Digital Media and Early Learning
What We Know and Why It Matters to Campus Child Care Leaders
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Digital Leadership in Campus Child Care
• Leadership
• Professional Development
• Research
• Networking
• Advocacy

Excellence in outreach, teaching, and research to support the greater goals of the University
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.

Digital Leadership for effective, appropriate and intentional use of technology and digital media in the early years

Let’s dive in
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.

Beware the either/or false dichotomy
It can be “We are family”
and “Wii are family”
Digital obstacles for 20th century leaders
Clinging to old tools to complete new tasks

The old and the analog...
Were you born digital...analog...or BPC?

Our narrow bandwidth...
- Born in another time
- Our analog skills are valuable but not sufficient
- Need to confront our technology shortcomings
- 21st century teaching for 21st century learners
- Use tech to learn how to use tech... for leading, managing, teaching, learning, communicating and collaborating
Our digital media literacy comes first

- What do we need to know and be able to do to intentionally and appropriately select, use, integrate and evaluate technology?
- What attitudes, dispositions and behaviors are essential?
- How do we gain knowledge, skills and experience to become fluent?
- What will it take to become intentional in selection and use?
- Can we narrow the personal/professional gap?
- What will it take to move educators from...

consumer > adopter > adapter > creator

We are the Jetsons...
...so we need media literacy in 2015

*Media literacy is about helping children develop the life skills they need to become thinkers and makers in the multimedia environment that is their reality...*

*It is precisely because our culture surrounds us with media that we need to model healthy and productive ways to integrate digital media technologies into our lives.*

Faith Rogow
What are the concerns?

- Too much passive, non-interactive use
- Exposure to inappropriate content
- 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 “ECE essentials” like hands-on, creative and open-ended play, construction, small manipulatives...
- Reduces outdoor time, decreases physical activity / Increases obesity
- Increases sleep disruptions
- We are the problem – adult media use, misuse, over use and “always on” tech – background TV

Can the screen be a window, mirror and magnifying glass?

- Imagine
  - A child looks through a window for a view of something beyond
  - A child looks into a mirror that reflects his/her interests
  - A child uses the screen as a magnifying glass to explore the world
- Would we count minutes of window time, mirror time or magnifying glass time and place the same limits as we do with screen time?
- How would teachers use technology differently?
- How could parents use digital windows, mirrors and magnifying glasses?
- We need to reflect on and explore our educational window of opportunity?

Every window – architectural or electronic – is a gateway to adventure, inquiry, fantasy, storytelling, self-discovery and learning. David Kleeman, PlayVangelist
Connecting the dots

• HighScope Using Technology Appropriately in the Preschool Classroom
• Zero to Three Setting the Record Straight
• RAND Corporation Reports
• Common Sense Media Early Connections: A Parent Education Toolkit for Early Childhood Providers
• TEC Center Technology and Digital Media in the Early Years: Tools for Teaching and Learning

Pediatricians, American Academy of Pediatrics debate toddlers and technology

• Sleep Duration, Restfulness, and Screens in the Sleep Environment, Falbe et al
• Mobile and Interactive Use by Young Children: The Good, the Bad, and the Unknown, Radesky et al
• Interactive Media Use at Younger Than the Age of 2 Years: Time to Rethink the American Academy of Pediatrics Guidelines? Dr. Dimitri Christakis
• Yes, Your Toddler Can Watch TV: The New Rules on Screen Time, Dr. Russell Sanders
• A family doctor’s rules for toddlers and screen time, Dr. Richard Saint Cyr
• Moving From Child Advocacy to Evidence-Based Care for Digital Natives Michael Rich, The Mediatrician, Boston Children’s Hospital (2014)

All media is educational – so we need to be aware of what children are being educated about."...Media is very much a part of our lives. The real research agenda is to find out how to use it in healthy ways. Dimitri Christakis

Media is very much a part of our lives. The real research agenda is to find out how to use it in healthy ways. Dimitri Christakis
Connecting the dots

“Screen time” confusion from recent headlines

- Mobile and Interactive Use by Young Children: The Good, the Bad, and the Unknown, Pediatrics, December 29, 2014
- Researchers: Using an iPad or smartphone can harm toddler’s learning and social skills, Washington Post, February 2
- iPads and Smartphones May Damage Toddler Brains
- …quickly became Tablets and Smartphones May Affect Social and Emotional Development of Toddlers, Scientists Speculate, February 2
- …and later that same day, No, Research Does Not Say That iPads and Smartphones May Damage Toddlers Brains, The Guardian, February 2
- Parents, Calm Down About Infant Screen Time, Time.com, February 3
- Soothing with Tablets May Hinder Development, PlayScience, February 11

What are our goals for tech in ECE?

- Do no harm
- Acknowledge and address the concerns
- Eliminate the false dichotomy
- Explore the intersection of child development, early learning, early literacy, STEM and children’s media
- Apply the NAEYC and Fred Rogers Center Joint Position Statement, DAP, Lisa Guernsey’s 3Cs, and 40 years of children’s media research
- Focus on digital media literacy – ours the theirs
- Become 4M educators who know the 3Cs and apply the 5Es
What are our goals for educators?

