



Technology and Digital Media in the Early Years: *Myths, Provocations and Nudges*

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It depends... I wonder... Seeking to understand what is wonder full and what we still need to wonder about



Our context: Analog adults in the digital age



*We live in a society
exquisitely dependent on
science and technology,
in which hardly anyone
knows anything about
science and technology.*

Carl Sagan, astronomer

What have we learned since 2012?

- 2012, NAEYC & Fred Rogers Center joint position statement on *Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8*
- Reports, guidelines, position statements from **Rand Corporation** (2014), **Zero to Three** (2014), **American Academy of Pediatrics** (2016), **U.S. Departments of Education & Health and Human Services** (2016) **Common Sense Media** (2017)



When used intentionally and appropriately, technology and interactive media are effective tools to support learning and development.

NAEYC & Fred Rogers Center, 2012

What have we learned since 2012?

- *Physical Activity/Movement, Sleep and Sedentary Guidelines* from Australia, Canada, New Zealand (2017)
- *Sedentary Behaviors in Today's Youth*, American Heart Association (2018)



Circulation

AHA SCIENTIFIC STATEMENT

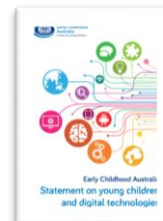
Sedentary Behaviors in Today's Youth: Approaches to the Prevention and Management of Childhood Obesity
A Scientific Statement From the American Heart Association



American Heart Association®

What are we learning this year?

- **2018, Early Childhood Australia** *Statement on young children and digital technologies*, 2018, September
- **2018, Common Sense Media.** *How Tech is Changing Childhood: And What We're Doing About it*
- **2018, Zero to Three,** *Screen Sense: Setting the Record Straight. Research-based guidelines for screen use for children under three years old*
- **2018, Global Family Research Project and Carnegie Corporation of New York.** *Joining Together to Create a Bold Vision for Next Generation Family Engagement: Engaging Families to Transform Education*



What are we learning this year?

- 2018, American Academy of Pediatrics, *The Power of Play: A Pediatric Role “prescription” for play*
...real-time social interactions remain superior to digital media for home learning.
- 2018, Lego Foundation, *Play Well Report 2018*
Children are pioneering “fluid play” where they naturally engage in play that seamlessly blends real world, imaginary and digital play
- 2018, *Designing for Children Guide*
Integrating children’s (0-18) rights and ethics into the heart of the design process



Moving from myths to truths and nudges

- The iPad will destroy childhoods
- All screens are created equal
- Children are the future
- Technology use is isolating and interferes with social and emotional development
- Grown-ups are managing their media well
- Educators lack the knowledge, skills and experiences to be role models and media mentors

