Foundations for Learning

Growing a child is like building a house: it's all about the foundation. Four factors are critical for the healthy growth and success of a child: **movement, touch, connection, and nature**. When these underlying brain and body systems are activated, children become strong and coordinated, secure and regulated, calm and focused.

Movement

Movement promotes cardiovascular fitness and supports the motor coordination required for achieving literacy.

How? Movement activates the *proprioceptive system*, which refines gross and fine motor skills needed to attain literacy, and the *vestibular system*, which increases alertness to enhance attention and learning.

Think about classroom movement breaks and "every day is an outside day" recess.

Touch

Touch promotes emotional regulation, reduces stress, and helps children feel secure.

How? Touch activates the *tactile system* to lower adrenaline, thus reducing anxiety and panic states. Deep pressure touch, such as hugs or sustained shoulder squeezes, can be particularly effective when treating children exposed to trauma.

Think about weighted devices, cozy reading spaces, and rough and tumble play.

Connection

Connection involves building trust, responsiveness, attachment, and communication—all of which are vital for personal and academic success.

How? Human connection supports co-regulation, a secure state where children feel seen and heard. Strong attachment bonds between child and adult are life-sustaining and predict lifelong success.

Think about circle stories, group games, appreciations, celebrations, and reflections.

Nature

Nature provides a calming environment that promotes physical and mental well-being.

How? Nature is sensory soothing and lowers stress hormones. Green space improves attention and behavior. Children move more when they are outside, enhancing cardiovascular fitness.

Think about one class per day outside or an "in/out school" concept of holding half of the class outside and half inside with a midday switch.

Take Action!

Foundations for Learning

How Can We Activate the Four Factors?

NATURE CHECK-IN

Invite students to find one thing in nature that reflects how they are feeling, as a way to practice connecting nature with their emotions.

FIVE SENSE MINDFUL WALK

Guide students on a walk where they focus on what they can see, hear, smell, touch, and taste in nature. Ask them for specific details.

NATURE DRAWING

Provide students with drawing materials and ask them to identify a tree that will be "their tree." Bring them back to sketch the tree during each of the four seasons.

OUTDOOR ART

Bring out students' creative side by having them create artwork using natural materials like leaves, sticks, shells, and stones.

THREE-PERSON TRUST WALK

Encourage trust and communication by teaming up students and blindfolding one person in each threesome to be guided through a natural setting.

Resources

- Moving to Learn blog: **Why screens in schools failed and what to do now to create solid foundations for literacy and learning**
- Kikori: **an app that suggests experiential activities aligned with teaching and social-emotional standards**
- Foundations for Learning Pyramid

Fact Sheet 2

Screen Time's Impact on Learning

Screen time has become a regular part of our children's school day. Technology is often thought to enhance learning, but surprisingly little independent research supports this claim. The promises of screen time must be weighed against its negative impacts.

Positive Uses of Screens in Schools

In specific cases, screen time can help students gain unique skills that are valuable in the workplace or for independent learning: typing, spreadsheet creation, robotics, coding, video/music creation and editing, etc. In addition, some programs assist students with learning differences. Select supplementary videos and digital materials can also support learning.

Negative Impacts of Screens in Schools

In a **2022 EdWeek survey**, 88% of teachers, principals, and district leaders said that as students' screen time increased, so did learning challenges. Student behavior worsened, too. Despite the EdTech industry's repeated promises to improve student learning outcomes, test scores today have fallen behind those in 2012, when the majority of classrooms were mostly tech-free.

There are numerous drawbacks to using screens in schools. Especially when screen time represents a significant percentage of the school day. Negative impacts include:

- **Isolation & underdeveloped social skills:** The relationship between student and teacher, a key factor in academic success, is interrupted or displaced. Today's 1-1 device programs also isolate students. Children learn best in community.
- **Decreased ability to work for intrinsic rewards:** **Many EdTech apps are gamified**. This can kill students' intrinsic love of learning and undermine their ability to focus on work that is not designed to hit dopamine triggers.
- **Distraction & attention deficits:** **Internet access in class** fragments attention by driving students to watch movies, message friends, and engage in social media during school hours.
- **Health risks:** Screen use has been linked to eyesight damage, sleep loss, neck pain, obesity, increased stress, and **overstimulation of students' brains**.
- **Privacy risks:** EdTech apps collect and sell sensitive student data without student or parental consent. (See Student Data Privacy Fact Sheet).

Benefits of off-screen learning: Numerous studies show better comprehension and retention from **learning on paper** vs screens. Off-screen activities are more cognitively rich and engage more perceptual systems (vestibular, kinesthetic, etc.).

LEAD AUTHORS: Max Bean, Laura Derrendinger
A project of the Screens in Schools Work Group

screen time action network at fairplay

Take Action!

Screen Time's Impact on Learning

What Can We Do to Reduce Screen Time at School?

WHAT SCHOOLS & DISTRICTS CAN DO

- **Eliminate 1:1 programs for elementary students** (see 1:1 Programs K-5 Page) and limit use for middle and high schoolers to times when screens provide unique learning benefits.
- **Monitor time students spend on devices** and set specific limits (in-school + at home).
- **Assess digital/EdTech products** to determine if they add enough value to the educational experience to outweigh harms. To determine this, schools must assess:
  - Independent research showing benefit.
  - The harms of increased screen time, including distraction/off-task device use.
  - The risks to student privacy.
- **Use a limited number of EdTech products** to keep the workload for curriculum coordinators and administrators manageable.
- **Go phone-free** to decrease distraction and negative impacts (see Phone-Free School sheet).

