



# **Screen Time Guidelines, Impact on Children, and Alternatives**

**Newhall Session 2  
February 12, 2025**

# **Schools NEXT: Parent Connect**

## **Who are we?**

Schools Next: Parent Connect empowers parents to foster balanced literacy and digital habits that support children's overall cognitive, language, and social-emotional development.

# Agenda

1. Introductions and Overview
2. How we got here: A quick timeline
3. Screen Time Use: Digital natives or digital captives?
4. Impacts of Screen Time
  - Cognitive Development
  - Social and Emotional Development and Mental Health
5. SMART Alternatives
6. Next Steps/Practice/Resources



# Introductions

Who is in the room?

## At your table share...

1. Your name
2. Ages of your children
3. (Fun fact, why did you join today, etc?)



# Impact of Screen Time



# Positive Impact:

How has technology changed and improved your daily life?



# Negative Impact:

What challenges have you faced  
with the use of technology?



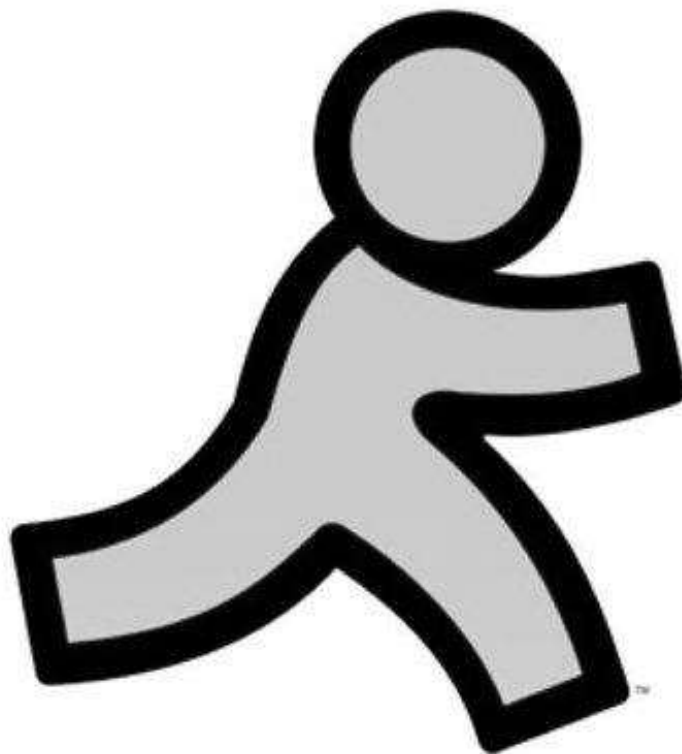
**We aren't here because we are not  
worried. We are here because we are.**





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# A Decade of Change

- App stores launches (2008)
- Likes/replies/tweets and push notifications introduced (2009)
- Forward facing cameras (2010)
- Snapchat emerges (2011)
- Infinite scroll and algorithmic feeds introduced into social media (2011-16)
- Facebook buys Instagram (2012)
- Smart phones become a majority of phones in US (2015)
- TikTok available worldwide (2018)
- Covid 19 hits and the world goes virtual (2019-20)



# TV show finales by decade

1983: 105.9 million watched MASH finale

1998: 76.3 million watched Seinfeld finale

2004: 52.5 million watched Friends finale

2019: 18 million watched Big Bang Theory finale



# A Decade of Impact

- Technology Use
- Attention Span
- Social Awareness
- Cognitive Processing
- Physical Health, Mental Health & Fitness
- Academic Outcomes
- Fine Motor Skills
- Durable Skills Development

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The logo features the word "RISE" in a serif font, centered between two sets of three curved lines that resemble an open book. Below this, the words "SCHOOL PROGRAMS" are written in a smaller, sans-serif font.