MYTHS

PROVOCATION

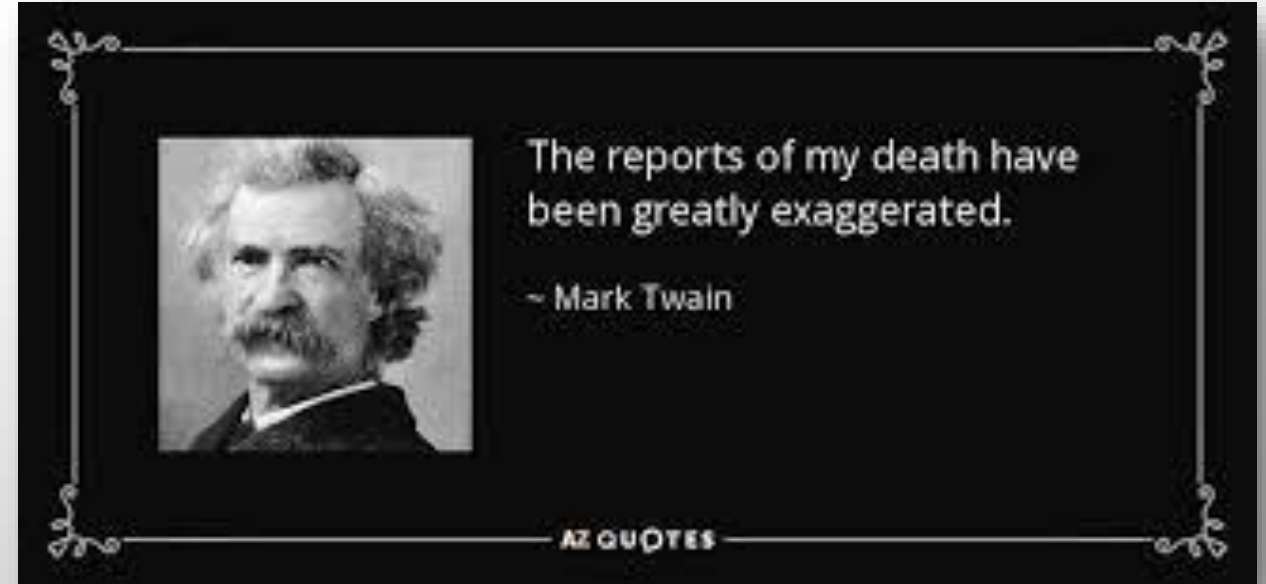
nudge



MYTHS

Despite claims to the contrary, the iPad hasn't killed...

- ✓ Childhood
- ✓ Social interactions
- ✓ Play
- ✓ Hands-on learning
- ✓ Outdoor time



PROVOCATION

We now have consensus on what matters most

- Child development theory, DAP, the whole child
- Early childhood “essentials” are non-negotiable
- 3Cs – Content, Context, Child
- Creating media and storytelling
- Relationships
- Family engagement
- Media mentors



We need more research to know

Children are growing up in an “always on” digital culture

- What do we know about evidenced-based and developmentally-informed benefits or harms?
- How does 40+ years of television research inform children’s use of digital devices?
- What are the implications of children using technology tools that were designed for adults – iPhone, iPad, Alexa?
- What do we need to know about digital well-being for young children and their families?

How do we move from screenworried to screenwise?

MYTHS

All screens are created equal

- Television or video monitor
- Laptop and desktop
- Smartphone
- Tablet with apps
- eBook reader
- Digital camera
- Digital microscope
- Wearable



The magic is in the child, not in the device. Gail Lovely



PROVOCATION

Avoid the either/or false dichotomy

- It's not all tech or no tech
- It's not tech or play – it can be digital play
- It's not tech or nature – it can be digital nature
- It's not tech in preschool or virtual preschool



Understand beneficial screentime

- Active **not** passive or sedentary
- Interactive **not** isolating
- Inclusive **not** exclusive
- Enhancement **not** displacement
- Meaning making **not** meaningless
- Creation **not** consumption
- Tool for learning **not** teaching



Children are the future

Children are here right now. Wonderful todays = future-ready kids

- Communicating
- Collaborating
- Critical thinking
- Problem-solving / Solution-seeking
- Decision making
- Planning and reflecting
- Creative thinking



Children are people. They grow into tomorrow only as they live today. John Dewey



PROVOCATION

Children need ~~21st~~ ANY century dispositions

- Playing well with others
- Demonstrating self-awareness
- Being adaptable
- Being persistent and resilient
- Knowing they're smarter than the tech

Rather than pushing children to think like adults, we might do better to remember that they are great learners and to try harder to be more like them.” Seymour Papert



Affordances of multi-touch devices

- Collect and curate artifacts
- Document experiences
- Share what you're learning
- Take photos
- Record audio
- Shoot videos
- Animate
- Make, tinker, build
- Code
- Create art
- Write music
- Tell your story
- Revisit



*Easy enough for
an adult to do.*
Gail Lovely

MYTHS

Technology use is isolating

- The “how much” and “passive” use screentime debates
- Inappropriate content and commercial messages (*Advertising in Young Children’s App: A Content Analysis*)
- Displacement/replacement of developmentally essential activities
- Negative impact on social-emotional development
- Negative impact on health and well-being
- Increased sleep disruptions and lack of quality sleep



*Spend less time monitoring
and more time mentoring.*
Devorah Heitner,
Screenwise



PROVOCATION

Relationships matter most

- Young children learn best in the context of interactions and relationships with attentive, responsive, caring adults
- Use tech to promote healthy social and emotional development
- Using media together leads to more learning

Enjoy Screens. Not too much. Mostly with others.
Anya Kamenetz, *The Art of Screen Time*



nudge

Use interactive media that invites and encourages interactions with others



MYTHS

Grown-ups are managing their media well

Do you ever feel digitally preoccupied, distracted, dependent, disconnected, isolated, ignored?