WHAT PARENTS CAN DO

- **Opt out:** Write your school that you do not want your child using digital products. Get a doctor's note (see Opt Out Page). See EdTech Law Center (in Resources ➡️).
- **Search for allies:** Print resources and share them with your community, PTA, school board, teachers, and school administrators. Parents feel empowered when joining forces.
- **Advocate:** Ask your school for the list of approved digital products and their approval process. Share this list with other advocates.
- **Inquire:** Ask how much time your children spend on screens at school.

Resources

- Global Education Monitoring Report (UNESCO)
- UNESCO Calls for Global Ban on Smartphones in Schools (The Guardian)
- The EdTech Triangle (Everyschool.org)
- The EdTech Report: Research to know right now about technology in the classroom (Everyschool.org)
- Personal Devices and Laptop Use in the Classroom (ScreenStrong.org)
- EdTech Law Center

Visit bit.ly/screensandlearning for the full Screens & Learning Action Kit!
References for the Action Kit: bit.ly/screensandlearningreferences

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EdTech Fact vs. Fiction

Educational technology, or "EdTech," is digital technology used to facilitate learning. A vast amount of technology is being used in today's classroom, in part because the tech industry has made many bold claims that it will improve student learning. But does it really?

Claim #1: Technology enables personalized learning

Technology allows students to work at their own pace, getting a customized learning experience, because algorithms in the computer program adapt the task to the child's skill level.

Reality: Personalized learning is best created by a person. No algorithm can attend to a child's mental state, physical wellbeing, or varying needs throughout the day, all of which impact ability to learn. A teacher is able to interpret and respond to the needs of the whole child.

Claim #2: Technology inspires communication, collaboration, and creativity

Students can stay connected, work together, and share ideas no matter where they are. Online communities bring students together.

Reality: Screens are a barrier to social skills. Children are less connected with those around them, not more. **Children's mental health has been declining** with excessive use of technology.

Claim #3: Technology is more engaging than traditional tools

Children are more engaged in the learning process, especially because of gamification.

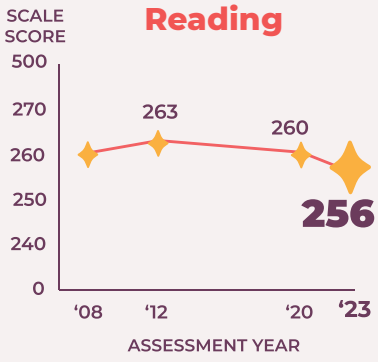
Reality: Students are driven to distraction. Students often are less engaged in learning activities and more distracted by the many other websites working to rob their attention (Roblox, YouTube, Minecraft, Netflix).

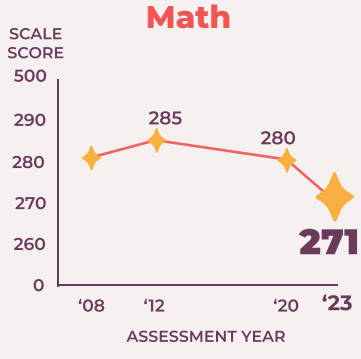
Claim #4: Technology improves student outcomes

Digital learning improves student outcomes, digital curriculum materials are high-quality, and students are learning the skills they will need to succeed in a digital age.

Reality: EdTech companies often use weak research to make false claims.

- The criteria that **EdReports** uses to identify "high-quality curriculum material" include alignment to Common Core standards and usability, **not** student achievement.
- **Reading comprehension** is better when reading text on paper rather than a screen.
- **Math skills** improve when problems are written on paper.
- Since the explosion of EdTech into schools starting in 2012, 13-year-old students' **test scores have dropped** from 263 to 256 in reading and from 285 to 271 in math (NAEP)





Screens & Learning Action Kit
LEAD AUTHOR: Denise Champney
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Action Sheet 3

Take Action!

EdTech Fact vs. Fiction

What Can We Do to Limit EdTech in Schools?

CONNECT

Connect with other parents who share your concern and help bring awareness to your community about the harms of EdTech.

Reach out to your child's school and share your concerns. Administrators are generally much more receptive when approached by groups of parents (even small groups).

IN YOUR HOME

Provide as many opportunities for your child to have true hands on learning with books and papers and away from screens.

Prioritize outdoor play.

Encourage screen-free breaks during online homework.

Continue to educate yourself. Reading this sheet is a great start!

REQUESTS FOR YOUR SCHOOL

Ask if your district has an opt-out option for technology.

Request to opt-out of technology for your child, check out this **tool kit** created by Emily Cherkin, The Screentime Consultant.

If your child has a disability, request that educational materials be presented in the format that best supports their learning.

Request that schoolwork and homework be on paper and not online.

1:1 Programs (K-5)

A 1:1 program refers to school-district initiatives to assign one personal device for every student. Districts advocate for these programs because of the promise of improved achievement outcomes, motivation, and engagement; to keep up with the digital world we live in; and to promote equity. These promises largely have turned out to be false ones.

Prevalence of 1:1 Programs

The pandemic led to the expansion of 1:1 programs for all ages and grades. Prior to the pandemic, about 40% of elementary-school kids were provided personal devices. In the 2022–23 school year, nearly 95% of public schools surveyed reported providing students with personal digital devices, such as laptops or tablets (U.S. Department of Education).

Very few districts have since reevaluated their decisions, even though 1:1 devices are no longer necessary—and are in fact harmful—for the youngest learners.

Realities and Risks of 1:1 Programs for K-5 Students

Opportunity costs are particularly damaging for young learners. Screen-based activities diminish human interactions, decrease play-based and tactile learning, reduce the cultivation of empathy, and deprioritize creativity. Device-based learning is often gamified. This causes students to pay attention to points or rewards earned instead of to comprehension or retention of content.

