

The following information includes research from various sources (Edutopia, the American Psychological Association) and from The Digital Delusion to support some of our MHMS school-level digital guidelines decision-making. Direct quotes are all from The Digital Delusion: How Classroom Technology Harms Our Kids' Learning-And How to Help Them Thrive Again, by Dr. Jared Cooney Horvath. Other notes are paraphrased to be more succinct. Text formatting is for emphasis only.

Merrol Hyde Magnet School acknowledges that there is much more discussion and research on this topic, and we make no claims to be experts. However, we are using the available data to make educational decisions that we think are sustainable, congruent with the learning process, and ultimately in the best interest of our students. Our move to have digital guidelines is not anti-tech or resisting devices. It is simply intentionally moving away from screens. It is about the value of learning, reclaiming education as a human endeavor, moving toward deep thought, and restoring rigor in the classroom.

“Now more than ever we need a generation capable of deep thought—kids who can grapple with nuance, hold multiple truths in tension, and creatively tackle problems that stump the greatest minds of today. In other words, **we need children who are sharper and more adaptable than we are**. But instead of cultivating these capacities, we’re quietly undermining them. Somewhere along the way, we’ve stripped something vital from our children—and perhaps the cruelest part is that they don’t even know they’ve lost anything.”

Regarding Devices at School:

“Over half of our children now use a computer at school for 1-4 hours each day, and a full quarter spend more than four hours on screens during a typical seven-hour school day. Unfortunately, studies suggest that less than half of this time is spent actually learning, with students off-task for up to 38 minutes of every hour when on classroom devices.”

Entertaining and learning aren’t the same thing. What it takes to capture attention is very different than what it takes to build deep understanding and long-term retention.

Screen inferiority effect: people comprehend better and retain more when reading from paper rather than from screens. The “place” of words doesn’t exist on screens. Meta-analysis of research shows that students skim information on screens rather than reading to comprehend.

“The purpose of education is to prepare kids for an ever-changing world—to build skills they can carry into new and unpredictable situations. Digital learning delivers the

opposite. It flattens experience, making knowledge harder to recall and apply outside the device. Our children need real-world learning that transfers. If they're never taught to think beyond the screen, they'll forever remain trapped inside of it."

"EdTech isn't failing because of outdated software or poor teacher training. **It's failing because it's fundamentally incompatible with how human beings actually learn.** Learning is deliberate and effortful. It requires sustained focus, thrives on emotional connection, and succeeds when skills can transfer flexibly between contexts. Yet by design, EdTech undermines these biological realities: it fragments attention, severs emotional synchrony, and confines learning to a context so narrow that knowledge struggles to escape the screen."

Regarding Cell Phone Usage in School:

Students who spend more time on phones report higher anxiety, stress, depression, disruptive behavior, and unhappiness. "So what happens when phones are removed from school? Exactly what you'd hope. Students report feeling more connected, their well-being improves, problematic behaviors decline, stress levels drop, and overall satisfaction with school goes up. Furthermore, breaktime habits shift dramatically. Instead of sitting alone with screens, students walk with friends, read physical books, and play active games with real people. These moments of genuine interaction reignite a deeper sense of human connection; the kind that leads to extremely happy kids. And isn't that what every parent wants?"

"When the pull (of a device) is gone, something stronger can grow in its place. Instead of reaching for a phone at the first sign of struggle, students can learn to self-regulate, seek support, or reflect—the same strategies we relied on before every flicker of unease could be numbed by a screen."

"When humans interact face-to-face...the brain releases a chemical called oxytocin. Often called the bonding hormone, oxytocin plays a central role in human connection. But when communication happens via text, the brain is more likely to release a peptide called tachykinin 2 (TAC2). TAC2, a biological marker of social isolation, activates brain regions involved in threat response."

"Once a habit forms, phones stop being tools for connection and start serving as regulators of the nervous system. When students know they'll soon have screen access, dopamine surges and attention collapses. But when access is removed entirely, cravings fade and focus returns. Without full separation, harmful habits persist

and learning suffers. Banning phones isn't about being strict—it's about giving our children a chance to rest."

Regarding AI:

"Identity isn't something we download—it's something we forge through struggle, effort, and honest reflection. When children hand creation over to AI and measure themselves by public reaction, they sever the very process that has shaped selfhood for millennia. Over time, they stop asking Who am I? And start accepting whatever the algorithm reflects back. AI will nudge our children to trade authenticity for approval, and many will never notice the change."

"Students are outsourcing their self-development, relying ever more on external opinion to construct their identity. As the world says they are, so they believe themselves to be."

"A defining feature of our modern Technopolopoly is information overwhelm. Every day, digital users post over 500 million tweets, upload more than 3 million videos, and generate an estimated 1.7 megabytes of data per person per second, the equivalent of an 850-page book for every person on earth, every second. When humans are confronted with this much information, coherence collapses. Structure, order, and clarity are buried beneath an avalanche of data. **Suddenly, almost everything starts to sound plausible, because we lose the frameworks needed to filter, evaluate, and prioritize** what we encounter."

Regarding online EdTech platforms: "Students no longer need to learn how to think; they need only learn how to prompt the tools that will do the thinking for them."

"Schools exist to help students build a coherent, shared worldview; to organize knowledge in ways that allow culture to grow, evolve, and endure. Their job is not only to transmit facts, but also to curate meaning—weaving fragments into stories, sequencing ideas into disciplines, and guiding students toward collective understanding. But the ideology of AI (and EdTech) denies this. By reducing thought to language and coherence to patterns, it strips schools of their broader role as meaning-makers."

How should schools respond to common arguments for EdTech:

1. It has so much potential/It's the future: Where is the data to prove this? If a tool works, there should be results to prove it.
2. We need more time: It's been sixty years with EdTEch. It shouldn't still be a work in progress, as children aren't test subjects and we shouldn't waste valuable class time validating ineffective products for tech companies.

3. Digital devices aren't going anywhere: There's a difference between WHAT we teach and HOW we teach. We don't have to use devices IN school just because they're so pervasive OUT of school.
4. Kids need digital skills to be competitive in the job market: Schools aren't meant to train students on passing trends, but prepare them to thrive in whatever comes next. The more we narrow the focus of education, the more we limit our children's futures.
5. Modern students learn differently: The core learning process is attention, memory, transfer. It always has been.
6. People are using EdTech incorrectly: A good learning tool will work in real classrooms, with real students, under real conditions. EdTech can't deliver results just under perfect conditions.
7. Don't let schools get left behind: If we need to "keep up", we are keeping up with what exactly? Schools exist to educate, not impress. We need to use the tools that work. Trends fade. Learning endures.
8. It's just a tool: "EdTech is force-feeding kids a narrow worldview that flattens learning, sidelines teachers, and treats education as something to be managed rather than mastered."