



Understanding Screen Time and Recommendations for Balancing Screen Time and Learning

“It is less important to focus on screen time **limits** and more important to focus on screen content **quality** and the context of how children engage with content across screens.”

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The debate about **how much screen time is healthy** has been going on since the dawn of television in the 1950s. It continues to this day as more and more young people interact with screen-based technology. Children around the world are growing up immersed in digital media and interactive technologies, from tablets to smartphones to IoT devices. As with any complex topic, there are a multitude of perspectives about how this constant engagement with technology in general, and screens in particular, is impacting children’s lives.

What is “screen time”?

At a high level, screen time is separable into five types:

TELEVISION	Watching a TV broadcast or movie on a television (live or time-shifted like Netflix*), online, DVDs, and online videos (i.e., YouTube*)
VIDEO GAMES	Video games (console or handheld games, played on a video game device), mobile games (tablet or smartphone), computer games (casual or multi-player, played on a computer)
SOCIAL MEDIA	Social networking sites and mobile apps such as Facebook*, Twitter*, Snapchat*, WhatsApp*, Weibo*, or Instagram*
MUSIC	Listening to music includes all time spent listening to music downloaded to a computer, tablet, smartphone, or other MP3 player
READING	Reading eBooks or reading online (including stories, articles, news, and blogs)

(Source: Types of Media Activities from Common Sense Media, a USA-based, non-profit organization that provides education and advocacy to families to promote safe technology and media for children)

What are the benefits and risks associated with screen time?

Concerns about screen time focus on children who use screens as part of their daily lives. Much of the debate about the relative value and potential harm of screen time revolves around children’s screen-based entertainment and leisure activities, with less emphasis on academic connections to screens in formal institutions. Some of the benefits of screen time to children include the following:

- Building modern skills to be prepared for college and careers in their future
- Becoming digital citizens, using information from technology in order to be active and engaged members of their communities and society
- Becoming positively exposed to new ideas and knowledge
- Learning and creating
- Acquiring hard and soft skills learned about or through digital media, including creativity and personal expression
- Playing video games and thereby improving motor skills and coordination
- Delivering educational value and school-related homework and research
- Offering Internet tools, texting, video conferencing, and shared video games—easy and fun ways to socialize, communicate with others, build community engagement and collaborate
- Encouraging joint engagement across family members and educators to further learning

“The Common Sense Census: Media Use by Tweens and Teens” report identified four main categories of screen time:

- 01** **Passive consumption:** watching TV, reading, and listening to music
- 02** **Interactive consumption:** playing games and browsing the Internet
- 03** **Communication:** video-chatting and using social media
- 04** **Content creation:** using devices to make digital art, videos, or music

Some of the potential (but not necessarily proven) risks of too much screen time, where “too much” is a very contentious term and is not clearly understood:

- Increasing rates of childhood obesity
- Engaging in risky or aggressive behavior
- Developing attention problems, screen addiction, sleep disorders, and language and developmental delays

What are the recommendations?

One way to better understand the shifts in thinking on this topic is to review the guidelines that the American Pediatric Association (APA) recommends. For almost two decades, the APA suggested that children under age 2 stay away from screens entirely, while children over age 2 spend no more than two hours a day in front of a screen for any reason. This “one-size-fits-all” recommendation was extremely difficult for parents and educators to enforce, particularly because it did not take into consideration how and what children were watching or interacting with as they used screens.

The APA has recently reevaluated its recommendations to better deal with these nuances of screen use.



The updated recommendations for children 24 months and younger are as follows:

- **For children younger than 18 months:** Avoid use of screen media other than video-chatting with remote family and friends.
- **For children 18 to 24 months:** Digital media can be introduced briefly, but it should be limited to high-quality educational programming and watched with the children (co-viewed, caregivers and child watch together and discuss content) to help them understand what they're seeing. Children should not watch alone.



