

Technology in Schools: Promise and Perils

It is true that our children will be living in a digital world, and that world holds both great promise as well as some peril. The Children's Screen Time Action Network supports the moderate, developmentally appropriate, and safe use of technology in schools. This technology can bring added convenience and communication, and can support and even transform learning in specific settings. The purpose of this Action Kit, therefore, is **not** to oppose these appropriate uses of technology. Rather, it is to help parents and educators resist the **overuse and misuse** of screens in schools.

The Action Network supports the principles set out in [The EdTech Triangle](#), a research-based model that was developed by the nonprofit [Everyschool](#) to guide educators to use technology selectively, with an emphasis on technology that is truly transformative and can produce a unique outcome or develop a high-level skill beyond traditional methods. As the "EdTech Triangle" indicates, a child's age and developmental stage must also be taken into account when judging both the appropriateness of the technology in question, and the amount of time the child might spend on it.

For example, most elementary-aged children (grades K-4) do not have the executive functioning skills to use technology in transformative ways. They benefit from writing by hand and reading from real books; plus their developing eyes and brains are harmed by exposure to screens. Computational thinking can begin to be taught to upper elementary students with non-digital games and puzzles. Middle school students will also benefit from the introduction of tools for word processing, data analysis, and research, but their school-based screen time must be considered in the context of their already heavy – and often harmful – use of screens for social media and gaming at home. By high school, students will benefit by learning more about computer logic and by engaging in creative projects, such as programming and building robots to solve real world problems, 3D printing, animation, and filmmaking. They should also be proficient in word processing and other select applications.

We understand that all educators aim to help children learn. Parents and educators also want children to finish school with the skills that will help them succeed in the 21st century economy. We believe, however, that the powerful edtech industry has preyed on these concerns and oversold school districts on the power of their products to solve *all* educational problems, including underperformance on standardized tests, the achievement gap, and meeting the needs of every type of student. In less than a decade, the resulting proliferation of 1:1 programs (one digital device per student), computer-based instruction (often called "personalized learning"), gamification of lessons, and putting most textbooks and homework online has transformed many K-12 classrooms.

Now, however, parents and teachers are beginning to take stock of these trends and ask important questions, such as:

- Is edtech helping our students learn, and, if so, in what situations and in what ways?
- How can edtech be used to transform educational experiences, rather than just substitute digital lessons for analog lessons, thus reducing face-to-face interaction with teachers and peers?
- Does edtech have unintended consequences in the form of threats to our children's health and social-emotional wellbeing?
- Does the technology take sufficient care with student data, and do parents and students have sufficient knowledge and agency with regard to how the data is used?
- How is edtech affecting the teaching profession?
- What are the possible unintended consequences for public schools, and our society in general, if decisions about curriculum and methods are, in effect, turned over to for-profit corporations?

We hope this Action Kit serves to promote this healthy questioning throughout our K-12 educational system. Our children's future is at stake.