

Taking Action on Screen Time: Phone-Free Classrooms and Other Steps to Improve Youth Mental Health, Attention, and Academics

by Katie Rybakova

INTRODUCTION

Children spend an inordinate amount of their free time on screens—using a tablet, phone, or computer or watching television. In fact, it feels strange to see a child *not* on a tablet or phone. On top of this screen time outside of school, many children spend at least 30 minutes in front of a screen at school (more for middle and high school students)—almost all elementary scripted curricula use some form of computer or iPad application, most tests are screen-based, and for schools that have not completely banned phones, students spend their time outside class chatting with their friends on their phones. These hours spent in front of a screen add up quickly.

Children in Gen Z (birth dates between 1995 and 2009) and Gen Alpha (birth dates between 2010 and 2024) are what Prensky (2001) called digital natives, so the concern is not whether they are able to use technology but rather whether they should be *using* technology—or, perhaps, so much technology. It is not clear, however, exactly what constitutes excessive screen time for all ages. While the American Academy of Pediatrics used to set specific time limits for screen time, since 2016 the recommendation for children over six has been simply to consider the quality of the interaction with technology. In *Beyond Screen Time: A Parent's Guide to Media Use*, the American Academy of Pediatrics (AAP 2021)

states that children under two should have very limited screen time and no unsupervised use of screens, while two- to five-year-olds should have no more than an hour a day. For children six and up, screen time should not displace sleep, family time, or exercise, and tweens and teens should be advised on media use and digital citizenship.

The American Academy of Child and Adolescent Psychiatry (2024) has clearer guidelines: children under 18 months old should have no screen time except for FaceTiming with a parent or loved one; children between 18 months and 24 months should have only limited screen time of educational intent supervised by a parent or guardian; children ages two to five should be limited to one hour per day and three hours on weekends, and those six and older need no time limit but should be encouraged to develop healthy habits. The Centers for Disease Control (CDC) has very strict guidelines for early care and early childhood educators as part of obesity prevention guidelines. These guidelines recommend no media viewing for children younger than two, no more than 30 minutes *weekly* for children two and older only to be viewed for educational purposes or exercise, and no screen use while eating.¹ Those who argue for doing away with limits on screen time do so because this technology can be used in a variety of ways (e.g., passively, actively, background noise); the lack of

guidance on what is considered excessive screen time makes it challenging to advise parents, educators, and others on what is best for youth and makes it difficult for researchers studying the effects of screen use.

RESEARCH

Research on screen time is complicated because researchers either focus on a type of screen time (e.g., phones), total cumulative screen time, or a combination of these factors. In some instances, screen time is not defined clearly, which makes it hard to summarize the research on screen time.

Recent research from the National Center for Health Statistics indicated that half US teens from ages 12 to 17 self-reported four or more hours of screen time daily (Zablotsky et al. 2024). Of those reporting four or more hours of screen time daily, a quarter also reported anxiety and depressive symptoms. Reliable research and clear statistics for other ages are more difficult to come by. A study by McArthur et al. (2022) found that 24.7 percent of children under two meet the guidelines of limited to no screen use set by the American Academy of Pediatrics, while 35.6 percent of two- to five-year-olds met the one-hour-daily guideline. Among school-aged children, Qi et al. (2023) found 6- to 14-year-olds averaged 2.77 hours of screen time a day, with 46.4 percent of kids in front of screens for more than two hours daily.

Self-reporting or adults reporting on behalf of young children through surveys often results in underreporting; more objective monitoring often finds higher levels of screen time than the self-reported figures. However, there are few US studies of objectively measured screen time habits. In such a study

of Australian infants, Brushe et al. (2023) found that mothers underreported screen time use in their infants, and the majority of Australian infants and toddlers exceeded screen time guidelines, with some six-month-olds watching more than three hours daily; maternal education made a significant difference in the amount of screen time use, with more educated moms exposing their children to less screen time.