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# Use of Technology

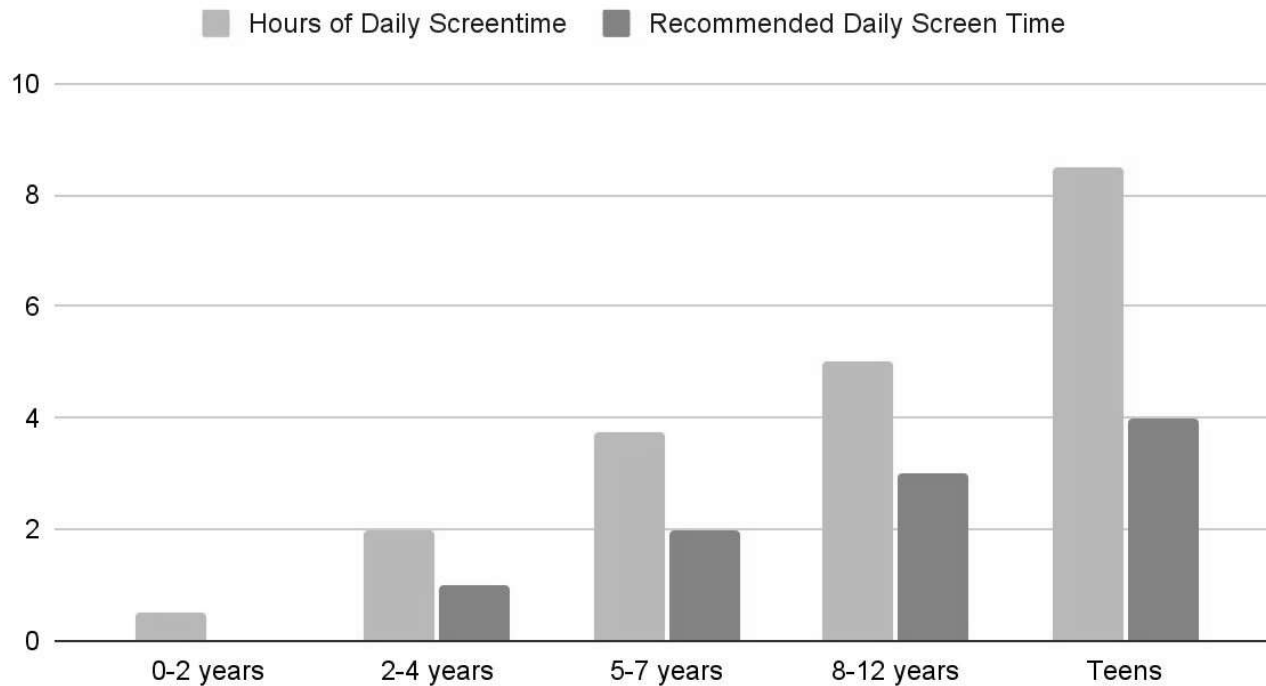
- Children aged 8-12 spend an average of **4-6 hours per day** watching or using screens, while teens spend up to 9 hours per day.

*(American Academy of Child & Adolescent Psychiatry, 2020)*



# Screen Time use by age

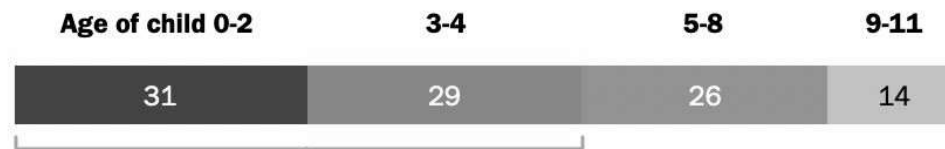
Actual vs recommended screen time by age



# Smartphone usage

## Many parents say their smartphone-using child began engaging with the phone before age 5

*Among U.S. parents of a child age 11 or younger who uses a smartphone, % who say their child began engaging with a smartphone between the ages of ...*



**NET children who began engaging with a smartphone before age 5: 60%**

Note: If parent has multiple children, they were asked to focus on one child when answering this question. Those who did not give an answer are not shown.

