
This version is available at https://strathprints.strath.ac.uk/60855/

Strathprints is designed to allow users to access the research output of the University of Strathclyde. Unless otherwise explicitly stated on the manuscript, Copyright © and Moral Rights for the papers on this site are retained by the individual authors and/or other copyright owners. Please check the manuscript for details of any other licences that may have been applied. You may not engage in further distribution of the material for any profitmaking activities or any commercial gain. You may freely distribute both the url (https://strathprints.strath.ac.uk/) and the content of this paper for research or private study, educational, or not-for-profit purposes without prior permission or charge.

Any correspondence concerning this service should be sent to the Strathprints administrator: strathprints@strath.ac.uk
The Early Years Technological Landscape: Reflecting on Digital Childhoods for Pedagogic Planning

Lorna Arnott and Eleni Karagiannidou, University of Strathclyde, Scotland
Nicola Yelland, Victoria University, Australia.
About Us

Lorna Arnott,
Lecture in Early Years Education, University of Strathclyde, Scotland
Convener of the EECERA Digital Childhoods SIG
Editor of Digital Technologies and Learning in the Early Years, SAGE Ltd.

Nicola Yelland
Professor of Education
College of Arts and Education
Victoria University, Australia

Editor of Contemporary Issues in Early Childhood &
Global Studies of Childhood (SAGE)
Series Editor of Changing Images of Early Childhood
(Routledge, New York)
Found in translation: Connecting reconceptualist thinking
with early childhood education practices. Routledge:
New York.

Eleni Karagiannidou, Research Fellow,
University of Strathclyde, Scotland.
Digital Technologies and Learning in the Early Years

- Part 1: The Early Years Technological Landscape
  - Chapter 1: Framing Technological Experiences in the Early Years
    - Lorna Arnott
  - Chapter 2: Children’s Technological Learning Journeys
    - Eleni Karagiannidou
  - Chapter 3: Re-imagining Play with New Technologies
    - Nicola Yelland and Caja Gilbert
Our Research Questions

- How do we conceptualise contemporary digital childhoods; beyond the suggestion that children increasingly have access to, and engage with, a broad range of new technologies? How can we draw on these experiences to characterise multimodal learning?

- How are children’s learning identities emerging and growing in an era where children have to negotiate both embodied and digital identities?

- How can we draw on our theoretical understandings of digital childhoods to frame children’s pedagogical and ecological early childhood experiences in the digital age?
Recognising Digital contexts

Cultural and social digital capital

Defining digital childhoods

Plurality: Embodied and Digital

Digital Learning Ecologies

Changes to the way children play and learn

Pieces of the jigsaw come together to inform the pedagogic planning for digital childhoods

Connectivity as lived experience

empowerment of children?

Multi-modality
The evolution of technologies is too fast paced for definitions to be meaningful.

Definitions of digital resources are fruitless

• The evolution of technologies is too fast paced for definitions to be meaningful

Instead focus on the ‘childhood’

• The shift in the way children experience the world;
• How children interact with physical, social and cultural spaces in contemporary society
• How learning and play is transformed within this dynamic and fluid context

Should we focus on digital?

• Another period in childhood history: Enlightenment to Digital...
empowerment of children?

<table>
<thead>
<tr>
<th>Youth at risk</th>
<th>Youth as capable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulnerability</td>
<td>Liberation</td>
</tr>
<tr>
<td>Consumers through adults</td>
<td>Producers and consumers</td>
</tr>
<tr>
<td>Young people as passive</td>
<td>Young people as active</td>
</tr>
<tr>
<td>Young people as novices</td>
<td>Young people as capable</td>
</tr>
<tr>
<td>Play as ‘private’</td>
<td>Play as ‘public’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROTECT</th>
<th>EMPOWER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue</td>
<td>Develop</td>
</tr>
<tr>
<td>Hierarchy</td>
<td>Co-participative</td>
</tr>
<tr>
<td>Closed</td>
<td>Open</td>
</tr>
<tr>
<td>Fearful</td>
<td>Brave</td>
</tr>
<tr>
<td>Absolute/Fixed</td>
<td>Fluid/Counter</td>
</tr>
</tbody>
</table>

**Fig I: narratives of childhood and youth and implied values**

Taken from Craft 2012
“New technologies affect the physical, social, emotional, psychological, educational and learning ‘environments’ that surround children. In many cases, children are immersed in experiences with digital technologies before their formal schooling years, and they come to school equipped with an already developing range of skills and experiences (Craft, 2012). Therefore, one of the main reasons for this undertaking relates to the growing need for understanding the complexities of children’s formal and informal learning experiences”
Multi-modality
Children live in the world of tangible technologies but they also live in an abstract world of symbolic representations:

- They negotiate an embodied identity but also a digital identity
- At times their digital identity is moulded by parents on their behalf.

Heather, 3 years 5 months ‘working’
• Technologies not as tools but as resources or artifacts
• Social, cultural, economic & political implications
• Fluent in access and use
• Multimodal lives: making meaning and connections
Changes to the way children play and learn

Photo - source: https://www.flickr.com/photos/ticoneva/5581238453/
Childhood is digital from birth: it is lived and experienced in everyday life, how do we mirror this in early childhood pedagogy?

Rebecca
17 months old

(Videos in original presentation, but stills presented here)
Digital Learning Ecologies

Early Computing Knowledge

Everyday Literacy

Everyday numeracy

Heather 3.5 years
Linking to Pedagogic Planning

“High quality experiences with technologies do not happen by chance. Technologies do not do the pedagogic planning for us, despite their interactive properties.” (Arnott 2017).
Thank you! Questions?

Contacts:
Lorna.Arnott@strath.ac.uk  |  eleni.karagiannidou@strath.ac.uk  |  nicola.yelland@vu.edu.au