1:1 programs increase cumulative screen time. Study after study shows that excessive screen time is a health hazard, especially for young learners. School 1:1 programs inevitably increase daily totals for screen time above both pediatrician recommendations and parent preferences.

Personal devices create a digital dependency. Personal devices create unhealthy habits and lead to a cycle of dependency. Kids want or need the device more and more to feel entertained. They become less capable of entertaining themselves, struggle with attention and focus, and lose the motivation to do the hard, slow work that's required for most learning.

Reading and writing on paper is better for children. Studies show that tactile learning—writing with a pencil, reading physical books—offer superior forms of student engagement and knowledge retention.

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A project of the Screens in Schools Work Group

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1:1 Programs (K-5)

What Can We Do to Eliminate 1:1 Programs in K-5 Classrooms?

TIPS FOR PARENTS AND TEACHERS

- Opt out of 1:1 devices.
- Keep 1:1 devices at school only; do not send home.
- Use classroom sets of devices instead of 1:1s.
- Keep devices stored out of sight when not in use.
- Avoid using devices as rewards or free-time choices.
- Set limits on screen time use in and out of the classroom.
- Choose screen-free reading/ homework assignments.
- Offer high-interest screen-free activities.
- Learn how to monitor screen time on devices.
- Request safe configuration of devices (filters, removing browsers for youngest students, disabling Siri, etc.).

TIPS FOR OPT-OUT ADVOCACY

- Seek across-the-board policy change instead of allowing for inconsistency.
- Pair policy change with community education and awareness about the benefits of screen-free or screen-minimalist K-5 classrooms.
- Advocate for a school or district whose tech philosophy outlines and enforces intentional use, rather than distracting or recreational use of technology.
- Equip and train teachers to use monitoring tools to limit in-class distractions and off-task activities.
- For teachers: If certain state or county assessments MUST be done on devices, make preparation targeted instead of allowing screens to become a default part of instruction.
- For parents: Organize and go to the school board or principal with the spirit of collaboration, backed by the information above.

Resources

- What the Massive Shift in 1:1 Computing Means for Schools (EdWeek)
- Survey by the U.S. Department of Education (National Center for Education Statistics)
- We Make More Virtuous Choices When Using Pen and Paper (Harvard Business Review)

Screens, Schools and Equity

EdTech products and 1:1 programs in particular have been hailed as a solution to stubborn equity challenges in education. But evidence is scant. Will more time on screens truly improve equity for learners? Or do traditional methods that prioritize students' relationships, pen and paper, and reading books do a better job of improving underprivileged children's learning outcomes?

Context

- Children from minority and lower socioeconomic backgrounds **already spend significantly more time on screens**. More screen time in school widens this divide.
- A **top contributor to student engagement** is strong relationships with their teachers.

How prioritizing human interaction over screens supports equity

- **Social learning:** **Classroom discussions** and **collaborative activities** are fertile ground for learning. They help students develop communication skills, listening skills, critical thinking, and a deeper understanding of the material. Purely digital lessons and games can't provide these benefits
- **Relationships:** A key **protective factor** from adverse childhood experiences is a strong relationship with a caring adult. For children who have physically or emotionally absent parents, a teacher can play this role (EdTech products cannot). Time students spend on EdTech products is time students are not spending interacting with teachers or classmates. Students crave positive **relationships**. Working on devices displaces time with teachers and classmates.
- **Distraction:** When students are using devices in school, they often end up off-task or **multitasking**. . Disrupted or fragmented attention makes it hard to retain class material.


The New York Times 2023

Dependence on Tech Caused 'Staggering' Education Inequality, U.N. Agency Says

NEWS SCIENCE & SOCIETY 2019

The learning gap between rich and poor students hasn't changed in decades

Lowest income students' learning level is up to four years behind the highest income students

Bottom Line

If EdTech reduced the education equity gap, we would expect to see it shrinking substantially over the past 15 years as time on EdTech products exploded. We haven't. As of 2019, Science News reported the gap had remained stable for decades. The gap widened during Covid, when EdTech and screen use was supercharged.

LEAD AUTHORS: Lauren Paer, Randy Freiman
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Take Action!

Screens, Schools and Equity

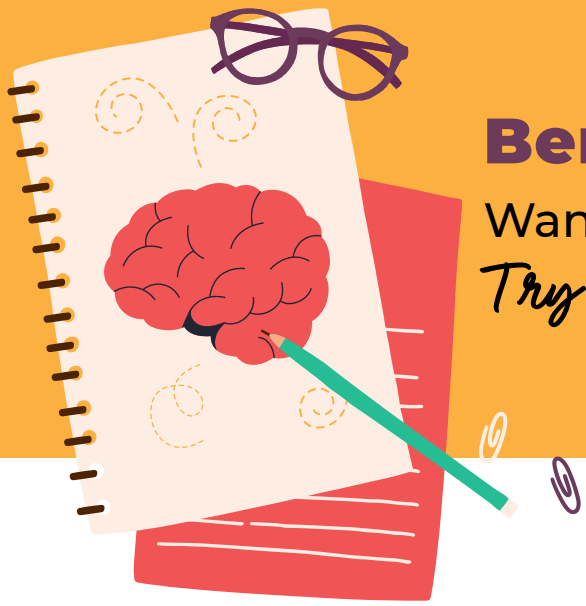
What Can We Do to Enhance Equity?

