Young Children in the Digital Age
Using New Tools to Support Early Literacy and Engagement

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About Erikson Institute
Our vision is that every adult who works with young children or on their behalf will be knowledgeable, aware, skilled, and alive to the possibilities of each child’s life.
Follow Fred’s lead...Use tech “with” rather than “instead of”

We have to help give children tools, building blocks for active play. And the computer is one of those building blocks. No computer will ever take the place of wooden toys or building blocks. But that doesn’t mean they have to be mutually exclusive.

Digital and media literacy

"Once we accept as a given that we all want to keep kids safe, it lets us move beyond a harmful-or-not paradigm to a learning-goals paradigm. That shift opens the tap to let our collective creative educational juices flow so we can identify pedagogically sound and developmentally appropriate strategies for crafting rich and rewarding learning experiences that integrate inquiry-based digital and media literacy."

Faith Rogow
Beware the either/or false dichotomy
It can be “We are family”

and “Wii are family”

It’s OK to read

and...

and even...

and enjoy them all!
Were you born digital...born analog...or born BPC?

Our narrow bandwidth of experience...

- Born in another time
- Digital locals are teaching the digital tourists
- Confronting our technology shortcomings
- Need to use technology to learn how (and why) to use technology...
- Digital and media literacy for adults and children = disposition, knowledge, experience, skills and fluency

Digital obstacles

Teaching analog adults new digital tricks
Follow Fred’s lead...
Meet young children where they are

Those of us who work with young children have a tremendous challenge. These children are going to grow up in a world that has problems we never even dreamed of.

Paper is not dead...yet
Digital obstacles for educators

Drowning in digital information

My desire to be well-informed is currently at odds with my desire to remain sane.

What’s wrong with these pictures?
What are the concerns?
• Too much passive, non-interactive use
• Exposure to inappropriate content (violence, sexuality, lifestyle)
• Commercial messages and in-app sales aimed at children
• Negative impact on social-emotional development – socially isolating, interrupts adult-child relationship

What are the concerns?
• Displaces / replaces traditional, developmentally valuable activities like hands-on, creative, open-ended play, construction, small manipulatives...
• Reduces outdoor time, decreases physical activity / Increases obesity
• Increases sleep disruptions
• Adult media use, misuse, over use and “always on” tech – background TV
From Screen Time to Interactive Touch-screens with Engaging Content

Dr. Dimitri Christakis
Pediatrician & George Adkins Professor of Pediatrics
Director, Center for Child Health, Behavior and Development
Seattle Children’s Research Institute
University of Washington

“All media is educational – so we need to be aware of what children are being educated about.”

“…our time and energy working to improve what our children watch, not just how much they watch, can have a positive impact on their behavior.”

“There may very well be important differences between linear media use (also known as television) and interactive media (like apps that are used on smartphones and tablets).”

“One thing children of all ages never say or never even think when they interact with passive media is, ‘I did it,’” he says. “Because of course, you don’t do anything when you watch a screen. But you do do things when you interact with a touchscreen device.”

“There’s no reason whatsoever that a caregiver can’t use an app with their child. It’s a great opportunity for what we call ‘joint attention’ — the interactions between a child and a caregiver, the back-and-forth, which is critical not just to language development, but brain development.”
Do you preach... ...what you practice?

“I’m not that interested in 'mass' communications. I’m much more interested in what happens between this person and the one person watching. The space between the television set and that person who’s watching is very holy ground.”

Follow Fred’s lead... Make impersonal technology personal
I went into television because I hated it so, and I thought there was some way of using this fabulous instrument to be of nurture to those who would watch and listen.

Follow Fred’s lead... Embrace today’s technology to nurture young children

Follow Fred’s lead... Connect new media and child development

Fred’s instinct in the 1950s was to be excited and challenged by new media, never to be afraid or put off by it. It was the potential of new media to play a constructive role in the development and education of young children that inspired him, and he sustained this open-minded and entrepreneurial attitude to media and technology all his life.

Maxwell King and Rita Catalano, Fred Rogers Center for Early Learning and Children’s Media at Saint Vincent College
Technology and Interactive Media as Tools in Early Childhood Programs Serving Children from Birth through Age 8

A joint position statement of the National Association for the Education of Young Children and the Fred Rogers Center for Early Learning and Children’s Media at Saint Vincent College

Follow Fred’s lead...
Use digital media for early learning

Throughout the process of researching and writing this position statement, we have been guided by the legacy of Fred Rogers. By appropriately and intentionally using the technology of his day—broadcast television—to connect with each individual child and with parents and families, Fred Rogers demonstrated the positive potential of using technology and media in ways that are grounded in principles of child development.

