Digital technologies in the early years – beyond the screen time paradigm.
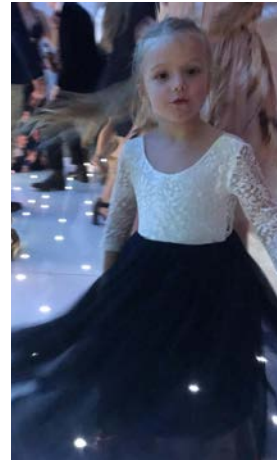
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Michelle Gregory

Associate Research Fellow

University of Wollongong

- SMART accredited trainer
- B. Ed (Early Childhood)
- Masters in Research
- Interested in the use of technology to overcome distance barriers in early education and open a world of opportunity to young children
- Mum of three

Our Digital Lives

- While we don't know much about tech and effects, we do know about Education.

- Stimulation, engagement- it is no different

- ARC Centre of Excellence for the Digital Child

New research centre receives AU$62m to *study* children's digital lives

Early Education and Digital Play

- Digital Play
  - Interactions with a piece of technology.
  - This is the first new type of play in 100 years and we re grappling to understand it. There is no evidence base to support or deny it
  - Contexts of play – pretend, imaginative
    - Play teaches us about our social world, a world that now involves technology
    - Reality is they have access so a find a pathway that works for you. Explore what is possible, not just the dangers

Left diagram:

08 — A confident child feels capable of attempting their next challenge.
01 — A child is naturally curious.
02 — The child's curiosity drives them to explore through play.
03 — As a child explores through play they discover new things and learn.
04 — The child finds learning and exploring fun!
05 — A child likes to repeat acitivtes that are fun.
06 — Repeating fun play activities helps a child to achieve mastery of their skills.
07 — A child who is mastering new skills feels confident!

Gooey Brains
www.gooeybrains.com
Adapted from "Curiosity, Pleasure and Play: A Neurodevelopmental Perspective" written by Perry, Hogan and Marlin (2000)

Right diagram:

08 — A confident child feels capable of attempting their next challenge.
01 — A child is naturally curious.
02 — The child's curiosity drives them to explore through technology
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Screen Time

- Does not include mobile technology
- Looked at sedentary tv when first introduced
- Not all screens are equal and not all digital play is equal
- Solitary digital play is more of a concern than time
  - Not so much use but quality of content
- Digital diets
  - We can communicate, we can create and we can consume.
  - Jocelyn Brewer (https://www.digitalnutrition.com.au/)

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DAILYTELEGRAPH.COM.AU
New advice about the right amount of screen time
AN early childhood tech expert has advised Tasmanian parents to stop...

…careful use of the technology can enhance learning, communication and creativity."

Dr Kate Highfield, from Early Childhood Australia, said parents should not lump all screen time into the one basket. Rather, they need to judge what the purpose of the screen time is.

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Digital behaviours

- Why do we use digital technology for behaviour management
  - iPad on the fridge
- Self regulation can be challenged by apps due to their design and aim to be addictive. Behaviour can be challenged but content can actually help
  - Place parameters around those games to help with self regulation. This is where co-viewing and interaction becomes important
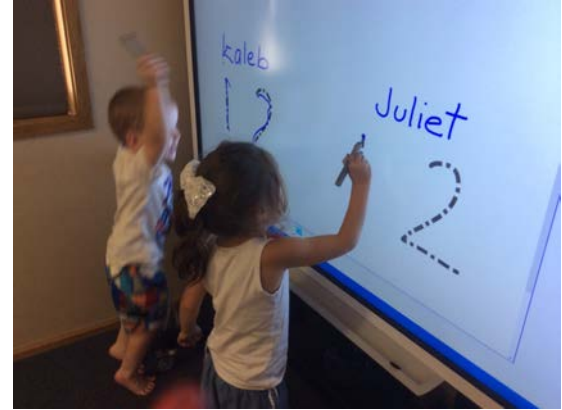
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Eric Pickersgill

'Removed'

Where to…. Moving beyond 'screen time'

- Understanding pedagogical practices

   Beyond tech support

- Professional Development

   Frequency and mentoring

- Policy and Programme development

   Building educators as media mentors, exhibiting
      positive technology habits

Thinking pedagogically

- Children can shift from screen to off screen really easily compared to adults

- Apps can be a place for children to be heard

- We don't leave children to just play with other items, so why with tech? Why is it viewed as something to hand them and walk away?

