EDITOR’S NOTE
Balanced screen time can help students develop more digitally responsible behavior. This Spotlight will help you understand the importance of discussing responsible online behavior; explore research on students’ online activity; gain insights into the right age for children to get a cellphone; learn what schools can do to prevent the overuse of technology; evaluate how much screen time kids should have; and more.

Balanced Screen Time

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Move over Itsy Bitsy Spider. Here’s a nursery rhyme for the 21st century: “Sometimes with technology, balancing’s hard to do. ... Too much of something can make you sad or blue.”

That ditty—popularized by Common Sense Media, a nonprofit which focuses on helping children use technology in safer and more meaningful ways—is meant to simplify a lesson that’s increasingly relevant for kids as young as two: Be careful about how much time you spend in the digital world and what you do while you’re there.

Talking to a preschooler about screen time limits, digital literacy, and cyber safety may seem a bit premature. But waiting until later in elementary school—or even middle or high school—puts children at a disadvantage, educators say.

“Can you imagine trying to teach a high schooler to brush their teeth for the first time?” asked Faith Rogow, an independent scholar and author of Media Literacy for Young Children: Teaching Beyond the Screen Time Debates, published this year. “It’s much harder to instill that habit later on. It’s possible, but it’s harder.”

The longer parents and teachers wait to help children safely explore the digital world, the more they will have to counter what the child has already learned from “people who don’t share your values, who may not have a kid’s best interest at heart,” such as social media companies, she added.

These days, most kids are getting exposure to digital spaces long before they learn to read. The overwhelming majority of children ages two to four—93 percent—spend at least some time on mobile media, according to a 2020 report by Common Sense Media, which has created lessons in digital citizenship for young children.

Device ownership can start even before most kids are toilet trained. Nine percent of children under age two have their own mobile device, according to the Common Sense report. That percentage increases as kids get older. Nearly half—46 percent—of children between ages two and four have their own mobile devices, typically a tablet, Common Sense found.

Once students get to 4th or 5th grade, it is easy to distinguish the kids who received early digital citizenship and literacy training from those who are experiencing the concepts for the first time, said Darshell Silva, a librarian and technology integration specialist at Nathanael Greene Middle School in Providence, R.I.

By middle school, children who were given guidance on how to navigate digital spaces early on “are knowledgeable of dangers that are out there,” Silva said. “They’re not using their accounts to bully people. [They] don’t have 10 social media accounts. They have one or two social media accounts. They don’t share any personal information. And they also don’t believe everything they read on the internet.”

Getting that background knowledge early is likely to become even more important now, as more schools provide kids in kindergarten, or even preschool, with a laptop or tablet to use in school and oftentimes at home too. Before the pandemic, less than half of educators reported that their elementary schools—42 percent—had 1-to-1 computing programs. That percentage soared to 84 percent by the spring of 2021, according to a survey conducted by the EdWeek Research Center.

Don’t stare at your screen and ignore those around you

Early digital literacy lessons don’t have to be complicated, Rogow said. In fact, they don’t even have to be digital. It’s possible to encourage kids to begin using their critical thinking skills early on, without ever picking up a device.

Parents or teachers can start by pointing out a piece of media, say a flier posted on a mailbox, and asking, “I wonder who made that?” That simple question will help little children begin to grasp the concept that someone created every piece of media they consume—it didn’t just appear out of nowhere. Eventually, children can begin considering how another person’s ideas and opinions may shape the messages they produce.

Putting healthy limits on screen time is also a big theme of early lessons, said Leticia Citizen, who works at Hawthorne Elementary School in Beverly Hills, Calif. She gets students thinking about those ideas as early as age four, during what is called “transitional kindergarten” in California.

Citizen often kicks off her lessons by asking students to name at least one fun online activity from the past week, and at least one equally enjoyable offline experience.

She’ll direct the youngest to think about how some of the bright, fast-moving images in virtual spaces make them feel physically. Are their bodies restless after playing a game online for too long? Does it hurt their eyes? Or make their brains “go wonky and wiggly”?

And she emphasizes to the children to pay
attention to what’s going on around them, in the physical world, over what’s happening in the virtual one. Inspired in part by a Common Sense lesson, “Pause for People,” Citizen has students think about what they might do if they are in the middle of a digital game, maybe even about to win, and a parent or sibling comes up to ask a question.

“We talk about like how sometimes you don’t even hear them because you’re like so engrossed in what you’re doing,” Citizen said. She’ll ask her students, “What are some things that we need to do to respect and honor them coming to talk to you and being responsive, and then we can go back and play our game?” And she asks them to name a time when they missed out on something fun—like playing outside with a friend—because they were too wrapped up in a digital game or television show.

She helps them understand why keeping devices on at night—considered bad sleep hygiene by child development experts—can be harmful. One of her favorite tools: A story about a family of rabbits kept awake by the sounds of various tablets and phones. (Spoiler alert: the mother bunny throws the devices out the window so everyone can get some shuteye.)

