



The New Normal: Kids and Screens

The novel coronavirus has changed how kids learn and socialize.

While the global pandemic has changed how everyone works and lives in different ways, it's really changed the way children learn and interact with the world. Screen time for kids was already on the rise before the pandemic, but the shift from in-person learning to remote has pushed it even further. Though the change was necessary for their safety, there are some unintended consequences to even more screen time.

The debate over blue light

You've likely read about the effects of blue light on eyes — [we've covered the topic before](#). There are benefits to blue light:

- Blue light helps keep you alert, boosts your memory and can help regulate your mood.
- It's part of the natural circadian rhythm — exposure to blue light during the day is an indication to your body to stay alert and awake. At night the effect of blue light on sleep is a little more obvious. It can cause issues because it suppresses melatonin in our bodies, which is helpful for falling asleep.
- Children need to be exposed to naturally occurring blue light to help develop their eyes and vision.

But when there's too much exposure, particularly in children, there are some issues. A child's eye hasn't yet fully developed, and they tend to absorb more blue light rays than fully developed eyes, which may increase the risk of age-related eye diseases. Adults still struggle with too much blue

light, particularly at night when using a phone or computer. But fully developed eyes can mitigate the effects of blue rays a little more effectively.

Too much blue light can cause eye strain, and impact a child's sleep schedule. And there's reason to believe that overexposure to blue light can cause age-related macular degeneration (ARMD). So what can we do to help children avoid these problems?



Mitigating the effects of blue light exposure

Before online schooling became the norm, it was easier to limit screen time for children. But these days, that's a little less realistic. Here are some common ways to limit blue light exposure:

- Turn the blue light off: Many devices offer a built-in setting that will set the screen to a warmer color to help limit blue light rays. Some devices even offer a schedule to set so nighttime browsing and watching won't affect sleep.
- Reduce screen brightness: Turning down the backlight on your child's tablet, laptop or smartphone will reduce the intensity of blue light shining in their eyes.
- Blue light blocking glasses: Glasses with built in filters that block blue light. These are a simple way to adapt to the increase in screen time. [Find them on Amazon here.](#)
- Filters for devices: Similar to blue blockers, these filters limit the amount of blue light coming from the device. [Buy some here.](#)

Reflective LCDs: Current display technology is typically OLED or LED-based. But a device with a reflective LCD reflects the room lighting (or sunlight) back to the user, which is much more natural to the eye like reading a book or a Kindle and works in more lighting conditions (sunny and dark) than LED displays. Unfortunately, not many devices use RLCD technology yet.

The future looks bright

The pandemic will eventually subside, but it's likely that many of the changes it brought on are here to stay. Children are using technology more and more to learn, play, and relax. That means devices will need to adapt to children's needs. They'll need to work outside in bright lighting conditions. They'll need to find power savings so they can be used for longer periods of time. And they'll need to address the blue light problem. While we can't say how much screen time a child should have, we know that we can change displays to adjust to the new normal.

That's what Azumo is working on. Devices with RLCDs can meet all these requirements. They're power efficient, sunlight readable, and more effectively utilize the more natural surrounding light than LED and OLED displays. And the Azumo [front light panel](#) will help light the way for new displays that are better for us.

Article Sources:

- <https://www.nature.com/articles/s41598-018-28254-8#Sec1>
- <https://preventblindness.org/blue-light-and-your-eyes/>
- <https://mymyopia.com/should-i-be-worried-about-the-blue-light-from-devices-affecting-my-kids-vision/>