NAEYC & Fred Rogers Center Joint Position Statement, 2012, p. 1
Keywords

- Tools
- Intentional
- Appropriate
- Effective
- Integrated
- Balanced
- Interactive
- Engaging
- Co-Engagement
- Access
- Equity
- Professional development
- Select, Use, Integrate, Evaluate

What do we mean by technology?
Old & new / analog & digital / low & hi-tech

http://tabletworld.in/newsdetails?id=30
http://www.the-cameras.com/what-is-the-best-digital-camera-similar-to-professional-cameras
http://itdl.darton.edu/forms/help_page.htm
http://www.supersonicinc.com/Portable_Audio/fuseaction/
ViewProductDetails/ProductID/3,3862597
http://www.couponsaver.org/computer-hardware-coupons-codes.html
http://www.brightminds.co.uk/science-toys/microscopes-for-kids.htm
http://www.hatchearlychildhood.com/
http://www.babble.com/products/toddler-preschool-products/fisher-price-
What are the key messages?

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

• Intentional use requires early childhood teachers and administrators to have information and resources regarding the nature of these tools and the implications of their use with children.

What are the key messages?

• Limitations on the use of technology and media are important.

• Special considerations must be given to the use of technology with infants and toddlers.

• Attention to digital citizenship and equitable access is essential.

• Ongoing research and professional development are needed.
What are the benefits?

- Additional tools for learning and development
- Can enhance children’s cognitive and social abilities
- Supports inclusive practice by providing adaptations for children with special needs in least restrictive settings

- Enhances early childhood practice when integrated into the environment, curriculum, and daily routines
- Can help educators make and sustain home-school connections
Follow Fred’s Lead...
Study child development

An intentional educator understands and applies child development theory, best practices in early literacy and the developmentally appropriate framework.

What would Montessori, Piaget, Vygotsky, Skinner say?

The 3Cs for choosing tech tools

• CONTENT How does this help children engage, express, imagine, or explore?

• CONTEXT How does it complement, and not interrupt, children’s natural play?

• The Unique CHILD: How do we choose the right tech tools and experiences for each child’s needs, abilities, interests and development stage?

Digital Media and Early Learning: What We Know & What We Need to Know
Alliance for Early Learning in a Digital Age
Follow Fred’s lead...
Relationships matter most

No matter how helpful computers are as tools (and of course they can be very helpful tools), they don't begin to compare in significance to the teacher-child relationship which is human and mutual. A computer can help you learn to spell HUG, but it can never know the risk or the joy of actually giving or receiving one.

We know relationships matter

• Young children learn best in the context of interactions and relationships with attentive, responsive, caring adults

• Media use in the context of the adult/child relationship

• Technology as a tool to strengthen relationships with adults and peers

• A more knowledgeable other/more capable peers (Vygotsky)
We know relationships matter

- Co-viewing < joint engagement with media – using media together leads to more learning
- Socially contingent / responsive interactions
- Parasocial relationships
- Social-emotional development
- Pro-social behaviors
- Guided play and mediated experiences

Joint engagement matters

Listening matters
Joint engagement & listening matter

Children learn best in active environments when they are engaged in meaningful, interactive and social contexts.

The individual child’s development, learning and the family media ecology matter.

Use of the media in the home depends greatly on children’s interests and needs, and families’ needs, backgrounds, languages and cultures.

Providing access to quality media requires engaging parents and children at home, in school and in informal “third spaces” – libraries, museums, zoos and nature centers.

Context matters
Creating Media Matters

• Young children are capable of creating their own messages and expressing themselves through media
• Focus on intrinsic motivation rather than rewards – Make it engaging, fun, interactive and interesting
• When children (and their adults) have control they can progress on a continuum from consuming media >>> meaning-making with media >>> creating media

Follow Fred’s lead…
Always think of the children first

Please think of the children first.
If you ever have anything to do with their entertainment, their food, their toys, their custody, their day or night care, their education – listen to the children, learn about them, learn from them. Think of the children first.