What to do when you find yourself in an unsafe space online

Online safety is part of the picture too. Most preschoolers and kindergarteners aren’t proficient readers, but they can still look at the pictures in online app stores. That means they’re bound to see ads that take them to digital products that might not be age appropriate.

Citizen shows students an online ad designed to appeal to children and asks how many of them would be drawn in by picture of, for instance, a cute elephant. Hands go up. Advertisers, she’ll explain, may catch their eyes with flashy images, but they want something in return, typically money.

Other strangers that students might encounter online may want access to private information, or to track down a kid in real life. Citizen tries to put that danger in terms young children can understand.

“We talk about how there are adults and some kids who don’t always make the best choices, and sometimes their goal is to try to hurt us,” Citizen said. They may ask for a child’s password, or want to know their name. She’s trained children not to give out any information—not even their favorite color—and to reach out to a parent or older sibling if they stumble on a corner of the internet that makes them feel unsafe or overwhelmed.

To be sure, it’s tough to tackle digital citizenship for the youngest children without parent outreach.

Part of that can just be about teaching caregivers how to use technology with their kids. For instance, some of Citizen’s youngest students play an online game, Roblox, which has a chat feature.

She helps the kids—and their parents—understand that they can use controls to disable the chat feature, and explains why it’s not a good idea to talk to strangers online, the same way it’s smart to be careful about unfamiliar people in the physical world. They can also agree on screen time limits and set timers that will go off when a child should stop using a device and move on to another activity.

Some school districts offer parents formal training in helping their children navigate the online world, including the Los Angeles Unified School District, which will offer a course in the subject in its newly created Parent Academy.

By the time they get to high school, ‘their digital footprint is crazy’

Children also need to understand that what they do online will leave a digital record that can be difficult to erase.

Silva has done Google searches on her name to show her students—and, with permission, repeated the exercise with a student. They’re often surprised to see how much information about them is already available on the internet.

This kind of training can come too late for some kids. “A lot of kids [go] to middle school without the digital citizenship lessons “and then before they get to high school their digital footprint is crazy,” Silva said.

Cyberbullying is another focus of digital citizenship lessons later in elementary and middle school. For the most part, children as young as four or five aren’t using their tablets for social media. Instead, they’re playing games, sometimes with other children they may or may not know in the real world.

That creates an opening to talk about how to treat others in a digital space.

“That’s new for kids to think about, that these are actually other people in the screen,” particularly if they are represented by avatars, said Kelly Mendoza, the vice-president of educational programs for Common Sense Media. When it comes to things like kindness, taking turns, and being a gracious winner or loser, children need to understand that “behavior in the digital world needs to mirror our behavior in the in-person world.”
Cut out passive screen time and digitized worksheets. Provide students with personalized instruction that teaches concepts and improves learning outcomes in just one hour per week.

“"We have observed a positive, direct correlation between student usage and student achievement. Students who are achieving their usage goals are showing growth on their nationally normed assessments. This was present prior to and even during the pandemic.”

— Michael Feeney, Executive Director, Elementary Education Pinellas County Schools, Florida

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Big Numbers of Teens Are on TikTok ‘Almost Constantly.’ What Should Teachers Do?

By Alyson Klein

A new survey confirms what most middle and high school teachers already know: A significant chunk of teenagers spend an unhealthy amount of time watching YouTube or scrolling through TikTok.

More than one in six teenagers say they are on TikTok—which is among the fastest-growing social media platforms—“almost constantly,” while nearly one in five say the same about YouTube, according to “Teens, Social Media and Technology 2022,” a report by the Pew Research Center released Aug. 10. The report was based on a survey of more than 1,300 teens ages 13 to 17, conducted last spring.

What’s more, over one in three teens surveyed—35 percent—say they’re on at least one of five platforms “almost constantly,” including Facebook, Instagram, Snapchat, TikTok, and YouTube.

Overall, more teens find themselves spending most of their time online these days than just a few years ago. Almost half of teenagers surveyed—46 percent—say they are online “almost constantly,” or roughly double the number who said the same when the Center conducted a similar survey in 2015.

Teens are clearly “highly digitally connected,” said Emily Vogels, a research associate at the Pew Research Center and a lead author of the report.

But, in focus groups conducted prior to the survey, she learned that teens are also “trying to find the best way to interact with these spaces. They’re thinking critically,” she explained, saying things like, “I’m only going to interact with these people because I know who they are.”

Teens are mixed on whether or not it would be easy to ditch social media entirely. More than half of teens in the United States—54 percent—say it would be at least somewhat hard for them to quit social media, with almost one in five saying it would be “very hard,” according to the survey.

On the other hand, nearly half of teens say it would be at least somewhat easy for them to give up social media, with roughly a fifth reporting that would be very easy.