FOR TEACHERS

- **Create a supportive learning environment:** When students sense a teacher cares about them, they are far more likely to be engaged. Students notice simple acts like greeting them when they enter the classroom, even if they don't always show it. Spending a few extra minutes chatting with students at the beginning of class can help them develop a sense of belonging in your class and connection with you.
- **Give students a voice & lead regular class discussions:** Look for discussion topics your students care about and foster a classroom culture where students feel comfortable taking risks and participating. Show them that you value their opinions and are interested in what they think.
- **Use of screens and 1:1 programs sparingly:** only use technology when it adds something students couldn't get any other way.
- **Ensure equal opportunities & promote diversity:** Focus on providing equal access to educational resources and opportunities for all students, especially those from underrepresented groups. Weave diverse materials, visuals, and perspectives into your curriculum.
- **Engage families:** Involve families in their children's education to improve academic performance and student behavior. Keep families informed about what is happening in the classroom on a regular basis.

FOR PARENTS

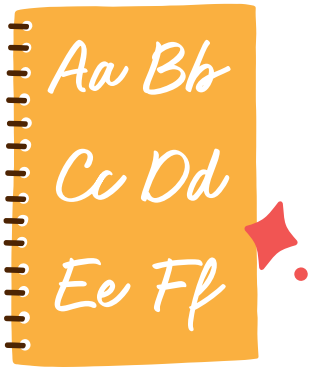
- **Encourage Reading:** Read to your younger children, and provide time for independent reading for your older children. Reading is a powerful way for your child to get ahead - it supports academic success, critical thinking, comprehension, and builds vocabulary.
- **Opt-Out of 1:1 Internet-Connected Devices (at school and at home):** Resist giving your child a smartphone for as long as possible. Dumbphones enables communication without providing them access to inappropriate content or endless scrolling. Reading is more likely to happen if a child doesn't have a smartphone. See the Opt-Out page.
- **Engage your school:** Talk to your child's principal about why you do not want them to have a 1:1 device. Use this Toolkit.



Benefits of Pencil and Paper

Want to build a better brain?

Try paper and pencil!



Handwriting vs. Typing: *Handwriting Wins!*

- Reading and creating variable handwritten styles helps develop areas of the brain used during reading.[1]
- Handwriting leads to more widespread brain connectivity.[2]
- Handwriting training teaches better letter recognition for preschoolers[3] and improves finger dexterity and muscle strength.[4]
- Writing by hand improves memory and recall of words.[5]
- Writing notes by hand increases conceptual understanding of material.[6, 7]

Reading on Paper vs. Screen Reading: *Paper Reading Wins!*

- Reading on paper is associated with better reading comprehension for students[8,9] and better understanding of chronological details of text, particularly for longer and more complex texts.[10]
- Reading on paper also promotes better focus[11] and presents fewer distractions since paper texts have no bells and whistles.
- When reading on paper, students get a stronger sense of how well they actually understand the text.[12]
- Paper reading puts less stress on the brain.[13]

Resources

Check out the references mentioned here:

Screens & Learning Action Kit
LEAD AUTHORS: Erin Shaw, Amy Warren, Liza Schlach, Katie Talarico
A project of the Screens in Schools Work Group

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Take Action!

Benefits of Pencil and Paper

What Can We Do To Build Better Brains?

BUILD BETTER BRAINS AT HOME

- Read paper books with your child from an early age, and continue to engage with paper books and articles together as they grow.
- Model reading printed books and magazines for pleasure—before bed, on vacation, on a lazy day.
- Have your child write postcards to loved ones and thank you notes for any occasion. It's a great opportunity to practice handwriting.
- Point out different fonts in your child's environment to expose them to different letter formations.
- Implement a "no screens before bed" rule to encourage healthy sleep habits.

BUILD BETTER BRAINS AT SCHOOL

- Request pencil and paper for your child at school, citing the evidence provided here.
- Meet with your child's teacher to discuss technology usage in class, including the use of computers, laptops, and e-readers.
- Encourage teachers to let students use technology only when supportive or transformative for learning, according to everyschool.org's **EdTech Triangle**.
- Frame decision-making as a partnership to promote the best learning environment possible for your child.
- Reach out to the principal and superintendent with information and for more support.
- Share this toolkit among parents and educators. Consider gathering interested parents and circulate this information among them.

Play to Learn

For children, free play—in the physical world, without screens—is not merely a break from learning, but rather an integral part of learning. Too often, play in childhood today is described as screen-based (J. Haidt). True play-based education is critical for the development of the whole child. Plus, learning through play is fun because it's how kids' brains are wired!

Play Encourages Cognitive Development

- Free play **helps develop** executive functioning skills, vocabulary, content knowledge and creative thinking skills.
- Play stimulates neurological growth.
- Play helps a child develop problem-solving skills as children learn to work through challenges and find solutions.
- Playful activities encourage creativity and imagination: children learn to use inventive thinking and adaptability.

Play Encourages Social and Emotional Development

- Free play helps develop skills such as self awareness, social-self regulation, and decision making. These foundational skills also support academic learning and success later in life.
- Through play, children learn to observe social cues, listen to others' ideas, and develop skills critical for empathy. Social play also helps children develop a shared imagination.
- Play encourages teamwork and collaboration. Group play teaches children to cooperate with others, follow a group plan and rules, and develop empathy.

Play Encourages Physical Development and Fine Motor Skills

- During play, children develop strength, muscle control, reflexes, coordination, fine motor skills, and how to take healthy risks.
- Play positively contributes to a child's health and physical development.
- Regular physical play promotes a healthy lifestyle.

Resources

- Embracing Learning Through Play (Harvard Graduate School of Education)
- The Power of Playful Learning (NAEYC)
- Learning Through Play: Benefits, Ideas, and Tips (Begin Learning)
- How Fun and Games Help Children Thrive (Healthy Children)
- The Four Letter Word Every Parent Should Know (Living Skills in the Schools)
- Jonathan Haidt on the Mental-Health Crisis and Smartphones | WSJ News

Take Action!