While Veraksa et al. (2021) found that passive TV watching was more detrimental to children's phonological memory development than time spent playing interactive, dynamic educational games, much research points to overwhelming negative effects of screen time, particularly when it exceeds four hours or more for 12 and up and the AAP recommendations for those five years old and under (Lissak 2018). Other studies indicate possible positive effects, particularly when high-quality resources are watched with a parent, muddying the waters of what constitutes appropriate screen time. For instance, Strouse et al. (2013) found that when parents of three-year-olds were coached to use dialogic reading questioning technique (a method that includes prompting questions and back-and-forth dialogue) after watching videos, the children scored higher in comprehension than the children who were simply shown videos.

Too much screen time and multitasking across media has a broad range of negative effects, including worse executive functioning, academic performance, language development, ability to read emotions, and social-emotional growth along with increased likelihood of obesity, anxiety and depression, and aggressive behavior (Muppalla et al. 2023). Longitudinal research has linked one-hour increases in early childhood of TV time to a 7 percent decrease in class participation and a 6 percent decrease in math proficiency by fourth

grade (Pagani 2010). Excessive screen time in early childhood has been shown to affect the parts of the brain supporting language and literacy skills (Hutton et al. 2020). Other research shows additional far-reaching and diverse the effects:

1. Developmental delays in communication and problem solving in ages two and four (Takahashi et al. 2023).
2. Reduction in the amount of time spent outside per week (Oswald et al. 2020).
3. Increased risk of developing autism spectrum disorder linked to longer and early screen exposure (Sarfraz et al. 2023).
4. Predicted increase in early onset dementia and Alzheimers based on chronic sensory overstimulation from excessive screen time (Manwell et al. 2022).

RECOMMENDATIONS

Ask any teacher at any grade level, including college, about the issues in education today, and they will say that the behaviors in their classrooms are “challenging.” Students are not only addicted to phones/screens and the subsequent increase of dopamine levels (particularly from social media for adolescents) (Lembke 2021), many often lack executive functioning, which means they are unable to cope with their emotions or to reason, engage in higher-order thinking, plan, or collaborate effectively (Muppalla et al. 2023; Vohr 2023). Screen time also replaces play time and time spent outside; not only are children not getting the benefits of social-emotional skill building associated with play (Hanscome 2016) and the physical benefits of being outside (Oswald et al. 2020), but they

are actively harming their brains and bodies while being locked on their screens.

Simply banning cell phones in schools, however, may not be enough. A study by Campbell et al. (2024) found that while the general consensus was that phones have a negative influence on learning, the empirical evidence is inconsistent and sparse, showing little evidence that phone bans promote academic learning. There is little research that examines whether phone bans were beneficial to academic outcomes, mental health, or school culture. Other studies showed that banning cell phones results in *heightened* student anxiety due to lack of access to their phones (Tricoli 2022; Wike 2020). These studies showed that screen time and phone access is only part of the puzzle—simply banning phones in schools is not a silver bullet.

So, what is the answer? Nationally, various states are banning phones in schools. Florida, Indiana, Louisiana, South Carolina, and California have passed legislature banning cell phones in schools, while other states—up to 15 at the time of this article's publication—are instituting restrictions or incentives to ban or significantly restrict cell phone use in schools (Rock 2025). Regardless of whether Maine is ready for this trend, we need to go beyond a simple phone ban and establish a multipronged approach to reducing screen time based on current research.

Educate Parents and Community Members on Screen Time

Screen time isn't just addicting for children and adolescents—adults also model unhealthy screen time habits (Minges et al. 2015). However, it is not as simple as advising parents to put their phones or tablets down and turn off the television; we must educate parents and community members about

healthy screen habits and share recommendations for suggested replacements for screen time. Providing books, brochures, and other informational items to new moms and dads at hospitals can be a starting point. Additional educational opportunities include school newsletters and workshops from school districts, institutions of higher education, or community centers.²

Follow-up Research on Phone Bans in Schools

Although school districts and administrators are taking action to significantly limit the use of phones in schools, there is not much research on the benefits of such actions. Thus, researchers should study the effects of phone bans to examine their successful implementation with empirical evidence. The metrics for success should encompass the myriad ways students are struggling today and include not only academic results but also social-emotional, mental health, connectiveness, attention, and executive function impacts. Policymakers can encourage this research through grants and other funding opportunities so scholars can build a framework for what kinds of restrictions work best in schools. Although it is unlikely that public schools will ever be completely screen free schools (although it is one of the basic tenets in Waldorf education), schools can and should limit screen-based activities and purchase scripted curricula based on how much screen time they include.