Teachers have a role to play in helping students understand the impact of social media on their behavior, attention spans, and even brain development, said Mary Beth Hertz, who will resume her previous role as a teacher at the Science Leadership Academy at Beeber in Philadelphia this fall.

Hertz is a fan of tech in the classroom, but if she sees a student mindlessly scrolling through a phone, she’ll ask them, “Are you letting the technology win right now, or are you winning right now?” She’s asked students to consider whether social media companies are being held accountable for the addictive behaviors their technologies are encouraging.

At the same time, teens’ Facebook engagement nosedived from nearly three quarters of teens saying they’ve used the platform at some point back in 2014-15 to just under a third this year.

That data serves as a reminder to educators that social media is “an ever-changing and evolving landscape,” Vogels said. “Where [teens are] flocking together to interact at any given point in time can very much shift and change.”
Balanced Screen Time

Black and Hispanic students are online more than their white peers

There are demographic differences when it comes to social media use. Teenage boys are more likely than girls to use YouTube, a video platform; Reddit, an online discussion forum, and Twitch, which focuses on videogame streaming. Girls, meanwhile, are more likely to hang out on Instagram, Snapchat, and TikTok.

Higher shares of Black and Hispanic teens report using Instagram, TikTok, Twitter, and WhatsApp, compared with white teens. And a slightly larger share of teens from households making $30,000 to $74,999 annually—51 percent—use the internet almost constantly, compared with 43 percent of teens with family incomes of at least $75,000 a year.

The findings about race and family income are particularly important for teachers to keep in mind when they are thinking about how to address teen social media use, or even incorporate the platforms into their classrooms, said Supreet Mann, a research manager at Common Sense Media, a nonprofit organization that examines the impact of technology on young people.

“We can’t put all of these kids into a bucket or think that by solving problems related to social media use for “higher income or white kids that we’re going to be able to address the unique needs of minority or lower income kids,” said Mann, who noted Pew’s findings dovetail closely with those in a recent Common Sense Media report.

How Often Teens Check Social Media

Percent of 13-17 year olds who say they visit or use each of the following sites or apps...

<table>
<thead>
<tr>
<th>Platform</th>
<th>Almost Constantly</th>
<th>Several Times a Day</th>
<th>About Once a Day</th>
<th>Several Times a Week</th>
<th>Less Often</th>
<th>Do Not Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>YouTube</td>
<td>5%</td>
<td>27%</td>
<td>33%</td>
<td>41%</td>
<td>38%</td>
<td>67%</td>
</tr>
<tr>
<td>TikTok</td>
<td>15%</td>
<td>16%</td>
<td>19%</td>
<td>27%</td>
<td>8%</td>
<td>8%</td>
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<tr>
<td>Snapchat</td>
<td>10%</td>
<td>10%</td>
<td>15%</td>
<td>27%</td>
<td>8%</td>
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<tr>
<td>Instagram</td>
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<td>5%</td>
<td>7%</td>
<td>12%</td>
<td>5%</td>
<td>67%</td>
</tr>
<tr>
<td>Facebook</td>
<td>6%</td>
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<td>8%</td>
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NOTE: Figures may not add to 100% due to rounding.
SOURCE: Pew Research Center
Children and Smartphones

The proportion of 8-, 9-, and 10-year-olds with cellphones nearly doubled from 2015 to 2021, says Common Sense Media.

<table>
<thead>
<tr>
<th>Age</th>
<th>2015</th>
<th>2021</th>
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<td>11%</td>
<td>31%</td>
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<td>9</td>
<td>15%</td>
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<td>10</td>
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<td>16</td>
<td>73%</td>
<td>90%</td>
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<tr>
<td>17</td>
<td>77%</td>
<td>93%</td>
</tr>
</tbody>
</table>

SOURCE: Common Sense Media

Children are getting cellphones at younger and younger ages. That's according to a report from Common Sense Media based on data from its 2015 and 2021 surveys on children's cellphone and social media use. The research and advocacy organization found that the proportion of 8-, 9-, and 10-year-olds with smartphones nearly doubled in those years. But the majority of parents give their children a cellphone around the ages of 12 and 13. The percentage of 12-year-olds owning a cellphone has leaped from 41 percent in 2015 to 71 percent in 2021.

Does that mean that 12-13 is right age for children to own cellphones? Some pediatricians said they are agnostic on that point.

"As a pediatrician, I don't recommend one specific age [since] I think much of it depends on the reason for the need for the cellphone," said Dr. Nusheen Ameenuddin, an assistant professor of pediatrics at Mayo Clinic, and the chairperson of the American Academy of Pediatrics Council on Communications and Media.

According to Ameenuddin, if the reason for providing children with a cellphone is safety, then it is advised to give them one with fewer features, just enough to connect in case of an emergency.

"You can also disable certain features of smartphones with certain plans, so that's something I would encourage parents to look into and take advantage of so that a cellphone is not an all-access pass for a child who might need some boundaries in place," she said.