The World According to Mister Rogers
A healthy media diet matters

All screens are not created equal

- Consider screen exposure throughout the day and across settings
- Shift from “how much” they watch to “what they watch”
- Use media “with” rather than “instead of”
- Place limits on passive use
- Avoid inappropriate content/commercial messages

- Look for media experiences that are interactive, include positive interactions with others, and give the child control
- Emphasize relationships and joint engagement with media
- Advocate for a digital age definition of “screen-time” – AAP, Caring for Our Children, ECERS, QRIS, Accreditation, Teacher Preparation...
Those of us who are in this world to educate - to care for - young children have a special calling: a calling that has very little to do with the collection of expensive possessions but has a lot to do with the worth inside of hearts and heads. In fact, that's our domain: the heads and hearts of the next generation, the thoughts and feelings of the future.

Follow Fred’s lead...
Provide and accept affirmation

What a difference you make, you who serve children and their families so directly! And they’re so well served when they can come to believe that there isn’t anything in their lives that can’t be expressed in words or play or craft or whatever healthy way they happen to choose - Such a gift will last them all of their days.

The child is in me still...and sometimes not so still.

Where would any of us be without teachers – without people who have passion and love it right in front of us?
What would any of us do without teachers passing on to us what they know is essential about life?
Analog curators – Tips for digital-age curation

Apply your knowledge, skills and passion as an early literacy specialist and content curator to select, use, integrate and evaluate digital tools and media

1. How does the media support my learning goals?
2. What are developmentally appropriate uses?
3. How does it take into account the whole child – cognitive abilities, motor skills, social-emotional needs, and interests?
4. How does the technology encourage playful and open-ended use, creativity, pretend play, active play, and outdoor activities?
5. How is the physical environment configured to accommodate the specific technology tool?

6. How does it offer children and parents opportunities for joint engagement or collaboration?
7. How could the tool encourage children to connect with the non-digital world?
8. How does it encourage children to explore real-world issues or to learn new content?
9. How cost effective is it? Is it durable for active use by young children?
10. How will I evaluate its use?
Elements of a quality tech tool

- Embodies Universal Design
- Utilizes Developmentally Appropriate features
- Extends learning experiences
- Requires active engagement
- Scaffolds complexity
- Encourages revisiting and sharing
- Models diversity
- Empowers exploration and creativity
- Fosters thinking and problem solving
- Supports playful use of technology

Traits of a great learning app

1. Interactive – Touchscreens beg for touching
2. Shorter playtimes – By design
3. Focused narrowly by age – Age and developmental level
4. Relevant – To what the children are learning and their motor skills
5. Fun – Engaging children by making them laugh
6. Inter-generational – Allowing a way to involve parents
7. Modifiable – Giving kids control and options to personalize
8. Have built-in goals and incentives – To keep kids coming back

Thanks to Mark Bailey & Aja Appel
Child Learning & Development Center
Pacific University College of Education
http://fg.ed.pacificu.edu/ccc/techtools.html

Tina Barseghian, KQED Mind/Shift blog (December 13, 2010)
Tips to engage and motivate

• Play is how children naturally learn
• Make it inviting and easy to use
• Respond to a child's actions
• Allow for child-driven exploration
• Hold children's attention
• Use humor to reinforce motivation
• Tap into natural desire to discover
• Intrinsic motivation is the key to time on task.
• Let kids "get to the good stuff quickly"
• Use the power of surprise as reinforcement

Mark Schlichting, Noodleworks Interactive

“Every time a child uses their finger to touch, tap, or click, they are asking a question.”

Follow Fred's lead... Be fearlessly authentic

My hunch is that if we allow ourselves to give who we really are to the children in our care, we will some way inspire cartwheels in their hearts.
Follow Fred’s lead…
Empower parents and engage families

Strengthen a parent…
and you strengthen a child.

What do parents need?
- Tech knowledge, competency, digital literacy
- Awareness of their own media habits
- Advice from digitally literate educators, librarians, pediatric health professionals
- Help in knowing what quality media is
- On-going parent education
- Hands-on opportunities to play
- Parent-to-Parent sharing
- Translation of new research findings
Technology for Family Engagement

Technology tools offer new opportunities for educators to build relationships, maintain ongoing communication, exchange information and share online resources with parents and families. Likewise, parents and families can use technology to ask questions, seek advice, share information about their child, and feel more engaged in the program and their child’s experiences there.