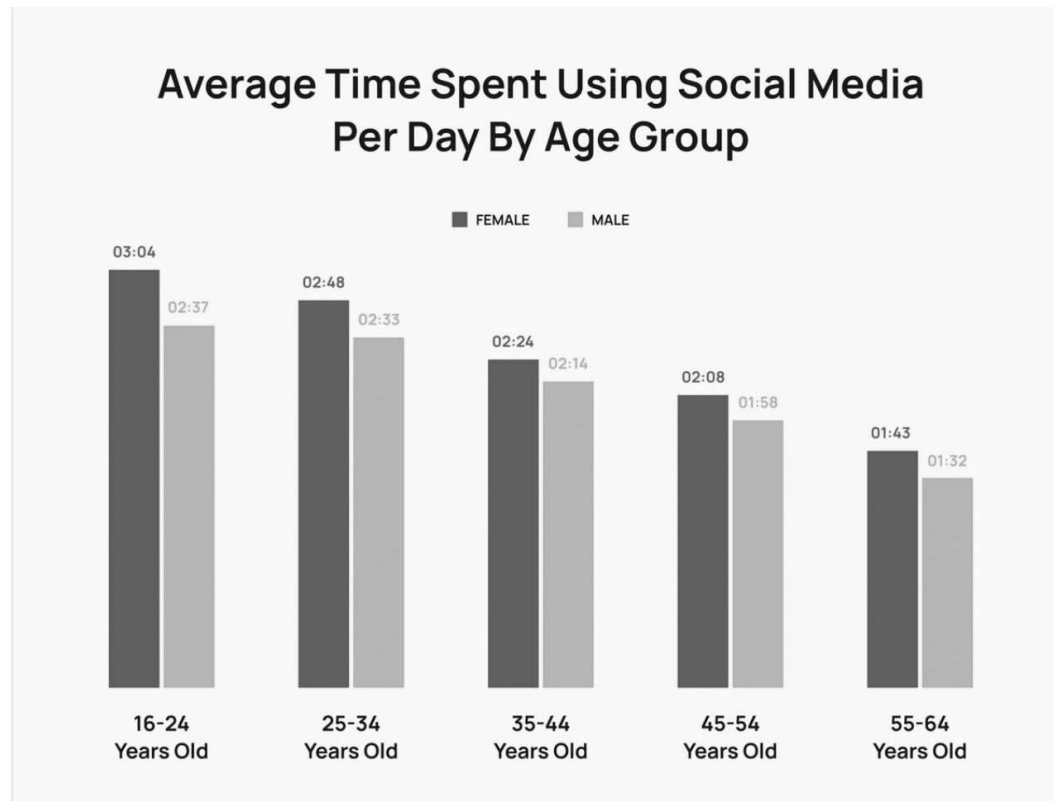
Source: Survey of U.S. adults conducted March 2-15, 2020.

"Parenting Children in the Age of Screens"

PEW RESEARCH CENTER



# Social media use by age group





# On average...

The average screen time per day for Americans is **7 hours and 3 minutes** (backlinko.com Mar 11 2024).

But not all screen time is equally valuable, or has an equal impact on the user. In part because of the content, and in part because of the user.



# Impact of Screen Time on Cognitive Development

- Attention Span
- Ability to read for a sustained period



# Cognitive Processing

**Early Exposure to Screens:** Early and excessive screen time can interfere with the development of self-control skills, which are essential for staying focused and completing tasks in the classroom.

**Development of Executive Function:** The prefrontal cortex, responsible for executive functions like self-control, doesn't fully mature until around age 25. This means many students struggle to focus until their self-regulation abilities develop.



# Cognitive Processes

- **High screen time can overload cognitive processes, leading to diminished cognitive control and multitasking ability.**

(National Institutes of Health, 2018)

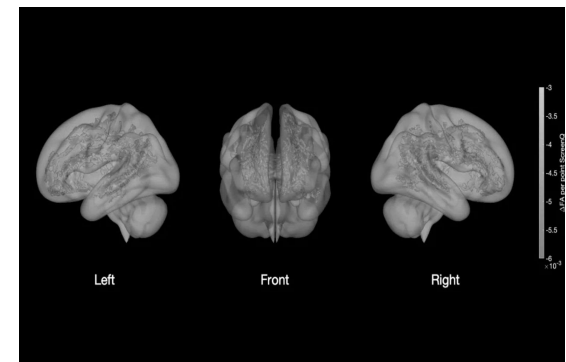
# Screen Time and the Brain: An Empirical Study

## Study Sample:

- 47 brain-healthy children (27 girls and 20 boys)
- Ages: Pre-kindergarten

## Methodology:

- Utilized diffusion tensor imaging (DTI) MRI
- Focus on the brain's white matter, which organizes communication between gray matter regions



Rogers, K. (2019, November 4). *Screen time linked to lower brain development in preschoolers, study finds*. CNN.  
<https://www.cnn.com/2019/11/04/health/screen-time-lower-brain-development-preschoolers-wellness/index.html>

# Screen Time and the Brain: Key Findings

## White and Gray Matter Explained:

- **Gray Matter:** Contains the majority of brain cells, directing bodily functions.
- **White Matter:** Composed of fibers, forming connections (tracts) between brain cells and the nervous system, connecting various brain regions for communication. Lack of development in these "cables" can slow brain processing speed.