The pediatrics academy recommends "parents and caregivers develop a plan that takes into account the health, education, and entertainment needs of each individual child as well as the whole family." It provides a customizable family media plan on its official website for families to follow together, which the family can revise as needed.

According to the report, The Common Sense Census: Media Use by Teens and Tweens, released in 2021, 8- to-12-year-olds use about five and a half hours of screen media everyday while 13- to-18-year-olds use about eight and a half hours. Social media use has increased in 8- to-12-year-olds, from 31 percent in 2019 to 38 percent in 2021, and almost 1 in 5 tweens say they use social media every day.

"Kids who have increased screen time, which is now something that smartphones can provide, [that] can affect sleep, mood, and academic performance, especially if they are using the time to compare their lives to what they see online and feeling less than adequate as a result," Ameenuddin said.

According to Mike Robb, Common Sense Media's senior director of research, "when we look at the effects of media and technology, it oftentimes has as much, if not even more, to do with what [kids] are doing with that time."

"So if you are, for example, on social media, and you're exposed to content that promotes negative body comparisons, or cyberbullying, or hate speech; that can have negative impacts on your mental health. Conversely, those kids who are using social media to connect with their friends and be artistic and creative ... are more likely to say that social media is having a positive effect on their mental health," he said.

Experts say that while technology can have some positive impact on children through the use of educational apps or by providing ways to stay connected in times of limited face-to-face interaction, there isn't enough evidence of benefits for development related to screen time or apps.

"There is far more evidence that shows that passive consumption of media, including so-called educational media, can actually have the opposite effect on development for very young children," Ameenuddin said.

According to experts at Common Sense Media, it is unlikely that media use is going to go down, which is why it is imperative to ensure both a high-quality and a safe media experience for children.

"I think it’s really on parents, schools, and other stakeholders in kids’ lives, to help children learn how to use the technology responsibly and safely," Robb said.

At the end of the day, pediatricians say that waiting until 13 to give children cellphones is a good rule to follow as a general guideline, but since "parents know their children and their level of maturity and ability to handle a cellphone the best... that takes precedence over general recommendations," according to Ameenuddin. ■
Students Are Behaving Badly in Class. Excessive Screen Time Might Be to Blame

By Sarah D. Sparks

Without even counting digital instruction, the amount of time teenagers and tweens spend staring at computer screens rivals how much time they would spend working at a full- or a part-time job. Educators and children’s health experts alike argue students need more support to prevent the overuse of technology from leading to unhealthy behaviors in the classroom.

According to an annual report from the nonprofit Common Sense Media, screen use for children and adolescents ages 8 to 18 jumped 17 percent between 2019 and 2021—a steeper increase than in the four years prior to the pandemic. Screen use rose by nearly 50 minutes per day for those ages 8 to 12 (tweens) to five hours and 33 minutes per day, and by more than an hour and 15 minutes for teenagers, to eight hours and 39 minutes per day. And those increases do not include students’ screen time in class or for schoolwork.

Teachers say they see the effects of heightened digital exposure in the classroom. In a nationally representative survey by the EdWeek Research Center in February, 88 percent of educators reported that in their experience, students’ learning challenges rose along with their increased screen time. Moreover, 80 percent of educators said student behavior worsened with more screen time. Over a third said student behavior has gotten “much worse” due to rising screen time.

Behavior problems associated with excessive screen time were relatively well-known even before the pandemic, including: ramped-up reactions to stress, poorer focus and executive skills, and higher risk of both acting out and internalized depression or anxiety. In some cases, studies have even found students’ technology-related focus problems can be severe enough to be misdiagnosed as attention deficit disorders.

What counts as too much screen time?

But it’s less clear just what kind and how much digital activity qualifies as “excessive.” The American Academy of Pediatrics recommends children ages 2 to 5 get no more than an hour of any sort of screen time a day, but it sets no time limits for school or recreational digital use for school-age children.

One massive research analysis released at the start of the pandemic found that the amount of daily screen time builds across devices; an hour of playing on a tablet or phone apps followed by a couple of television shows and another hour of internet browsing, quickly adds up to four hours of screen time.

The timing of digital use matters too. Minimal screen time after dark on top of excessive screen time during the day can significantly damage sleep for children and adolescents, according to Michelle Garrison, a sleep specialist and research associate professor in child and adolescent psychiatry at the University of Washington in Seattle.

In part, that’s because the blue light exuded by many digital devices mimics bright sunlight and delays the release of melatonin, the chemical that regulates natural sleep cycles. Garrison said video games and social media that trigger reward mechanisms in the brain also make it more difficult for children to quiet their brain activity, reducing both the quality and quantity of the sleep they get. This, in turn, can make students more tired and irritable and less focused on learning the following day.

“Sleep isn’t actually always a valued goal for tweens and teens,” Garrison said in a briefing for the Children and Screens Institute of Digital Media and Child Development.