TIP:
Practice
What
You
Preach



- Are we paying (enough or too much) attention to unintended consequences?
- Children's are confused when screen time rules for grown-ups are different than for children
- From *Do as I say, not as I do* to *Do as I say and as I do*

PROVOCATION

The more you connect the less you connect

- Remember that young children learn media habits from the adults in their lives
- Reimagine the screentime debate as an adult issue first
- Develop the capacity in adults to become mindful media mentors



*"Connection is inevitable,
distraction is a choice."*
Alex Soojung-Kim Pang, The
Distraction Addiction

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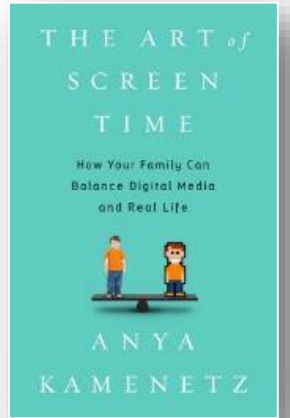
Learn to live well with media

*Enjoy Screens.
Not too much.
Mostly with others.*

*Anya Kamenetz,
The Art of Screen
Time*

*Our focus should be on living
well with media rather than
opposing or restricting it.*

*Dr. Michael Rich, The
Mediatrician, Boston Children's
Hospital*





MYTHS

Educators lack the knowledge, skills and experiences to be role models and media mentors in the digital age

PROVOCATION

Early childhood educators are not **unequipped** but often feel ill-**equipped** to select and use new technology and digital media for young children.



Classrooms don't need tech geeks who can teach; we need teaching geeks who can use tech.

— DAVID GUERIN

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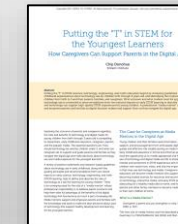
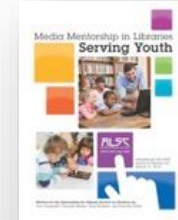
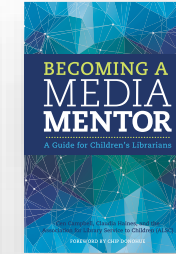
Start with what you know

- Know what matters and apply what you know
 - Child development theory, DAP, the whole child and SEL
 - Family, culture and community contexts
 - Principles and guidelines from the field 2012-2018
 - 40+ years of children's media research
 - Best practices in teaching, learning inform technology integration
- Become a 21st century learner to become a 21st century teacher
- Become a connected educator – *use tech to learn how to use tech*



- Every child needs a media mentor
- Every parent/family needs a media mentor
- Every educator needs to be a media mentor
- Who mentors the mentors?

...as much as media mentors are needed for families, they are also needed for teachers. Lisa Guernsey & Michael Levine, 2016



Chip's tips for educators as media mentors

1. Remember that relationships matter most
2. Trust your instincts and what you know
3. Integrate technology use into social and emotional learning
4. Use tech as another tool
5. Empower children to use technology as tools for 21st century learning



Chip's tips for educators as media mentors

6. Provide beneficial technology experiences
7. Make media use a language-rich experience
8. Help children progress from consuming media to creating it
9. Pay attention to your own technology use in front of children
10. Be a media mentor to children and grown-ups



A final provocation

What is essential is invisible to the eye



...Let's not get so fascinated by what the technology can do that we forget what it can't do...It's through relationships that we grow best and learn best. Fred Rogers



Myths, Provocations, Nudges

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Photos courtesy of Google Image Search, Fred Rogers Center, Fred Rogers Company, Erikson Institute, TEC Center, NAEYC, Early Learning Community at Pacific University, Burley Elementary School, Ravenswood Elementary School, Gail Lovely, University of Maine Center for Community Inclusion and Disability Studies, Cassandra Mattoon and Chris Crowell

Learn more at
www.teccenter.erikson.edu



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