Play to Learn

What Can We Do to Encourage Free Play in Schools?

"Play is often talked about as if it were a relief from serious learning. But for children, play is serious learning. Play is really the work of childhood." —Fred Rogers

EMPOWER CHILDREN TO LEAD

- Create free-play areas that allow young children the opportunity to choose their activities. At home or at school, set up various stations such as building blocks, drawing/coloring, sand box, and math manipulatives that allow a child to choose their play/learning experience.
- Provide opportunities for children to interact, explore, and play without guidance from adults. Adults are nearby only to ensure safety.
- Allow students free time to engage in playful activities that explore their interests at their own pace. Encourage more recess time with fewer restrictions and rules.
- When conflicts arise, give children a chance to work out a resolution on their own before stepping in.

PROVIDE THOUGHTFUL EXPERIENCES

- Provide experiences that encourage imagination and creativity.
- Weave academic activities with play.
- Through playful games and interactions, children can learn academic skills with fewer of the pressures of formal instruction.

PRIORITIZE PHYSICAL MOVEMENT, ESPECIALLY OUTDOORS

- Set up breaks in learning, providing activities that involve physical movement.
- Allow time for outdoor play to increase fine and gross motor skills.
- Encourage safe outdoor exploration with time for stopping to make observations.

Student Data Privacy

Student data is a commodity that the multi-billion-dollar EdTech industry packages, shares, and sells to advertisers, colleges, data aggregators, and anyone else willing to pay. The "data dossiers" that schools or EdTech providers compile are valuable for profiling our children today and targeting them as future customers.

Why Worry?

In the hands of EdTech and those they share it with or sell it to, student data can negatively impact college admissions, employment, access to credit, financial futures, and more.

The massive amount of data collected by EdTech providers is also an attractive target for hackers and other bad actors (as seen with the **2025 breach of Powerschool**). Compromised social security numbers, just one example of a risk, can lead to our children's identities being stolen and their credit scores destroyed, impacting their future ability to get loans, buy homes, and get credit cards.

What information is being collected?

- **Personally identifiable information (PII)**
- **Grades**
- **Answers to tests and surveys**
- **Behavioral information**
- **Attendance records**
- **Psychological profiles**
- **Disabilities**

Laws to Protect Student Data

The primary statute for protecting student data is the Family Educational Rights & Privacy Act (FERPA). FERPA was designed in 1974—a time of mimeograph machines and calculators. In short, FERPA is outdated, does not work in our modern digital economy, and is not enforced.

Parents have little ability to prevent EdTech from accessing student data. FERPA's "school official exception" lets schools disclose student data without parental consent, as long as the school maintains "direct control" over the provider (which could be as basic as the school agreeing to a provider's boilerplate Terms of Service).

Parents cannot sue schools under FERPA because it grants the U.S. Department of Education exclusive oversight of schools' compliance with FERPA. Parents also face serious hurdles suing EdTech providers because schools, not parents, own the contractual relationship. State privacy laws generally exempt data covered by FERPA.

Take Action!

Student Data Privacy

What Can We Do to Protect Student Data?

WORK WITH YOUR SCHOOL

- Ask your principal and district leadership about opting out of ALL EdTech products or NON-CORE products (such as YouTube). Many schools have a form for this.
- Ask for books and paper-based assignments. Less screen time lowers privacy risks.

WORK WITH DISTRICT LEADERSHIP

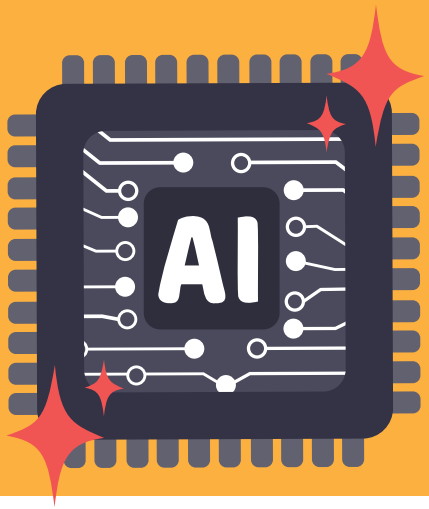
- Take your concerns to the Board of Education; most allow public comments at meetings.
- Lobby to use only EdTech that commits to not sharing student data (or using it for advertising or analytics short retention periods, and deletion of all student data at the end of the year.

WORK WITH THE TECHNOLOGY DEPARTMENT

- Ask to register your child on Apps used in school with an alias or anonymous account.
- Advocate to reduce the number of EdTech products used by your school to just a handful so that your school can truly perform the oversight necessary to protect student data.
- Ask for regular audits of EdTech providers, and for the results of those to be publicly posted.
- Insist that schools incorporate contract provisions that preclude sharing and selling of student data, and that all contracts be posted publicly.
- Request that all student data be deleted by EdTech annually.

WORK WITH OTHER PARENTS

- Band together with others: create a committee that meets regularly, logs concerns, and shares them with the Chief Technology Officer, the Superintendent, and the General Counsel.
- Lobby your federal legislators to amend and update FERPA, and to compel the U.S. Department of Education to begin enforcing FERPA with regard to EdTech access to student data.
- Contact the Federal Trade Commission (FTC) or your State Attorney General when you believe EdTech violated its privacy promises. These organizations have different tools for addressing concerns outside of FERPA.



What AI Can and Cannot Do

Companies are racing to incorporate artificial intelligence into their products, and the EdTech industry is at the front of the line. When it comes to learning, what is the problem for which AI is the solution? Do children need this? Thoughtful questions become even more important when society-wide transitions are happening as quickly as they are today. Start by remembering what AI can and cannot do.