It’s important for educators to help students connect their sleep habits to other goals they do care about, she said: “Whether that’s getting into less fights with their parents or siblings or their girlfriends or boyfriends, or doing better at school, or even being faster at soccer practice, there’s lots of different things that are downstream effects of getting more sleep. Often those are things that we can really leverage to get tweens and teens more motivated to work with us around media use.”

Context and content are critical when evaluating use of digital devices

Lumping together different kinds of screen time is a mistake, experts say. There are no studies that analyze the interactions between school- and out-of-school screen time, but studies have shown that time spent on educational content can be beneficial even when non-educational content on the same platform has negative effects.

“Research suggests that what kids actually do with that screen time and the context of that use is a better predictor of outcomes, both positive and negative” than total hours
on a device, said Michael Robb, the senior research director at Common Sense Media. “Completing an assignment on Google Docs is not the same thing as watching TikTok videos, is not the same thing as playing video games, is not the same thing as FaceTime chat. All these things are very different; they serve different needs.”

Experts stressed the need for schools to teach students healthy technology behaviors as explicitly as they teach in-person classroom behaviors and social norms. That means helping students to become mindful about:

- **Physical effects:** Identifying when and how technology use may change a student’s sleep, eating, or exercise routines. For example, students may learn how to schedule screen time or change color settings to improve sleep.

- **Mental effects:** Identifying when technology use is causing cognitive stress or emotional distress. For example, students can learn how to limit their use of social media sites that spark negative body images of themselves, or they can take breaks from screen time when they have difficulty focusing.

- **Social effects:** Identifying how to be a “good digital citizen,” including protecting your own and other’s privacy and behaving in civil rather than bullying ways on digital platforms. This also means teaching students how to balance in-person and online socializing.

Teaching students to choose higher-quality digital content can also improve behavior. For example, University of Washington researchers found that preschoolers’ behavior problems fell when their parents substituted educational and positive social content for more violent content, even without reducing the children’s total screen time.

For example, when the Wichita, Kan., public schools district invested in tablets for all its students, it also trained teachers in a digital citizenship curriculum. That content includes lessons on creating balance in digital use, respecting others online, and thinking critically about the content consumed.

Garrison emphasized that schools and parents should work to give students opportunities to practice making healthy decisions about digital use and engaging in positive behavior, rather than setting up total bans on digital devices.

“For many reasons, the abstinence-on approach to media use is not always the best,” she said. “So many students … talk to me about how they’re really, really struggling, because they’ve never had to be the one who’s in charge of when the device is shut off at night.”

Kristen Craft, the former principal of Andover High School in Andover, Kan., and the 2021 Kansas Principal of the Year, agrees. Craft encourages more video game esports activities in her school to help rebuild engagement for students whose main social connections had been digital during the pandemic. Esports teams in schools provide structure and team connections for competitive video gaming which might otherwise be more solitary.

Craft said she is seeing students struggle to regulate their behavior “because they spent so much time not having structure and guidance. I would say that [student] behavior issues are better when they have [digital use] that’s purposeful like esports.”
Active screen time can engage students, build confidence, empower learning and help develop lifelong learners. So how can educators offer solutions that require less screen time, while driving successful learning?

1. **Shift from passive to active screen time:** Technology solutions have the potential to accelerate student learning. However, many solutions are passive digitized worksheets or sit-and-get instruction. Active screen time, on the other hand, offers students in-the-moment-adaptive instruction. The right programs offer interactive instructional screen time that engages students with the right concepts at the right time.

2. **Engaging screen time means engaged learners:** Screen time can motivate students with interactive, age-appropriate learning that responds to individual strengths and needs. Intelligent Adaptive Learning™ technology captures student behavior and scaffolds and adjusts instruction to meet students where they are. This approach ensures that students always work within their zone of proximal development resulting in higher engagement and confidence-building-building practice.

3. **Remember, usage doesn’t always mean growth:** Each student accesses hundreds of technology programs every month. That’s why it’s critical to know if each solution enhances learning. Educators and program vendors are responsible to ensure that screen time helps students advance. Programs should capture data throughout usage and provide insight into student progress, allowing educators to better measure the efficacy of a program.
How Much Screen Time Is Too Much? The Answer Is ‘It Depends’

By Alyson Klein

One of the biggest critiques of full-time virtual and blended learning is that kids spend way too much time on screens. Students have complained about getting headaches, and educators have suffered from “Zoom fatigue.”

So how worried should educators be about all that time students spend staring at a Chromebook, iPad, or cellphone screen, especially if it’s followed by hours of television or video games? How many hours of screen time per day is too much?

To answer those questions, Education Week spoke with Lisa Guernsey, a senior fellow and strategic advisor with the Education Policy Program at New America, and Michael Levine, Senior Vice President, Learning and Impact, for Noggin, Nickelodeon’s online interactive learning service for preschoolers.

This interview has been edited for length and clarity.

How worried should educators and parents be about screen time?