The updated recommendations for children 2-5 years old are as follows:

- Limit screen usage to one hour per day of high-quality programs (i.e., educational programming, educational web applications, and educational games).
- Parents and educators should co-view media with children to help them understand what they are seeing and apply it to the world around them.
 - Avoid screen time before bed.
 - Avoid using screen engagement to soothe a child, as the child could have issues with self-regulatory development.
 - Avoid content with fast-paced and rapid screen changes and violent content.
 - Avoid screens at meal times, in bedrooms, and at playtime.
 - Caregivers should monitor media content and test applications before letting a child play, and discuss the application and/or game with the child.
 - Caregivers should review content with a reputable source (i.e., Common Sense Media, Parent Zone) to make sure it is acceptable.



The updated recommendations for children 6-17 years old are as follows:

- Place consistent limits on the time spent using media, and on the types of media used. Make sure media does not take the place of adequate sleep, physical activity, and other behaviors essential to health.
 - Caregivers should develop and be consistent with their own personal family guidelines regarding what is appropriate for their family.
 - Designate media-free times together, such as dinner or driving, as well as media-free locations at home, such as bedrooms.
 - With your child, engage in selecting and co-viewing media that stimulates learning and creativity. Share these experiences with your family and your community.
 - Have ongoing communication about online citizenship and safety, including treating others with respect online and offline.
 - Review cyberbullying, sexting, solicitations, and compromising privacy with children.
 - Develop a network of trusted adults who will engage with the child through social media.
 - Review content with a reputable source (i.e., Common Sense Media, Parent Zone).

While the APA recommendations reflect a US-based perspective, there are a variety of different guidelines depending on the country or region around the world. However, most of the guidelines align around the need for limits on screen time due to the risks listed above. A few of the key international guidelines are as follows:

- **France:** In 2008, France's High Audiovisual Council sent out a decree declaring that no French stations will broadcast programs designed for toddlers and babies, and that any foreign stations must display a warning message stating that shows for young children hinder child development. The declaration stemmed from the French minister's belief that this programming is a danger to children's development, causes over-excitement, and makes kids passive.
- **Australia:** In 2016, the Australian Department of Health continued to recommend that children under the age of 2 years see no screens at all, and children aged between 5 and 17 years limit screen time to less than two hours a day.
- **Taiwan:** Parents in Taiwan face large fines if they let their children spend too much time watching televisions or playing video games. Under the rules passed in 2015, children under the age of 2 are completely banned from using electronic devices. Parents and caregivers of children 2-18 are advised to not allow their children to use electronic devices that they deem "unreasonable." This means electronic products are now listed alongside cigarettes and alcohol as potentially dangerous vices. Parents who break the rules of the Child and Youth Welfare Protection Act can be hit with fines of up to \$1,576 (USD), although it remains unclear how authorities will determine what amount of time is unreasonable.
- **China:** In 2010, China introduced rules requiring games companies to develop techniques that would limit the gaming time of minors in order to prevent addiction. Those precautions have included penalizing those playing online role-playing games by reducing their characters' abilities if they play for more than a certain period of time. In 2013, the government introduced laws stating that parents and caregivers, including teachers, should prevent and stop minors from excessive online and electronic game play.
- **Europe, Brazil, UK, and South Africa:** There is no equivalent to the APA that would provide centralized guidance on screen time.
- **Canada:** The Canadian Pediatric Society is currently updating guidelines to be released later in 2017. Until then, they recommend following the updated APA recommendations.

How much time do children spend engaging with screens?

Children currently spend upwards of two hours a day watching television and much more time playing with applications, video games, and interacting with smartphones. While television use has gone down slightly, smartphone, tablet, and social media use have all increased. For the first time in history, children are spending more time online than watching television. On-demand media streaming has also contributed to this increase.

Approximately 75% of all teenagers today own a smartphone. All this access allows young people to stream TV and videos, surf the Internet, and play with interactive applications. Yet only 25% of these teens believe they are continuously connected to the Internet. This is an important discrepancy: how much time children are spending interacting with screens vs. how much time they think they are spending.