# Screen Time and the Brain: An Empirical Study

## Cognitive Tests:

- Children underwent cognitive assessments before the MRI
- Parents completed a new screen time scoring system by the American Academy of Pediatrics (AAP)

## Screen Time Scoring:

- Measures access, frequency, content, and interaction
- Examples include: use during meals, bedtime, type of content, and parental engagement

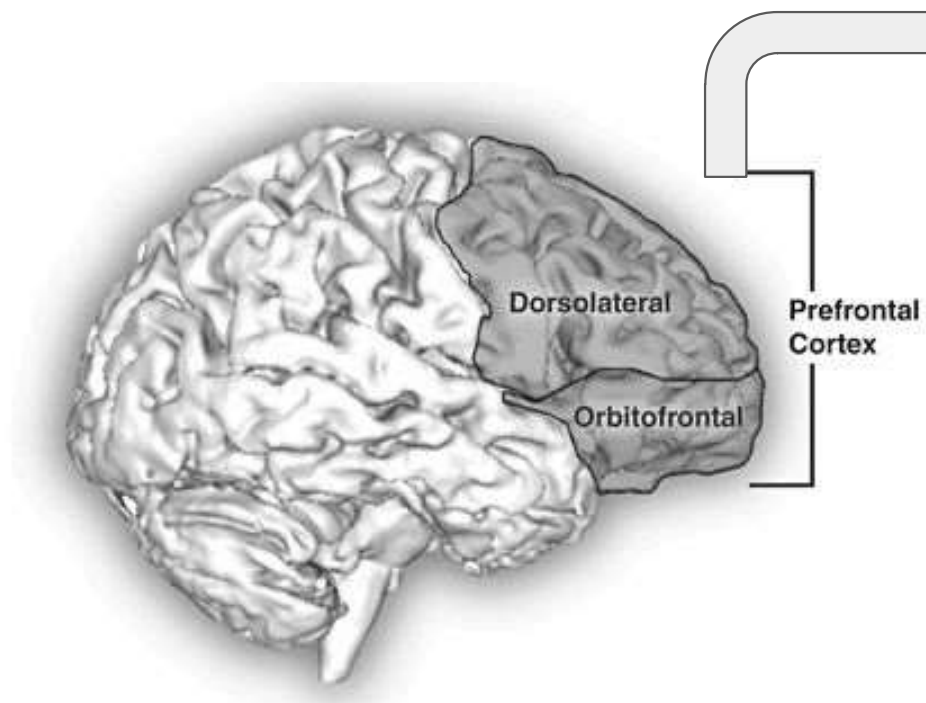


# Screen Time and the Brain: Key Findings

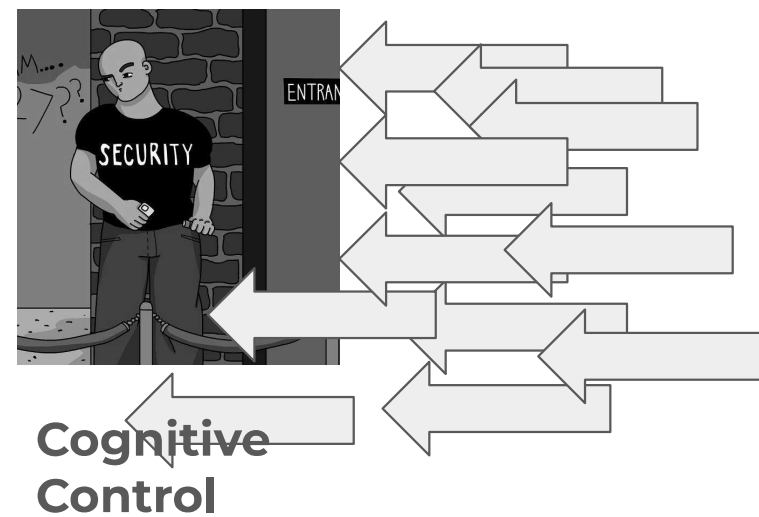
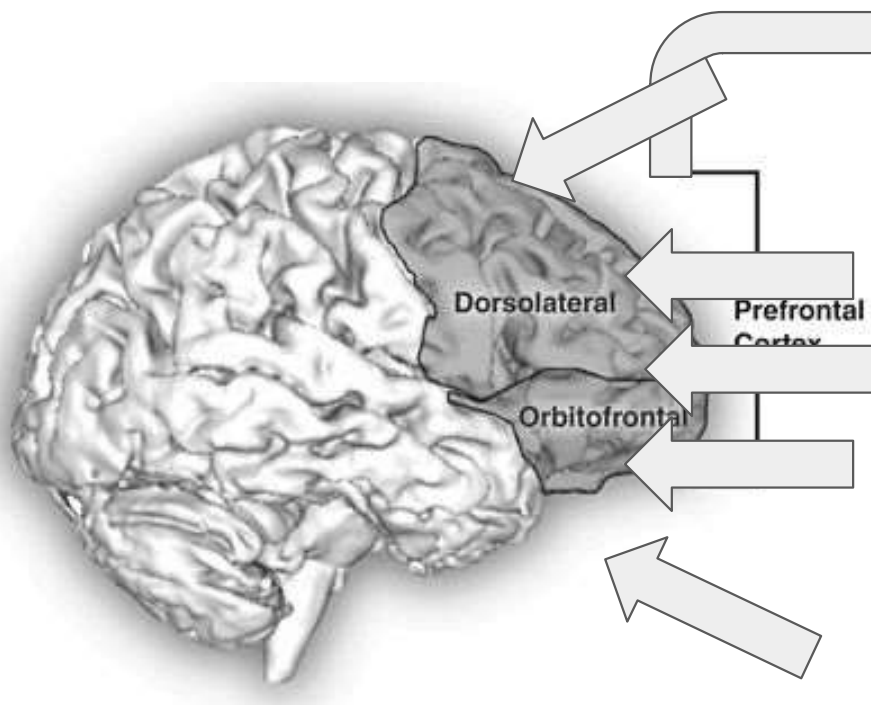
## Study Results:

- Children exceeding AAP's screen time recommendation (1 hour/day) without parental interaction showed more disorganized, underdeveloped white matter.
- White matter tracts responsible for executive functions were particularly affected, leading to slower cognitive processing.

Rogers, K. (2019, November 4). *Screen time linked to lower brain development in preschoolers, study finds*. CNN.  
<https://www.cnn.com/2019/11/04/health/screen-time-lower-brain-development-preschoolers-wellness/index.html>



**Cognitive  
Control**



## Technology Impact on...

### Attention Span

#### Children who spend...

- More than **2 hours a day** on screens being 1.6 times more likely to have attention problems.  
(American Academy of Pediatrics, 2016)
- More than **7 hours a day** are twice as likely to be diagnosed with ADHD.  
(JAMA Pediatrics, 2018)



# Impact of Screen Time on Social and Emotional Development and Mental Health

- Social awareness and interaction
- Mental health



# What is Social and Emotional Development?

**Self-Awareness:** Recognizing and understanding one's own emotions.

**Self-Regulation:** Managing emotions, behaviors, and reactions in different situations.

**Social Awareness:** Understanding and empathizing with others' emotions and perspectives.

**Relationship Skills:** Building healthy, positive relationships through communication, cooperation, and conflict resolution.

**Responsible Decision-Making:** Making choices that are thoughtful, respectful, and considerate of others.

# Social Awareness & Social Interaction

## Children who frequently use screens...

- less likely to engage in **face-to-face interactions**.  
(Developmental Psychology, 2017)
- more likely to struggle with **interpreting social cues** and engaging in **social interactions**.  
(Pew Research Center, 2018)

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# What the research says..

**American Academy of Pediatrics (2016):** "Excessive screen time can impair the development of critical social skills and emotional awareness in young children."