Guernsey: The research doesn’t match up with the sensationalized headlines. The research actually shows that there are many things at play in a child’s life and what they’re learning from a screen interaction. It’s not just about the amount of time that they spend in front of a rectangle slide screen.

Instead of time, we really have to look at the three C’s. And those three C’s are looking at the Content on screen; understanding the Context in which the child is playing, watching, or observing what they’re seeing on screen; and then the third C is the [individual] child. There’s so many different needs that children have at different ages and different stages of development in their own context of their family but also in their community.

Guernsey: I think it’s completely valid that there were concerns, because in the pandemic it was certainly the case that a lot of things were not available to our kids. Being able to be with their peers, or running around outside, or for the older ones being able to go to a concert or a football game. [Kids were] not being able to get together with friends. It was not a good year. To stay inside and to have to try to find ways to entertain yourself or to keep your kids learning is really, really difficult. So I do think that we need to recognize that we want something different than what we had last year and we want that to be something that’s engaging for children.

The science of how children learn really points to how much social interaction matters. How much just getting engaged with new content and exploring new things and being able to ask questions and have some critical inquiry about what you’re seeing and exploring that really leads to even more engagement for kids. That can happen through great TV shows, through really cool [digital] games. That can also happen offline.

Instead of asking the question, ‘how do we get kids off screens?’ Let’s turn the question around and ask ‘how do we make next year so much more interesting, engaging, interactive for our kids?’ I think that that may very well mean for families that have the means and the ability to do so that their kids do some things off screen now. But it doesn’t mean that we’re going to suddenly go back to this world in which all screens are bad.

Are there any health issues related to screen time?

Levine: It’s really important that parents and educators realize that screens can be disruptive to sleep. I think a lot of kids did get out of their sleep routines [during the pandemic] and very young children need quite a lot of sleep. We do need to be concerned about screens [being used] late into the night.

Can you talk a little more about how content figures into screen time?

Levine: When you think about the digital media diet that your child should have, there are things that really are more like treats and then there are things that are wholesome, you know, fruits and vegetables [of television shows or games]. It’s extremely important that the parent monitor and review the quality of content as well as the context and the needs of that individual child. Once you’re getting into the kids who are parts of peer culture, Pokemon Go and Minecraft or more violent video games, there’s quite a lot more work that needs to be done.

How can you improve the context in which your child or student is experiencing screen time?

Guernsey: [When teachers or parents watch with their kids], they’re learning together, they’re having fun. There’s a positive emotional experience that comes out of that.
We build on that in communication with teachers, and having more of a two-way street. But [it’s] also just recognizing, ‘Hey, it can be fun to talk to your kids about that game that they just played or to maybe play along with them. If it sparks something that they might want to do offline, that’s great too, like maybe that character was so much fun for them they want to draw a picture of it.

**How can teachers help parents navigate their child’s use of digital media now that most schools have resumed in-person instruction?**

*Guernsey:* Continued communication between families and teachers can really go a long way to helping children themselves feel like they’re supported both in school and then back at home. Maybe that means continuing to use Zoom, at times, with parents to connect over the best thing for [the] child or having moments where there are songs and stories that are told together through virtual spaces so that parents can be engaged in that, especially for those parents who cannot get to those parent teacher conferences at 4 p.m. on a Tuesday afternoon. The most underserved kids, in communities that haven’t had the resources they need, they really need that ecosystem of support more than ever.
Discover why adaptive software is critical to creating meaningful learning.

Although many education technologies tout adaptivity, few deliver on that promise. In fact, many only adjust the pace of instruction to meet student needs. This approach fails to consider why a student is struggling to grasp a concept. It may disengage them further because instruction is both repetitive and slow.

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Personalized technology programs allow students to independently engage with the material because the software helps them thrive within their zone of proximal development. Intelligently adaptive programs enables students to experience more meaningful learning and produces better outcomes with less screen time.

“DreamBox is the ultimate in differentiated instruction — an efficient way to provide every child a virtual tutor.”

Tom Torkelson, Founder and CEO of IDEA Public Schools

Learn more about Intelligent Adaptive Learning software at dreambox.com
The potential for screen time to effect learning hinges on how well it can empower students to learn and enhance classroom instruction for teachers. These quick tips help educators select programs that will accelerate learning and offer balanced screen time for all students.