Incorporate More Green Time in Schools to Counteract Screen Time

There is evidence that exposure to nature and time outside counteract the negatives of screen time—particularly the physiological effects (Rybakova 2022). Pediatric occupational therapist Hanscome (2016) has written about the importance of play outdoors and in nature, ideally unstructured by adults

RECOMMENDED READING

- *The Chaos Machine: The Inside Story of How Social Media Rewired Our Minds and Our World* by Max Fisher (Back Bay Books, 2023)
- *Reader, Come Home: The Reading Brain in a Digital World* by MaryAnn Wolf (Harper, 2018)
- *The Anxious Generation: How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness* by Jonathan Haidt (Penguin House, 2024)
- *Generations: The Real Differences between Gen Z, Millennials, Gen X, Boomers, and Silents—and What They Mean for America's Future* by Jean M. Twenge (Atria Books, 2023)
- *Dopamine Nation: Finding Balance in the Age of Indulgence* by Anna Lembke (Dutton, 2021)
- *The Opt-Out Family: How to Give Your Kids What Technology Can't* by Erin Loechner (Zondervan, 2024)

(structured play include games like soccer), and how this type of play promotes cognitive development, sensory processing, and executive functions. Furthermore, Hanscome noted that lack of movement can lead to a number of issues, including ADHD, lack of emotional regulation, and sensory processing issues—the latter two directly affected by excess screen time.

Raise the Age Requirement for Social Media Access

Haidt (2024), in his book *The Anxious Generation*, advocates for raising the age requirement for social media access and increasing accountability beyond the user simply typing in a birth date. His recommendation is well substantiated by research, and Maine has the opportunity to lead by implementing this restriction through proactive and thoughtful legislation.

Encourage Opting Out

Providing spaces both at home and in public for digital detox (a deliberate break from digital devices) can be beneficial and is not as challenging as people anticipate (Anandpara et al. 2024). Instilling tech-free time at home, in schools, and within the larger community space can motivate people to

engage in healthy social interaction. Part of the reason that parents hesitate to take phones away from their preteens and teens is because they do not want their children to feel left out, so we should do more to encourage “opt-out” communities (Loechner 2024) where children who do not own or use phones can play, communicate, and interact with each other. With more calls for the delayed purchase of phones and other digital devices for children and adolescents, policymakers, educators, and administrators should use their community-building capacity to initiate these kinds of interactions.

Incorporate Developmentally Appropriate Technology in Schools

While most recommendations based on research suggest limitations on or bans of screen time for children and adolescents, we need to acknowledge the potential for powerful and authentic learning with technology. It's a given that technology will continue to evolve and that young people will have to keep up with these changes. Rather than expecting children and adolescents to access their phones and other devices only when needed, however, we ought to encourage teachers and school

administrators to use research-driven models such as the SAMR (substitution, augmentation, modification, and redefinition) model (Puentedura 2014) to make developmentally appropriate decisions about technology use to encourage learning and promote digital literacies.

CONCLUSION

The effect of screen time is a societal issue right now. It has broad, persistent effects on youth and adult mental health, social-emotional skills, academic success, executive function, memory, attention, and literacy development. The solution is neither simple nor easy, but movement towards a solution is essential. Policymakers need to increase educational efforts about the effects of screen time education and advocate for increased accountability measures where necessary. Educators and administrators need to teach our communities about healthy screen time habits and incorporate screen bans and limits in schools to underscore the importance of these habits. Parents need to take a hard look at their own screen habits and set strict limits on screen time use and access for their children. Researchers need to gather and analyze empirical evidence on the successes of and barriers to schoolwide phone bans, screen time bans, and other metrics that can be used to encourage all of us to limit screen time. We all have a role to play in controlling the negative effects of this rapidly evolving, digital lifestyle.

NOTES

- 1 HIOPS for Screen Time Limits, <https://www.cdc.gov/early-care-education/php/obesity-prevention-standards/screen-time-limits.html>
- 2 See online appendix for brochures communicating the effects of screen time to parents: <https://digitalcommons.library.umaine.edu/mpr/vol34/iss1/6/>.

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