Khan Academy Kids

What the Research Says About Screen Time

A background brief for facilitators

How to use this page

This overview provides a look at some of the research surrounding the impact of screen time on young children. These three findings are the most common:

1. **Time alone is an incomplete measure.** Duration is associated with some outcomes, but its meaning depends heavily on the child, content, context and what media use displaces.
2. **Content and context can materially change the relationship.** Educational content and adult co-engagement are generally associated with better learning outcomes than passive or unsupported use.
3. **Some educational media and apps produce measurable learning gains.** Effects vary substantially by product, skill, age, implementation and how learning is assessed.

What does the American Academy of Pediatrics say?

Start here, because it's the strongest ground you have. You're not asking families to argue with their pediatrician. The field's own guidance moved to this position, and your job is catching the room up to it.

The AAP has moved away from universal hour-based rules.

Its 2026 policy replaces a primarily time-centered approach with a broader framework that considers the child, the content, what media displaces, how products are designed, and the social systems surrounding media use.

One of the report's co-authors described part of the purpose as taking pressure and shame off parents, on the grounds that the issue involves broader systems and the design of the devices themselves.

For parents who have treated a single daily number as the complete measure of healthy media use, the new guidance offers a more useful and less guilt-driven framework.

The AAP's 5 Cs offer a more useful way to evaluate media use

- **Child.** This child's age, temperament, and needs.
- **Content.** What's actually on the screen.
- **Calm.** Whether media is the main tool for managing emotions.
- **Crowding out.** What the screen is displacing.
- **Communication.** Whether anyone is talking about it.

There's no screen time guideline for schools, and that's deliberate

The AAP addressed this directly and found no US educational organization setting specific time limits. The Department of Education's 2024 national technology plan draws the line

somewhere else entirely: **active** versus **passive** use.

- **Active use** asks for thinking: coding, simulations, making media, design work, collaborating with peers.
- **Passive use** is a digital worksheet, or content consumed with no reflection or participation.

That gives a teacher a real answer to "how much is too much at school?" without naming a number.

Technology as an access strategy

The AAP also notes that classroom technology can make instruction more inclusive: audiobooks alongside text for children with dyslexia, voice-to-text for children with fine motor difficulties, targeted practice for children with specific learning disabilities.

What the other research shows

Time thresholds were not strongly linked to psychological well-being. A population-based study drew on 19,957 caregiver interviews about children ages 2 to 5. After accounting for factors including the child's age, gender and ethnicity, as well as household income and caregiver education, researchers found little evidence that one- or two-hour screen-time thresholds predicted children's psychological well-being. The study looked at outcomes such as attachment, resilience, curiosity and positive affect. It did not examine every possible outcome of screen use, including language development, sleep, physical health or later academic achievement. Its finding is therefore narrower than "time limits do not matter": for psychological well-being, the evidence did not support a clear cutoff at one or two hours.

Watching together flips the result. An umbrella review pooled 102 meta-analyses covering roughly 2,451 studies and about 1.94 million participants. Across the evidence synthesized in the umbrella review, general screen use was negatively associated with literacy, while studies of parent co-viewing showed a small positive association. That does not prove co-viewing alone caused the difference, but it supports the value of adults engaging with children around media.

Even the skeptical research points to quality. The meta-analysis most often cited against early screen use did find a negative association with children's language skills. That same analysis found co-viewing and educational content were associated with a small positive effect. Citing the study that cuts against us, for the part that supports us, is the single most credible move available to you.

Educational apps show measurable gains in this exact age band. A meta-analysis of 36 intervention studies, covering 285 effect sizes, found an average improvement of about one-third of a standard deviation in children's literacy and math achievement. Effects were larger for preschoolers than for children in kindergarten through third grade, and for apps focused on specific skills such as letter knowledge or counting. The results varied widely across studies. Effects were also larger when researchers used assessments they had developed themselves rather than standardized measures, so the average should be interpreted cautiously. The review initially identified 228 records, assessed 79 full-text articles and included 31 studies; five additional studies were added through an updated search, bringing the total to 36.

The takeaway is not that every educational app works. It is that well-designed apps can support learning, particularly when they target a specific skill and are used with clear instructional purpose.

Well-made media performs like good instruction, not like a weak substitute. A meta-analysis of 24 studies covering more than 10,000 children across 15 countries found significant positive effects of Sesame Street on cognitive outcomes including literacy and numeracy, on knowledge about the world, and on social reasoning. The effect on cognitive outcomes landed in roughly the same range researchers report for in-person early childhood education and childcare programs. That comparison is the soundbite, and it comes with a second point worth making: media reaches children who don't have access to the alternative.

The case against screen time

A cohort study followed 3,322 children in grade 3 and 2,084 children in grade 6 who were recruited through primary care settings in Ontario. Higher parent-reported total screen time was associated with lower reading and math achievement in grade 3 and lower math achievement in grade 6. The study did not find statistically significant associations with grade 3 writing or with grade 6 reading and writing in the combined sample.

The researchers examined total screen time as well as time spent watching television or using digital media and playing video games. They did not distinguish between active, instructional use and passive use, so the findings should not be treated as evidence about a specific activity such as a phonics lesson on a tablet.

The study was observational, which means it found associations rather than proving that screen use caused lower achievement. The researchers adjusted for several child and family characteristics, but residual confounding may still remain. Screen time was also reported by parents, making the estimates less precise than direct measurement.

The finding is important, but it is specific: higher reported screen use was associated with lower achievement in some subjects and grades, not uniformly across every academic outcome.

What the research says about Khan Academy Kids

Ten weeks with the free Khan Academy Kids app narrowed the early literacy gap for low-income preschoolers.

A randomized controlled trial at the University of Massachusetts Amherst, led by David Arnold, followed preschoolers from low-income families using Khan Academy Kids over ten weeks. It reported pre-literacy gains, including phonological awareness gains the researchers compared to roughly 25 one-on-one tutoring sessions, and growth large enough to close much of the distance to national averages.

Answers to the questions you'll actually get

"Have I already done damage? We're over an hour most days."
Going over an hour does not mean you have harmed your child. A large study of nearly 20,000 young children found little evidence that one- or two-hour thresholds predicted psychological well-being. That does not mean time never matters, but it does mean there is no clear point at which harm suddenly begins. Content, context and what screen use replaces also matter.

"Does it really matter if I sit and watch with them?"
More than almost anything else you'll tell them tonight. It's the one variable in the research that reversed a negative result outright.

"But I read that screens hurt language development."
They read it correctly, and you should say so. That study found a negative association overall, and also found co-viewing and educational content associated with a small positive effect. Same paper, both findings.

"We limit screens at home. Why is my kindergartener on a tablet at school?"
The most common version of this: a family manages screens carefully at home, learns their child is also on a device during the school day, and the math stops adding up. Answer with the kind of use, not a number. That's Communication, the fifth C, in practice. The AAP specifically recommends teachers explain to families why technology is part of a lesson and how it supports that child's learning.

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