<table>
<thead>
<tr>
<th>Challenge:</th>
<th>Don’t</th>
<th>Do</th>
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<td>1. Students may be at very different learning levels in every area.</td>
<td>Rely on instructional programs that use only summative data about student work (answers only) rather than insight on students’ approaches to problem-solving.</td>
<td>Seek out learning programs that leverage real-time data across student skills and understanding.</td>
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<td>2. Teachers have limited bandwidth for new solutions.</td>
<td>Bloat your tool kit. Programs that are difficult to implement can feel like one more thing teachers must bring into the classroom.</td>
<td>Adopt programs that streamline educators’ workflow so they can focus on supporting students, not completing tasks.</td>
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<td>3. Students spend too much time on screens.</td>
<td>Create unnecessary screentime with digitized worksheets or solutions that measure only usage hours rather than academic growth.</td>
<td>Ensure student time on devices is meaningful and actually promotes learning. Explore tech solutions that can prove they produce rapid results with less screen time.</td>
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DreamBox provides adaptive instruction that can be implemented in minutes, executed by any educator in any learning environment and yields rapid results for students at every level in just weeks. With DreamBox, students have a personal math or reading tutor at their fingertips.
Like a long shadow sweeping the country, the coronavirus has transformed K-12 schooling, forcing millions of students to learn from home, parked in front of computers for many hours each week. And that’s triggered new concerns about how much time kids are spending looking at screens.

Santhana Pierre’s daily schedule offers a glimpse of many students’ new realities. The 10th grader opted for the all-remote option at her school, Pathways College Preparatory in St. Albans, N.Y. She’s on her laptop in her bedroom or on the living room couch pretty much constantly for the school’s entire day, which runs from 8:30 a.m. to 1:39 p.m. After a quick break, she goes back to the screen to start her homework.

“I hate it. It gets me so tired,” she said. “I never really leave the screen all day except for lunch break. I wish we had more assignments that were off the screen.”

How much time kids spend with digital screens is hardly a new concern. Adults have worried about it for years, mindful of research showing that excessive time using computer screens or watching TV is linked to eye strain, trouble sleeping, and other difficulties. The American Academy of Pediatrics urges parents to set consistent limits on screen time, but doesn’t specify maximum time parameters for children 5 to 18.

Screen Time ‘On Steroids’

But now, when the pandemic has shuttered many school buildings, children are adding dozens of hours of screen time each week as they learn remotely. A massive review of research on screen time, landing in the journal JAMA Pediatrics just as schools closed down in March, was a tart reminder of the risks that were about to escalate.

“The same screen-time issues we faced before COVID, now we’re facing them on steroids,” said Seth Evans, who leads the Campaign for a Commercial-Free Childhood’s work on digital devices in schools.

Off-screen learning is particularly important when there are still so many students who don’t have regular or sufficient access to devices and the internet, said Michael Barbour, an associate professor of education at Touro University California who specializes in virtual learning.

“Regardless of whether screen time is good or bad for kids, strictly from an equity perspective, teachers should be thinking about how they can deliver instruction in ways that don’t involve a screen,” he said.

But these concerns are colliding with reality. Many teachers trying to manage their students’—and their own—screen use are caught in a bind if their districts require hefty doses of logged-on school time.

“So much of what the kids do, even when they are with me, is on the computer,” said Shannon Guevarez, who teaches 4th grade at South Hanover Elementary School in Hershey, Pa., where students come to school some days and learn from home on others. “They need some opportunities to just close their screens sometimes.”

Taking a Don’t-Stress Approach

While some experts urge teachers to pay special attention to creating assignments that take children away from their computer screens, others are urging compassion and flexibility.

Erin Wilkey Oh creates online media resources for teachers at Common Sense Education, which has long studied children’s digital habits and cautioned against excessive screen time. The organization’s most recent survey, in 2019, showed that children 8 to 12 years old averaged nearly five hours a day using screens recreationally—TV, videos, gaming, social media, video chatting. Teenagers averaged more than seven hours daily. Computer-based schoolwork added only another 20 minutes for the tweens and an hour for teenagers, amounts that are surely soaring now with remote and hybrid learning.

Nonetheless, Oh urged teachers not to stress themselves out too much over screen time right now.

“We’ve never faced this before, and there are bigger concerns,” like equal access to remote instruction, Oh said. Teachers are already struggling to manage district mandates on remote instruction time, and they’re worried about students who aren’t connecting. “I’m awed by how they’re stepping up. I wouldn’t want to put more burdens on them right now,” Oh said.
Think learning goal first, format second. Jessica Twomey, a Long Valley, N.J., kindergarten teacher who works with Pinto to design offline activities for teachers in a project called “Innovating Play,” encourages teachers to put technology second when thinking about remote instruction. “Think first about your learning goal,” she said. “What experience do you want to provide? And then consider your options. The screen is only one option.”

Choice boards can play a new role. These grid-shaped sets of instructional activities have been around a long time; some know them as learning menus. During the pandemic, they’re getting renewed attention not only for including offline instructional ideas, but for giving students agency in a world that feels out of control. Teachers are creating and sharing their own versions on social media.

Catlin Tucker, a former teacher and the bestselling author of books on blended learning, was so concerned about heavy screen time during the coronavirus that she created free choice boards with activities designed to take elementary and middle school students off their screens and help them get active, like doing math with pieces of pasta, or drawing a comic strip based on a newspaper article. (There are wellness boards to help teachers take breaks from the screen, too.)