**University of Michigan (2019):** "Children who use screens more than 2 hours per day are at higher risk of developing social and emotional difficulties."

**Common Sense Media (2021):** "Screen time can interfere with face-to-face interactions that are key to emotional development and social understanding."

### **Limited Face-to-Face Interaction:**

Excessive screen time means less in-person socializing, which is crucial for learning empathy, non-verbal communication, and emotional cues.

### **Difficulty Reading Emotions:**

Children who spend a lot of time on screens may struggle to interpret facial expressions or tone of voice, which can affect relationships with peers and adults.

### **Lower Emotional Intelligence:**

Social interactions help build emotional intelligence. Without regular practice, kids may find it harder to express their feelings, recognize others' emotions, or cope with stress.

### **Increased Social Isolation:**

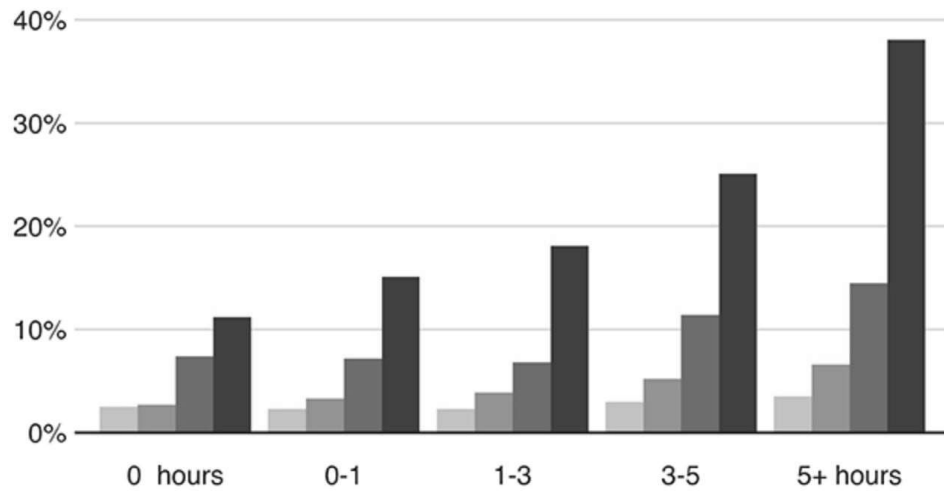
Over-reliance on technology may lead to social withdrawal and a lack of confidence in social settings.



## Children's use of social media and depression

Daily usage, UK 14-year-olds

■ All boys ■ All girls ■ Boys with depression ■ Girls with depression



Source: University College London

BBC


While our children may not feel it, the research is clear and the link is staggering.




# Mental Health

## High Screen time linked to...

- Experiencing symptoms of **depression, anxiety, and other mental health issues.**  
(National Institute of Mental Health, 2018)
- Increased feelings of **loneliness and social isolation** among adolescents.  
(Journal of Adolescence, 2019)




“Compulsive usage correlates with a slew of negative mental health effects like loss of analytical skills. Memory formation, contextual thinking, conversational depth, empathy and increased anxiety” ... *in addition to* “interfering with essential personal responsibilities like sufficient sleep, work school responsibilities and connecting with loved ones.”




“Minors do not have executive  
function to control their screen  
time”

“Tiktok is particularly popular with younger users who are particularly sensitive to reinforcement in the form of social reward and they have minimal ability to self-regulate”



“Meta has researched how to  
attract users as young as the age of  
4”





**S**      **Social Interaction**  
**M**      **Moderation**  
**A**      **Alternatives**  
**R**      **Role Model**  
**T**      **Tool**



# Reducing Screen Time

- Determine how much screen time you will allow  
Use parental control apps such as the **\*Screentime App** to monitor and manage
- Be clear and consistent about expectations
- Lock computers and check phones at the door
- No devices in bedrooms or at meals
- Be a role model

# Alternatives to Screen Time

- Create appropriate tasks that earn screen time (after school responsibilities/chores)
- Active or creative play (playing outdoors, riding bikes, scooters, make believe play, dress-up, etc)
- Stock up on art supplies (have a box ready with a variety of supplies)
- Carry a pen and pencil wherever you go
- Allow for boredom (stock up on board games and puzzles)
- Institute electronic sabbaticals



# More Alternative Ideas

- Reading, Storytelling, Visit the Library Regularly
- Music, Karaoke, Dancing
- Building and Construction (blocks, legos, cardboard boxes, etc)
- Pets and Animal Care
- Sensory Play (sensory bins and Playdough or Air Dry Clay to sculpt and create with hands-on materials)



# Parent to Parent...

- Don't fall for false choices
- The R might be the most important part of SMART



# Self Reflection & Practice:

Take a few moments and think about about how many hours you spend a day on your phone/iPad/computer doing tasks listed...

