

# Teen Brains and Technology

Lately, Dave has been spending way too much time on technology. He's flunking classes, and he has trouble making friends through face to face contact. His parents are trying to decide which path they should take in improving these qualities. They wonder: What effect does technology have on our son?

Dave's parents should consider recent research on the teen brain when making their decision about how to handle Dave's academic issues. The teen brain is still developing greatly around the teenage years. Within the brain are neurons which transmit messages. Information travels between neurons via axons and dendrites. The area between one axon and another's dendrite is a synapse. If synapses aren't used often than they are pruned through a process known as synaptic pruning. Could the brain prune beneficial synapses or even stunt development?

With this research in mind, all parents, including Dave's, should limit a child's screen time because technology negatively impacts teens' ability to empathize, understand nonverbal social cues, and socially interact.

Teenagers ability to empathize is decreasing because of an influx of technology. Aric Sigman stated that areas associated with empathy skills weren't stimulated when playing video games (Sigman tech). This loss of empathy skills over time could possibly lead to violent acts or even mental instability. Sigman states that children are growing up open to this type of technology, and their brains are more flimsy, or they're capable of great change. As children are focusing more and more on technology, it shifts away from more empathetic skills. This means that teenage brains are more adaptable because they are still in a developmental phase. Technology could sway your brain to take a more violent path based on the entertainment media you watch or play. Even preschoolers are being affected by the widespread problem that there is too much time spent on the internet. You are throwing away your ability to effectively empathize now for entertainment while there will be instances when you directly need this skill.

Without technology children's' ability to understand nonverbal social cues improves. Too much technology interferes with their ability to understand important social cues (Netburn 6). This means that bodily motions and signals are becoming less and less recognizable. According to a Los Angeles times article, by Deborah Netburn, a study conducted shows that "nonverbal social cues" when one group of students spends 5 days without access to technology. With an absence of technology you will not only see a major improvement for nonverbal social cues, but your professional and personal life will improve too because you will be able to take those cues and implement them into everyday events. Push away from screens and you will see major improvements in your ability to understand nonverbal social cues.

Even though some people think that technology can help you make friends through things such as online chat rooms, technology is in fact limiting children's ability to interact face to face.

According to Sigman's research face to face interaction dramatically decreased since the introduction of electronic media (social technology). This piece of evidence is relevant because it shows the point of view above through an expert on the subject. A Stanford University study shows that for each hour you spend on the internet, thirty minutes is lost in face to face interaction. This means that in the total of one hour, (if you didn't spend it on the internet) you would have spent 30 minutes socializing face to face and another 30 minutes doing something else. When new technologies were introduced in Sumatra, children were obsessed spending 7-8 hours online instead of interacting face to face (Sigman). In an instant technology can strip you of your ability to effectively socially interact face to face, and to do it often. You need to turn off the screens to effectively interact face to face with friends and family.

Technology is having a negative impact on the teenage brain which is still developmental phase. Our children need to develop a strong brain foundation now, so that they will be ready for the oncoming steps in life. This starts by turning off the screens.

#### Works Cited:

Aric Sigman, "The ONLINE EDUCA Debate 2009 (Part 2 of 10)" (video), Dec. 2009, as found at <http://www.youtube.com/watch?v=GRi4DPu6WGc>.

Netburn, Deborah. "Study: 5 days away from computers boosts preteens' social awareness." LATimes. Los Angeles Times, 28 August 2014. Web. 30 November 2014