Utilisation　　　OR　　　Integration

- Usage is random and often an afterthought
- It is rare or sporadic
- Used purely for the sake of using technology
- Often used to instruct content
- Mostly use by the educator
- Is used to delivery information
- Is peripheral to the learning activity

What can technology do?

The User

- The more devices you connect, the less you connect
- Technology is simply another tool we can use in the early childhood environment to help us provide exciting and challenging learning opportunities

The Tool

- Technology cannot build relationships
- Technology contributes not causes
- All screens are not equal

'Magic comes from the child and the Educator; not the device'

Chip Donohue

TECHNOLOGY IS MORE EFFECTIVE WHEN USED TOGETHER

Engage

Communicate

Learn

Create

Examples of use

Whiteboard Use in Daily Experiences
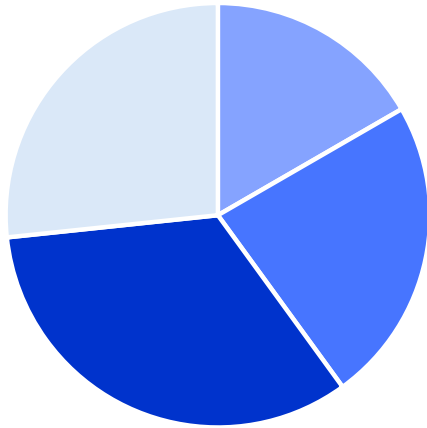
- Extensive
- Moderate
- Limited
- None

- Integrated program experiences
  - Interactive learning stories
  - Daily activity files
- Spontaneous experiences
  - Natural interest
  - Extension of enquiry & research
- Community connection
  - Local pilot training centre
  - Use of resources by Community
  - Inter-centre connections
  - Virtual experiences

Look at our dinosaur land we created this morning. We kept it up to show you!

Statement on young children and digital technologies

- Early Childhood Australia (ECA) developed the Statement on young children and digital technologies in response to an identified need for guidance for early childhood professionals.

- Principles and practice advice intended to facilitate professional reflection on the role and optimal use of digital technologies with, by and for young children, according to the digital contexts in which

young children, their families and educators play, live and work.

Relationships

Citizenship

Health and wellbeing

Play and pedagogy

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RELATIONSHIPS

Young children in digital contexts interact, engage, access and learn how to use digital technologies in relationships with other people, including the adults (e.g. family members, parents, kinship members, educators) and peers (e.g. friends, siblings, extended family members) in their lives. These relationships facilitate and influence children's engagement with digital technologies.

Principle: Young children's relationships with adults and peers matter in digital contexts

Practice advice:

1. Use digital technologies in early childhood education and care settings to promote social interactions between children, peers and adults.

2. Support children in turn-taking and learning to share when using digital technologies in collaboration with others.

3. Foster children's peer-to-peer interactions as opportunities for co-learning about and with digital technologies.

4. Model self-regulated digital technology use with children and families that recognises the importance of sustained social interactions between children and adults.

5. Create shared understandings between families, educators and services about digital technology use, by adults, in front of children.

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HEALTH AND WELLBEING

The way that young children interact, engage with and experience digital technologies can have implications for health and wellbeing. This includes their physical activity, posture, vision, sleep and emotions.