EdTech Products Powered by AI Can:

- Generate a human-sounding response to a query or prompt. These systems imitate the form of language and so appear intelligent.
- **Automate** a variety of teaching and learning tasks: lesson-planning, grading, answering student questions, writing. Teachers must review and vet all output.
- Generate incorrect information (AI is said to **"hallucinate"** or be **"BS"**).
- Generate racist, sexist, or violent output—because they are built on data scraped from the Internet, which includes racist, sexist, or violent content.
- Include guardrails that attempt to improve safety and reliability but that are inconsistent in their efficacy. Notable failures include: **encouraging suicide**; generating dangerous advice to people with **eating disorders**; and offering information that "sounds right" but is **patently inaccurate**.

EdTech Products Powered by AI CANNOT:

- Be relied upon to provide truthful information. A student or teacher using an "AI tutor" or "AI teaching assistant" can't know when it will err, or if they will be able to identify an error.
- Understand a student's particular social, emotional, academic, linguistic, or other **context**.
- Understand the meaning of the words it reads or generates.

AI What is AI?

Artificial intelligence (AI) is a marketing term for automation systems that use large amounts of data to: make decisions (e.g., credit approvals); classify (e.g., facial recognition); recommend (e.g., news feeds, product recommendations); access human labor (e.g., Uber); and generate synthetic content (e.g., ChatGPT). See Bender & ISO.

Generative AI (e.g., ChatGPT, DALL-E, Claude) systems are complex statistical models that can generate text, images, video, and audio based on data from large training sets.

Screens & Learning Action Kit
LEAD AUTHORS: Kelly Johnston, Verena Bryan, Faith Boninger
A project of the Screens in Schools Work Group

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Take Action!

What AI Can and Cannot Do

How Can We Be More Thoughtful About the Use of AI in Schools?

AI

BEFORE ADOPTING ANY GENERATIVE AI PRODUCT, ASK

- What are your pedagogical values, goals, and practices?
- Can the product you're considering advance your values, goals, and practices? How?
- What problem does the product purport to solve? Is it a problem for you?
- What pedagogical or administrative task does the product automate?
- What are the implications of the automation?
    - Who may benefit from the automation, and how?
    - Who may be harmed by the automation, and how?
    - Who is responsible for correcting false information generated by the automation?
    - What are the negative consequences—for curriculum and teaching, assessment, student privacy—that may be associated with this automation?
    - If you adopt this product, what strategies can you implement to prevent the possible negative consequences? How may these strategies be effective? How may they be ineffective?
- What alternative (including non-digital) solutions align with your values, goals, and practices?
- How do their implications compare with those of this product?

"...the construction and operation of AI algorithms is largely outside of public view and without any public accountability. Nevertheless, school people are being pushed, both by marketers and government entities, to be seen to be in the forefront of this alleged digital revolution."
—Alex Molnar

Resources

- AI in the Workplace (Bender, 2023)
- Issues to Consider Before Adopting a Digital Platform (Boninger & Molnar, 2020)
- Neil Postman's 6 Questions (LibrarianShipwreck, 2013)

Social Media Use by Schools

Many schools use social media to communicate with students, even though some are aware that social media harms student mental health. Many of these same schools are, in fact, suing social media companies for this very reason. Schools should consider restricting all social media use on campus, including during extra-curricular activities, on buses, and possibly at school events held off-campus.

Exacerbates Harm to Students' Mental Health

Schools' use of social media:

- Pushes students to join social media, undermining their ability to stay off.
- Requires students to frequently check social media, which is designed to be addictive.
- Provides implicit endorsement of social media by schools.
- Further enmeshes social media into student's lives, adding another dimension to their social media world.
- Undermines parents' authority and ability to keep their children off social media.

Links Between Social Media and the Youth Mental Health Crisis

- **More than 200 school districts are suing social media companies**, stating that rising mental health problems among their student body are largely driven by social media. **Citation**
- The Surgeon General called for warning labels on social media. He says, "There are ample indicators that social media can also have a profound risk of harm to the mental health and well-being of children and adolescents."
- Research by Jonathan Haidt and Jean Twenge **highlights the sharp rise in youth mental health issues** concurrent with the rise in smartphone use and demonstrates why other **potential causes are unlikely to be responsible**.

Resources

- **Screen Time Action Network** letter to Department of Education
- **Jonathan Haidt's** Social Media collaboration **document**
- Socialmediaharms.org
- 200+ schools suing social media companies
- Surgeon General Advisory

LEAD AUTHORS: Cris Rowan, Lauren Paer
A project of the Screens in Schools Work Group

screen time action network at fairplay

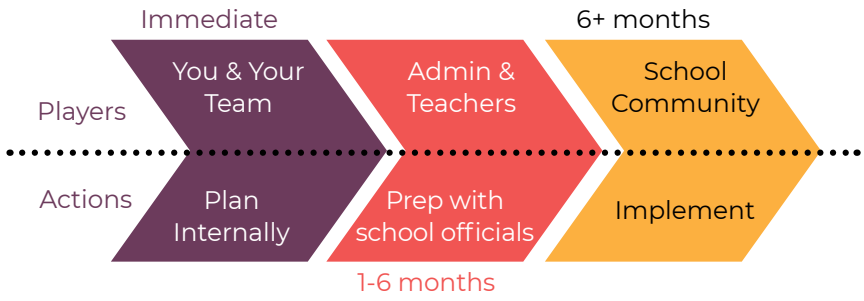
Take Action!