Social media is also a huge source of teens' connection with screens. Instagram, Facebook, Twitter, WhatsApp, Weibo, and Snapchat lead the way as the most popular sites with which teens engage. Video games fill in the remainder of the time. Additionally, 89% of girls and boys cite video games as a favorite activity they would choose to do with their free time.

How are children using screens?

There is no simple metric that defines how much screen time is too much. However, in 2016, Intel Corporation researchers conducted an independent, cross-cultural study of children's play, interests, and family practices. The study addressed both traditional and digital play. It incorporated both ethnographic and quantitative data from over 1,643 children (ages 3-17) and their parents from China, Germany, and the US. Researchers found that children in these countries spend varying amounts of time with screens, suggesting that there are important cultural influences that impact children's screen time. The following figure shows a detailed breakdown of the screen time for these countries.

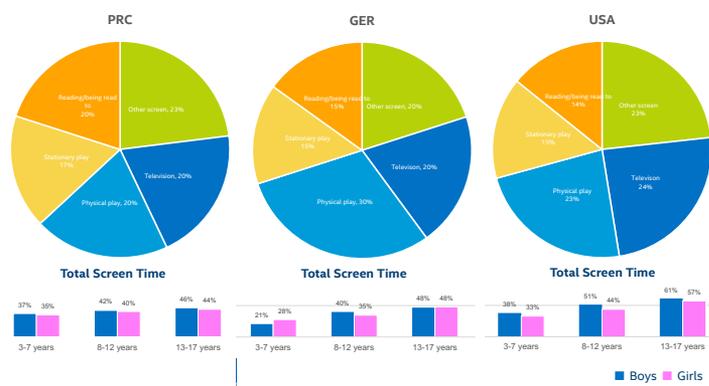


Figure 1. Screen Time Across China, Germany, and USA

Source: McClard & Dugan, Intel Corporation, 2016.

Shifting the focus from quantity of time to quality of engagement

Much of the academic debate over screen time has focused on the risks and impediments that screen time might cause, with little regard to beneficial opportunities. Dr. Heather Kirkorian, a cognitive development researcher and professor at the University of Wisconsin-Madison states, "Children will learn from what they watch, whether that means learning letters and numbers, slapstick humor or aggressive behavior." She adds that children who watch age-appropriate, educational TV programs often do better on tests of school readiness.

One common theme across the work of these researchers is the importance of strong digital citizenship skills that prepare young people to tackle modern problems with modern 21st century skills—skills they can build through interactions with digital content and devices.

It is less important to focus on screen time *limits* and more important to focus on screen content *quality* and the context of how children engage with content across screens. Dr. Mizuko Ito, a cultural anthropologist and Professor in Residence at the Humanities Research Institute at the University of California, Irvine, states that with these new APA recommendations, we no longer have a “one-size-fits-all approach. Parents and educators can now be ‘media mentors’ instead of ‘time cops.’” Dr. Ito suggests that we shift focus away from children’s time spent with screens toward the quality and purpose of the content they are seeing and engaging with. (Ito, 2016)

Conclusion

As devices with screens have become more ubiquitous over the past 15 years, the topic of screen time has come under increasing scrutiny. While there are potential risks to interacting with screens, there are also numerous benefits to engagement. Not all screen time activity is alike, just as not all content that young people engage with is the same. It is the responsibility of educators and families to prioritize students’ quality academic, knowledge-building, and learning screen engagement with other non-structured, entertainment-based screen engagements. Governments around the world are tackling the issues of culling screen time with different recommendations to reduce the risks. As more research is completed, policy is moving away from arbitrary time limits to a deeper focus on “context (where, when and how digital media are accessed), content (what is being watched or used), and connections (whether and how relationships are facilitated or impeded).” (Blum-Ross & Livingstone, 2016)



Links

New American Pediatric Association Guidelines (2016): <http://pediatrics.aappublications.org/content/138/5/e20162591>

New American Pediatric Association Guidelines (2016): <http://pediatrics.aappublications.org/content/138/5/e20162592>

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