Principle: Young children's health and wellbeing is actively supported in digital contexts

Practice advice:

1. Provide digital technology experiences for young children that promote movement opportunities.

2. Ensure children participate in both digital and non-digital activities to build strength and skills in their hands and fingers.

3. Ensure that screen-based digital technology use while sitting is only for short periods and does not replace periods of active physical movement.

4. Promote postural awareness and change by providing a variety of spaces and heights for children to use digital technologies.

5. Minimise screen glare and reflection and promote regular breaks with a variety of visual distances when using screen-based technologies.

6. Support families to understand that exposure to disturbing or arousing content and screens in the hour before sleep time decreases the length and quality of children's sleep.

7. Promote screen-free sleeping areas and the use of non-screen-based calming activities with children before nap times and evening bedtimes.

8. Help children develop self-regulation for using digital technologies and support them to transition from digital to non-digital activities.

9. Establish routines and structures that promote access to a variety of digital and non-digital activities in the early childhood education and care setting.

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CITIZENSHIP

Citizenship in digital contexts recognises that young children are active participants in their communities now and into the future. As citizens, young children respect their own rights and those of other people, and develop an appreciation for cultural, racial, gender and religious diversity. Digital rights, digital privacy, online safety and cyber-safety education provide a foundation for early citizenship in digital contexts.

Principle: Young children's citizenship is upheld and fostered in digital contexts

Practice advice:

1. Participate in professional learning opportunities to build educator understanding about young children's digital rights and how these relate to young children's socioeconomic, geographic, gender and culturally based experiences in digital contexts.

2. Seek permission from children and families to use digital documentation, including photographs of children via social media and/or other digital documentation platforms.

3. Develop policies and guidelines about the collection, use, retention and deletion of digital data held about young children and families.

4. Ensure proactive adult supervision of young children's online activities, including the use of filters and restrictions on devices and networks in the early childhood education and care setting.

5. Maintain conversations with young children about their online experiences, both positive and negative, to ensure they are supported by adults in their online engagements.

6. Help children develop an understanding of the internet as a network that people use to generate, store, retrieve and share information.

7. Model internet use with children for learning purposes and provide opportunities for assessing the quality and relevance of information.

8. Direct families towards government and/or not-for-profit organisations for advice on the selection of digital media, content, apps and games that are appropriate for use by young children.

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PLAY AND PEDAGOGY

Young children have opportunities for play and pedagogy in digital contexts. Play and pedagogy involve children using a range of digital devices for exploration, meaning-making, collaboration and problem-solving. Educators engage in active decision making about the use and non-use of digital technologies for learning.

Principle: Play and pedagogy promotes young children's exploration, social interaction, collaboration and learning in digital contexts

Practice advice:

1. Provide opportunities for children to explore and experiment with the functions of a diverse range of digital technologies alongside adult modelling and instruction in digital technology use.

2. Promote play involving children in digital technology use with digital and non-digital tools and materials to build knowledge about the use of technologies for communication, collaboration and information sharing.

3. Seek young children's perspectives regarding the role and use of digital technologies in their own lives, play and learning.

4. Model active decision making regarding digital technology use with, by and for young children that provides a balance of digital and non-digital experiences and activities in early childhood education and care settings.

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Top 5 tips for parents with young children watching YouTube

1. Limit unboxing videos. They're ads packaged to look like videos.

2. Find channels with consistent quality videos.

3. If you don't have time to sit with your child, regularly chat to them about what they watched.

4. Help your child to connect what they viewed online to their play in real-life.

5. Don't rely on 'Up Next' to do your parenting.

- YouTube
  - There is some great content on there but there's lots of hidden advertising- especially in unboxing videos that young children love. It's also important to help your children connect their on screen viewing with their real life play. They can draw one of the characters they viewed or use their blocks to create a home for their toy puppy just like the one they saw in the video.
- Dr Joanne Orlando

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Social Sciences Research

PLAY, PEDAGOGY AND CURRICULUM IN CONTEMPORARY
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