Social Media Use by Schools

What Can We Do to Limit Social-Media Use in School?

Creating an action plan for a healthy, social media-free environment is a process best achieved through teamwork. While you will likely be met with resistance by some, student wellbeing and academic success outcomes will be worth your efforts.

TIME FRAME TEMPLATE



PLAN WITH OTHER PARENTS

- Build your team. Seek out like-minded parents to work with. Look for champions who work for your school.
- Educate yourself and your team; be prepared with research and facts.
- Prepare for opposition. Listen respectfully to those who disagree and consider their ideas; look for opportunities to turn them into teammates.
- Identify communication alternatives to social media, e.g. using the student data management system.
- Identify alternate activities for students to replace time spent on social media.

WORK WITH SCHOOL OFFICIALS

- Develop and implement an education plan for all stakeholders.
  - Engage administrators and school counselors for best program delivery. Consider “train the trainer” or “peer support” models for efficiency.
  - Suggest hosting forums where stakeholders can share their opinions.
  - Highlight salient facts:
    - Schools’ use of social media encourages student use.
    - Surgeon General and schools recognize that social media harms student mental health.
    - Social media use creates conflict and behavioral problems at school.
- Host separate forums for parents, students and teachers. Share facts/research. Listen to opinions/concerns.
- Determine social media restriction specifics.
  - Which communication alternative will be used?
  - Consider a “phone-free school” model for students.
  - Decide action steps and timeframe.
  - Designate a responsible person for each action step plus follow-up protocols.

Opting Out of EdTech

Parents may not be able to change their school district's policy on EdTech, but they very likely can have a say in their own child's exposure to it.

What's bad about EdTech?

- According to the EdTech industry's own estimate, the average school district **uses 2,739 applications** throughout the year.
- An astounding **96% of applications used in schools** sell children's data to third parties. This includes usage statistics and personally identifiable information (PII), like birthdates, behavior records, test scores, and user behavior.
- Software Development Kits (SDKs) are present in **75% of applications used in schools**. SDKs track and send user geo-location data, PII, and more, exposing the platform to external monitoring by third parties (without parental consent or knowledge).
- In a sampling of **25 mandatory school apps**, the independent organization Internet Safety Lab scored 56% as "Do Not Use," and scored an additional 20% as "High Risk."

Educational reasons to opt out of EdTech

Isn't EdTech beneficial to learning? According to a recent **UNESCO report**: "There is little robust evidence on digital technology's added value in education" and a lot of the evidence that does exist "comes from those trying to sell it."

Too much **screen time** is linked to emotional dysregulation. It negatively impacts literacy and mathematics in school-aged children. Opting a child out of excessive EdTech can benefit the child's learning experience.

Drawbacks to opting out of EdTech

There are a few things to consider:

- Most schools consider EdTech an all-or-nothing proposition and aren't prepared to offer parents a middle-ground alternative.
- Not all teachers are able to easily accommodate parent requests to opt out of EdTech and may resent the extra work they will most likely be asked to shoulder.
- Peer dynamics can be tricky, and your child will be asked why they are doing something different from the rest of the class.

Resources

- The Screentime Consultant's UnPlug EdTech Toolkit
- Dr. Dunckley's Opt Out Letter
- EdTech Law Center
- Internet Safety Labs
- UNESCO report Technology in Education
- ACLU Digital Dystopia Report

Take Action!

Opting Out of EdTech

10 questions to ask before opting out

It's critical to have a thorough understanding of how technology is integrated into your child's daily activity; how much of the burden will fall on teachers to accommodate your request; and how much risk the school's general attitude toward EdTech will impact your child's experience.

10 QUESTIONS

1. How does our school use screen-based technologies for teaching and learning?
2. Does our school have a 1:1 program? Do devices come home or stay at school?
3. Does our school teach typing skills before handing out devices?
4. Are students required to sign a User Agreement or Technology Use Contract?
5. What types of filters, monitoring software, firewalls, or controls are used at our school on school-issued or school-owned devices?
6. What is the school's privacy policy around student data? Who retains that data?
7. Does the school use social media platforms to communicate with parents, coaches, students, or staff?
8. How are students taught about topics such as safe Internet searching, identifying mis- or dis-information, validating sources, plagiarism, digital citizenship, cyberbullying, and problem-solving when inappropriate content or behaviors occur?
9. Is technology used as a reward, such as during free time or for certain behavior?
10. For families who choose to opt out of some or all school screen-based technology, what alternatives are available?

WHAT SHOULD I DO NEXT?

You'll need to choose what's best for your family, and that's not easy! If you decide that opting out is the best course of action, we recommend sending an email to request opting your child out of 1:1 device programs and limiting the exposure your child has to EdTech applications. You can find an opt-out letter template **here**.

When you opt out, prepare your child to respond to peer questions about why. Some responses:

- *"I find I learn things better with paper and pencil."*
- *"My family is making a different choice right now."*
- *"I'm way less distracted when I don't use a computer for school."*

If you receive pushback or retaliation from the school, you may need additional support. For more information on understanding your rights and potential litigation options, visit **EdTech.Law**.

Phone-Free Schools

Phone-Free Schools—schools where cell phones are locked away from the first bell to the last bell of the school day—is a movement taking off in schools across the country. Schools that have implemented phone-free rules see more engagement with learning and more social interaction among students.

Six Reasons to Go Phone-Free Bell-to-Bell

Improves academic focus
Fewer distractions: Cell phones and other smart devices are a major distraction during class, leading to decreased student attention and participation.
Better academic performance: Studies show that students perform better academically without the distraction of cell phones.

