political views to personal opinions. We crave the attention others give us and we are willing to share details of our lives across many miles.
4. **Access by all**-Changes in technology allow individuals with disabilities to access tools to make their lives easier. With text and audio programs, those with hearing and vision issues suddenly gain

access to the same world as everyone else. Those with learning disabilities have new ways to comprehend information and gain cognitive skills.

Growing Trends in Digital Technology

1. **Wearable Technology**- The birth of Apple Watches and Google glasses, enable us to take technology with us wherever we go. No need for a wallet or calendar-it's shrunk into a 1 inch square or circle on your arm!
2. **Virtual Reality Devices**-Slip this device over your head and you are in another world exploring atoms or solar systems, fighting the enemy, or learning parts of the body. Add in special gloves and bodysuits to enhance the experience with full immersion into the program. The potential to use VR as a teaching tool for problem solving is limitless.
3. **Projection units**-The ability to cast information to larger screens, walls, and floors makes it easier to bring information to more than just one person. This produces a classroom experience that is rich in knowledge. We are not tied to screens, but rather free to move and experience the information.
4. **E-Readers**- This tool started as a simple device with plain background and print words. Now e-books are brought to life with graphics, words underlined for meaning and vocabulary, and the words can be read aloud by the device.
5. **Robots**-While robots have been used for many years in factories, their use in the classroom is continually expanding. Students now study STEM activities in school and how to keep up with the changing demands of technology. Additionally, studies have found that children with Autism can better relate to robots due to their less emotional feedback and attention to detail.

NAEYC and Fred Rogers Joint Position Statement

“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 the many options to support children’s learning. “

In short, technology continues to evolve and we must evolve with it. When we ensure that teachers are given professional development to sharpen their technological skills, we ensure that children will learn to take advantage of the endless possibilities technology provides. Bringing technology into the hands of children in the classroom will help expand their mind and learning opportunities.

Additional Information

Center on Technology and Disabilities: <http://www.ctdinstitute.org/>

National Education for the Education of Young Children: <http://remakelearning.org/blog/2012/03/09/1855/>

Technology in Early Education: <http://teccenter.erikson.edu/>



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