# Technology Use Tracker

Technology Use Tracker

Task/Activity	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Watching videos (YouTube, Netflix, etc)							
Social Media (Instagram, Facebook, TikTok, etc)							
Video games					1		
Educational apps or websites							
Homework or school-related activities							

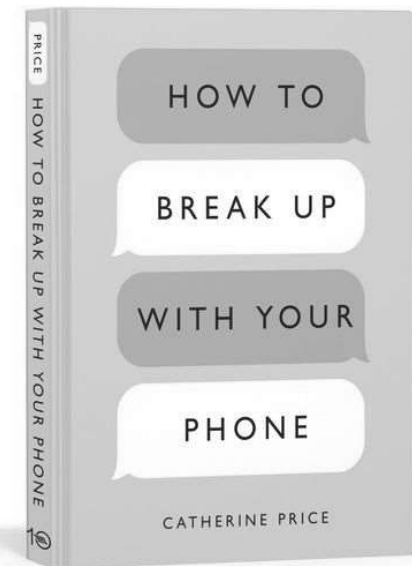
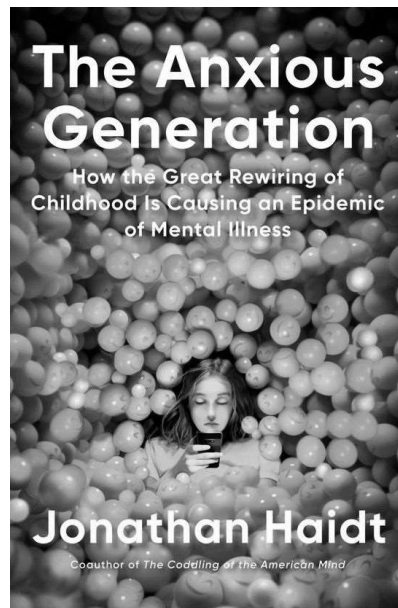
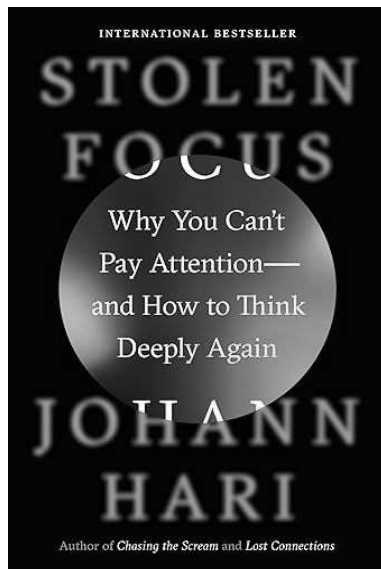
# Next Steps: Bridge to Practice



1. Continue to journal and reflect on how much time you spend on your devices.
2. Start tracking how your child (children) spend on their devices:
  - a. How are they using technology?
  - b. Which websites/apps are they using?
  - c. What kind of activities are they doing?
  - d. How much time do they spend?



# Resources



# Additional Resources

*Frank on podcast with Schools Next Partner Gene Tavernetti: <https://share.transistor.fm/s/065863ad>*

*Industrial-scale harm. <https://www.afterbabel.com/p/industrial-scale-harm-tiktok>*

*Gen Z, Social Media is Optional. <https://www.afterbabel.com/>*

*Are You Struggling with Your Own Screen Time? <https://www.afterbabel.com/>*



# Schools Next

*If you would like to receive a View-Only copy of the presentation, please email:*

*[Support@Schoolsnext.org](mailto:Support@Schoolsnext.org)*





**“Not everything that is faced can be  
changed, but nothing can be changed  
until it is faced.”**

James Baldwin



# Closing

# Reflections



What are some big takeaways from today's session?

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