Enhances social interaction
Encourages face-to-face communication: Interacting without phones promotes better social skills and strengthens peer relationships.
Reduces cyberbullying: Students feel more free to act authentically when there's no threat of being recorded, and the incidence of cyberbullying during school hours can be significantly reduced.

Boosts physical activity
Increases active breaks: Students are more likely to engage in physical activities during breaks, contributing to better physical health.

Improves classroom management
Minimizes disruptions: Teachers can maintain a more controlled and focused learning environment, with more learning time for all students.
Rules are easier to enforce: A schoolwide policy aids uniformity.

Enhances mental health
Reduces anxiety: The constant need to check phones can create anxiety. A cell-phone–free environment helps alleviate this stress.
Reduces isolation: Smartphone technology can make young people feel more isolated, which can lead to low self-esteem and depression.

Promotes responsibility and time management
Increases self-reliance: Students learn to manage their time and responsibilities without relying on digital reminders.
Encourages preparation: Without the crutch of cell phones, students must learn to come to class prepared with necessary materials.

Take Action!

Phone-Free Schools

Fairplay and Phone-Free Schools Movement have developed a comprehensive guide to advocate for phone-free schools. Click here for the Ambassador's Toolkit.

How Can We Advocate for a Phone-Free School?

START CONVERSATIONS

- **Conversations:** Find other parents and have conversations with them about the advantages of phone-free schools.
- **Connect interested parents:** Through your conversations, identify parents who share the same concerns. Meet with those parents to discuss a phone-free policy, and how they can start conversations with their child's teachers, principal, and school board.
- **Host a book group:** Jonathan Haidt's "The Anxious Generation" has a wealth of information for parents and teachers.

GATHER DATA AND RESEARCH

- **Present evidence:** Collect data and research that supports the benefits of a cell-phone–free school to present to other parents and school officials.
- **Compile testimonials:** Gather testimonials from teachers, students, and parents from schools that have successfully implemented a phone-free policy.

CREATE A PETITION

- **Petition for change:** Draft a petition (or use this template) outlining the reasons for a cell-phone–free policy. Gather signatures from parents, teachers, and community members.
- **Present to school administration:** Once a significant number of signatures are collected, present the petition to the school administration and school board.

UTILIZE COMMUNICATION CHANNELS

- **Newsletters and emails:** Send regular updates and newsletters to keep parents informed and engaged.
- **Join a group:** Groups like Fairplay's Screen Time Action Network are a terrific resource and support for anyone concerned about cell phone use in schools.

ENGAGE WITH SCHOOL LEADERSHIP

- **Attend board meetings:** Regularly attend school board meetings to voice concerns and present evidence supporting the phone-free policy.
- **Advocate for policy change:** Use the meetings as a platform to advocate for the implementation of a cell-phone-free policy. Use the comment periods to share evidence and petitions.

Organizing Parents on a School Level

If you're feeling fired up by the information in this toolkit and what you see in your child's classroom, the first step to working toward change at your school will be gathering like-minded parents and community members to join the cause.

Parent advocacy works! Think of parent-led health advocacies like Mothers Against Drunk Driving, which was started by one mother in 1980, and has helped reduce the amount of deaths related to drunk driving by half.

Organizing Strengthens School Communities

A key characteristic of high-performing schools is a high level of parent and community involvement. Studies show multiple benefits to students: higher grade point averages, enrollment in more challenging programs, better attendance, improved behavior, and better social skills.

Parent engagement is increasingly supported. Since 2018, the U.S. Department of Education has invested nearly $100 million to support family engagement. The Carnegie Corporation of New York, a partner, emphasizes that "family engagement must be seen as a core element of effective and equitable education practice."

Working together is more effective than working alone. If you find each other and share ideas and resources, you amplify each other's effect! Community schools are one success story.

Parent support groups keep individual parents clear, grounded, and healthy. Local organizing is often arduous and tiring. When we have others on the same path as us, we can give and receive support, which reduces our anxiety and stress. We are stronger together.

Resources

- Organizing for School Reform
- Twenty Years, Ten Lessons: Community Schools

LEAD AUTHORS: Sebastian Steinbach, Gretchen Shanahan
A project of the Screens in Schools Work Group

screen time action network at fairplay

Take Action!

Organizing Parents on a School Level

Where Can We Begin in Organizing Parents?

Start here!

- **Every movement needs a group of leaders, and it begins with you.** Are you committed to taking this on?
- **Empower other leaders. Invite diversity and co-creation.** Who can you invite to join you?
- **Cultivate critical skills.** Assess yourself and look for co-leaders who complement you. Qualities:
  - Passionate and driven
  - Respectful and open
  - Relational and supportive
  - Strategic and organized
- **Identify who you can approach.** You can find co-leaders and allies among teachers, principals, superintendents, school counselors or therapists, parents, parent organizations (PTA, PTO, Dad's clubs, etc.), teachers union members, school board members, etc.

- **Get the "lay of the land."** What are other parents worried about or interested in? What is the school doing or not doing? After some discussions, a natural direction will present itself. The direction might involve one-on-one conversations, additional outreach, organizing a book discussion, giving a presentation, hosting a panel of experts, or something entirely different. Be open, curious, and willing to try new things.
- **Don't try to convince anyone.** Share your passion, authentically, and you will attract like-minded individuals.
- **Embrace trial and error.** Every obstacle is an opportunity for growth. Remember that there is no blueprint for this! You will evolve through trial and error, iteration and adaption. You will have to learn new skills on this journey—and that's awesome!
- **Seek support.** The Screen Time Action Network has multiple work groups and a robust resource library to support your efforts. Aligned community organizations like Heed The Children, Everyschool, or the Phone Free School Movement offer additional resources and community support to keep organizers like you motivated and going.