NAEYC & Fred Rogers Center Joint Position Statement, 2012, 7

Modeling the effective use of technology and interactive media for parent communication and family engagement also creates opportunities to help parents themselves become better informed, empowers them to make responsible choices about technology use and screen time at home, engages them as teachers who can extend classroom learning activities into the home, and encourages co-viewing, co-participation, and joint media engagement between parents and their children.

NAEYC & Fred Rogers Center Joint Position Statement, 2012, 8
5 things parents need from media mentors

1. A good role model and tour guide
2. A trusted source
3. Resources and recommendations
4. Opportunities for parent play time
5. Tips for promoting a healthy media diet and positive family media ecology at home

Media ecology for a healthy family

- Understand parental influence as the primary media role model
- Be aware of use – when, by who, where, for what and for how long
- Understand that content is as important as length of time
- Find trusted sources of media recommendations
- Place limits on passive use and avoid inappropriate content

*TV may be the only appliance that is more useful after it is turned off.*
Media ecology for a healthy family

- Avoid background TV
- Limit screen media before bedtime
- No TVs in children’s bedrooms
- Turn off media and digital devices during meals
- Watch together – joint engagement with media that promotes prosocial behaviors and learning
- Be aware of private tech use replacing traditional public use
- Have unplugged time

“What can we do when we turn off the screen?”

4 (more) tips for parents/families

1. Keep it interactive – Be active while you watch, emphasize adult-child interaction, ask questions, narrate your media use, connect media experiences to children’s “real lives”
2. Match use with age – Children’s needs change as they grow and develop
3. Have fun, stay engaged – Choose media and technology that support active, hands-on, creative and authentic engagement with people and the world around them
4. Promote digital literacy – Model appropriate use, model helpful uses of technology tools
Follow Fred’s lead…
Be a media manager, mediator and mentor

_We all got to be who we are today with the help of many other people. Nobody can successfully manage in the world without the investment of others._

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5 tips for media managers

1. Be a good digital media role model and enthusiastic tour guide – and follow the children
2. Do your homework – your digital media literacy matters
3. Be intentional – use DAP and Guidelines to select, use, integrate, and evaluate technology tools
4. Curate content
5. Limit tech time
### 5 tips for media *mediators*

1. Be a great digital media playmate and co-explorer – *a more knowledgeable other*
2. Be tuned-in and attentive, keep it interactive, stay engaged
3. Match the tools and content to the individual child
4. Use tools to enhance and extend activities and promote pro-social behavior
5. Use tech to let children do something that they couldn't do without the technology
6. Plan for fun offline

### 5 tips for media *mentors*

1. Guide the way
2. Emphasize technology tools that encourage pro-social behaviors, interactions, relationships, and joint engagement
3. Give children choices and control
4. Help children progress from media consumers to creators
5. Promote digital media literacy
Quick tips for parents as media managers, mediators and mentors

- Play together
- Guide the way
- Limit tech time
- Have fun offline
- Be a good example
- Strive for balance

The recipe for media mentors

- Choose only the highest quality ingredients
- Combine research, theory and developmentally appropriate practice
- Stir in opportunities for interactions and pro-social behavior
- Blend in relationships and mix in lots of joint engagement with media
- Fold in the 3Cs of quality media – Content, Context, Child
- Bake in your understanding of the reciprocal influence of parents, families, culture and community on children’s media use
- Top with digital media literacy for children, parents and educators
- Don’t forget to add the secret ingredient – you!
A neighborly reminder...

...Computers can be useful machines, especially when they help people communicate in caring ways with each other...

Fred Rogers, Dear Mister Rogers, Does It Ever Rain in Your Neighborhood?

Feeling alone? Incompetent? Too far behind? Don’t know where to begin? Conflicted about tech and young children?

What you need is right at your fingertips – guidance for confronting your digital obstacles and taking advantage of the opportunities so that you can support young children, parents and families in the multi-screen, multi-touch world.

• Reflect on your analog knowledge and skills
• Apply Developmentally Appropriate principles
• Follow the NAEYC/FRC Joint Position Statement guidelines
• Put yourself at the intersection of child development, early learning, best practices in early literacy and family engagement with technology tools and digital media

...and look to Mister Rogers
What is essential is invisible to the eye

...the “essential invisible” is about child development, early learning, early literacy, and relationships with young children, parents, families, educators and communities.

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.