Carve out non-screen time, even during live sessions. Some teachers divide online classes into chunks, with time to introduce a new topic, time away from the screen to work on it, and then a regroup for questions and reflections at the end. Maria DeRosia, who teaches 4th grade in Ann Arbor, Mich., said her students are supposed to leave their Zoom on from 8:10 a.m. to 3:13 p.m. daily, but she directs them away from the screen periodically to work on assignments. She remains online, within reach if they have questions.

Don’t let tech blind you. Guevarez, the Hershey, Pa., teacher, said that teachers can sometimes let “the technology block our vision a little bit.” They feel surrounded by teachers trying new technologies, and think they should, too, but they forget all the things they know that don’t have to do with the new technology.

Teachers are also putting a lot of pressure on themselves to be “within reach” all day, in part because they miss their kids, said Christine Pinto, who teaches kindergarten in Arcadia, Calif. Teachers take breaks from the screen, too.)

Consider listening. Audiobooks, podcasts, and recorded read-alouds are getting renewed attention as teachers try to break up their students’ pixel-gazing time. Lately, Guevarez has been using “The Imagine Neighborhood,” a story podcast designed to help students deal with emotions sparked by the pandemic. When the children are at home, they can listen while they relax on the couch or take a walk. When they’re in the classroom with her, she plays the episode through a sound projector and the kids sit quietly or color while they listen. Teachers at her elementary school also like “Tinkercast” and “Brains On!” for science, and “Forever Ago” and “The Past and the Curious” for social studies. They’ve also recorded social studies read-alouds from Joy Hakim’s A History of US.

Don’t forget the power of handwriting. Barry Frank, an English teacher and coach at Queens School of Inquiry in Flushing, N.Y., said he is having his students keep handwritten notebooks throughout the year. They’ll also be sketchnoting on paper, rather than taking notes in a Word document, during some lectures and videos. Students will submit their notes by taking pictures and sending them electronically. Frank has nothing against technology; he’s the tech coordinator for his school. “I love it, but we have to find a balance,” he said.

Harness the power of hands-on learning. Most experts said that now is a great time to use hands-on and project-based learning. Learning fractions by cooking a recipe or exploring nature and writing about it can get children off their computer screens while they master academic standards. DeRosia creates new choice boards, each with 25 activities students can choose from, every Wednesday. They always include off-screen options, such as building a catapult out of household materials. Experts said there are many projects students can do, both at home and in their communities, that can be carried out masked and socially distant, from gardening to documenting images of a COVID-19 world.
OPINION

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Helping Students Outsmart Their Smartphones

By Angela Duckworth

How do I get my students to stop looking at their phones? We can all use some help to put a little distance between ourselves and our vices. Here’s something I wrote recently on the topic for Character Lab as a Tip of the Week:

Question: What temptation is hardest for teenagers to resist?

Answer: Cellphones

How do I know? I’ve been studying self-control in adolescence for nearly two decades, and increasingly, my data implicate cellphones as the single most potent temptation in the lives of young people.

Phones are a limitless source of immediate gratification. Finished scrolling through your Instagram feed? You can rewatch an episode of “The Office.” Craving something else? There’s always Snapchat, TikTok, and ... the list goes on.

When pitted against homework and studying, phones are the “easy” choice because, to paraphrase Aristotle, the fruits of education are sweet, but the roots are often bitter. In other words, thinking hard about things you don’t yet understand is not nearly as effortlessly pleasurable as the myriad diversions you have in the palm of your hand.

It’s impractical to ask teenagers to swear off phones altogether. But it is possible to share evidence-based strategies for outsmarting their smartphones. The trick I like best is also the one most commonly recommended by undergraduates in the classes I’m teaching this year—what scientists call situation modification. It involves intentionally changing your physical surroundings to make it easier to resist temptation.

Consider, for example, this data collected from thousands of high school students on Character Lab Research Network. The farther students reported keeping their phones when trying to study, the higher their report card grades.

Of course, correlation is not causation. Still, my guess is that the young people in your life have already discovered that their phone is less tempting when it’s out of sight, out of earshot, and hard to reach. But it may not have occurred to them that they can, as a habit, capitalize on situation modification.

For the middle or high school students in your life, here are suggestions, courtesy of my undergraduates, on how to successfully resist reaching for their phone:

Try ...

... putting your phone in a closet or on another floor.

... downloading the SelfControl app, which blacklists access to websites for a predetermined time period.

... putting the notifications on your computer on “do not disturb” and shutting off your phone for 30 minutes at a time.

... turning your phone completely off and putting it in a random bag somewhere. This will especially help when you have a busy day with lots of plans already set out.

... plugging your phone in across the room before getting in bed so you go to sleep without wasting time on your phone.

Angela Duckworth is a behavioral-science expert offering advice to teachers based on scientific research. She is also the founder and CEO of the education nonprofit Character Lab, and professor of psychology at the University of Pennsylvania.
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