- Know what matters and apply what they know
  - Child development theory
  - Influence of family, culture and community
  - NAEYC & Fred Rogers Center Joint Position Statement
  - Developmentally appropriate practices framework
  - 40 years of children’s media research
- Become 4M educators who know the 3Cs and apply the 5Es
- Become connected educators

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

Digital media literacy matters
- Attitudes
- Knowledge
- Experience
- Competencies
- Leading to fluency
- DML is essential for leaders and teachers in campus child care programs
ECE “essentials” matter

- Creativity, curiosity and wonder
- Open-ended exploration
- Unstructured, active, imaginative play
- Loose parts and hands-on learning
- Authentic and deep engagement
- Outdoor play and nature
- Solitary and shared experiences
- Interactions and relationships

Lisa Guernsey’s 3Cs matter

- **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?
**Content matters**

- *Instructive – Manipulable – Constructive*
- Hands-on / Minds-on – Active engagement, interactive, meaningful, social, tools for inquiry and problem solving
- Child controlled with guided exploration
- Appropriate images, language, and content
- Supports teacher’s goals for learning and development
- Accommodates children of different abilities and needs
- Culturally appropriate and inclusive
- Child can save, revisit, revise, print and share

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**Context matters**

- 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
- Providing access to quality media requires engaging parents and children
  - at home
  - in Head Start, early childhood programs, family child care homes and school classrooms
  - in informal “third spaces” – libraries, museums, zoos, nature centers
Child development theory matters

- Know about child development and early learning and what is typical at each age and stage
- Know what is individually appropriate
- Understand the family context
- Know what is culturally relevant and appropriate


DAP matters

Digitally literate educators who are grounded in child development theory and developmentally appropriate practices have the knowledge, skills, and experience to select and use technology tools and interactive media that suit the ages and developmental levels of the children in their care, and they know when and how to integrate technology into the program effectively.

NAEYC & FRC Joint Position Statement
Creating media matters

- Young children are capable of creating their own messages and expressing themselves through media
- Give children (and their adults) control over what they use and how they use it
- Consuming media > Meaning-making > Creating media

Relationships matter

- Young children learn best in the context of interactions and relationships with attentive, responsive, caring adults
- Co-viewing < joint engagement with media – using media together leads to more learning
- Media use to encourage pro-social behaviors and promote social/emotional development
- Use technology as a tool to strengthen relationships with adults and peers
Joint engagement matters

Skills and attributes for 21st century learning matter

- Effective oral & written communication skills
- Critical thinking & problem-solving
- Computational thinking
- Agility and adaptability
- Collaboration
- Initiative
- Curiosity and imagination
- Hope and optimism
- Self-regulation
- Grit and persistence
- Resilience
- Vision

“…the principal goal of education is to create individuals who are capable of doing new things, not simply of repeating what other generations have done.”

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 and commercial messages

A healthy media diet matters

All screens are not created equal

- 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 Standards...
Family media ecology matters

- 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.*
Fred Rogers

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Family media ecology matters

- 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
- Be aware of private tech use replacing traditional public use
- Plan for unplugged time

“What can we do when we turn off the screen?”
If everything matters...
...what matters most?

- 3Cs
- 4Ms
- 5Es
- Relationships

3Cs for digital age educators

- Content
- Context
- Child
### 4M roles for digital age educators

1. **Manager**
2. **Mediator**
3. **Mentor**
4. **Maker**

### 5Es for digital age educators

**Martin Blows e-words framework**

<table>
<thead>
<tr>
<th>Shallow</th>
<th>Deep</th>
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<tbody>
<tr>
<td>Exchange</td>
<td>Engage learners by using a richer mix of media</td>
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<tr>
<td>Enrich</td>
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<td>Empower</td>
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- **Swap traditional practices with ICT**
- **Enrich**
- **Engage learners by using a richer mix of media**
- **Deepen learning through the use of ICT**
- **Extend**
- **Enable learners to take control of their own learning**
- **Empower**
Digital leadership in campus child care

It’s not a leap of faith if you know where you’re going

- Identify your vision and share it
- Model lifelong & lifewide learning
- Foster a culture of innovation and risk taking
- Model digital expectations and best practices
- Cultivate digital teacher leaders

Invest in professional development, or your investments in equipment will be wasted

Develop 3C, 4M and 5E educators

Consumer > Adopter > Adapter > Creator
Encourage and support teachers as media managers, mediators, mentors and makers

Digital teacher leaders

• Keep up with education and technology trends and practices
• Balance technology, pedagogy and content knowledge
• Re-imagine tech integration
• Use technology to support new ways of learning and teaching

Encourage and support teachers as media managers, mediators, mentors and makers

Digital teacher leaders

• Choose the best technology for the child, goals, learning outcomes
• Expect problems/solution focused
• Start with evolution...then go for revolution
• Identify and nurture innovators
Provide leadership that encourages “baby steps” toward digital literacy for educators

- Leaders/Administrators
- Teaching staff
- Technology specialists
- Trainers
- Teacher Educators

Begin and end with relationships

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

Mister Rogers and Jeff Erlanger
Begin and end with relationships

...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.

3C – 4M – 5E educators turn screens into windows, mirrors and magnifying glasses