Young Children Playing and Learning in a Digital Age

a Cultural and Critical Perspective

Christine Stephen
and Susan Edwards

Towards an Ethical Praxis in Early Childhood

EECERA
European Early Childhood Education Research Association

ROUTLEDGE

YOUNG CHILDREN PLAYING AND LEARNING IN A DIGITAL AGE

Young Children Playing and Learning in a Digital Age explores the emergence of the digital age and young children's experiences with digital technologies at home and in educational environments.

Drawing on theory and research-based evidence, this book makes an important contribution to understanding the contemporary experiences of young children in the digital age. It argues that a cultural and critically informed perspective allows educators, policy-makers and parents to make sense of children's digital experiences as they play and learn, enabling informed decision-making about future early years curriculum and practices at home and in early learning and care settings.

An essential read for researchers, students, policy-makers and professionals working with children today, this book draws attention to the evolution of digital developments and the relationship between contemporary technologies, play and learning in the early years.

Christine Stephen recently retired as a Research Fellow at the University of Stirling, Scotland. Her research focuses on young children's learning and in particular on their everyday experiences as they engage with digital technologies.

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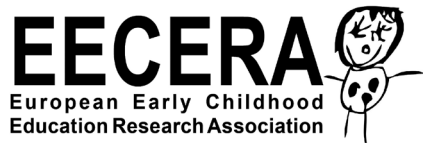

Written in association with the European Early Childhood Education Research Association (EECERA), titles in this series will reflect the latest developments and most current research and practice in early childhood education on a global level. Feeding into and supporting the further development of the discipline as an exciting and urgent field of research and high academic endeavour, the series carries a particular focus on knowledge and reflection, which has huge relevance and topicality for those at the front line of decision making and professional practice.

Rather than following a linear approach of research to practice, this series offers a unique fusion of research, theoretical, conceptual and philosophical perspectives, values and ethics, and professional practice, which has been termed 'Ethical Praxis'.

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From Christine:
To Olivia and Sam and their Grandpa

From Susan:
To Luke Cosgriff, Noel Edwards and Elizabeth Edwards

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FOREWORD

Introduction to the EECERA Book Series

Tony Bertram and Chris Pascal

Underpinning aspirations

This ground-breaking book by Christine Stephen and Susan Edwards, entitled *Young Children Playing and Learning in a Digital Age: a Cultural and Critical Perspective*, provides the third book in an innovative new book series generated by the European Early Childhood Education Research Association (EECERA). The EECERA Book Series, entitled 'Towards an Ethical Praxis in Early Childhood', offers an innovative and exemplary vehicle for the international early childhood sector to develop transformative pedagogy which demonstrates effective integrated praxis. The EECERA Book Series is designed to complement and link with the *European Early Childhood Education Research Journal* (EECERJ), which is primarily a worldwide academic platform for publishing research according to the highest international standards of scholarship. The EECERA Book Series aims to highlight pedagogic praxis in order to demonstrate how this knowledge can be used to develop and improve the quality of early education and care services to young children and their families. It is also intended to stimulate dialogue about the impact of such research studies.

Pedagogic approach

The approach taken in the book series is not a linear one, but rather a praxeological one focused on praxis, meaning a focus on pedagogic action impregnated in theory and supported by a belief system. It is this fusion of practice, theoretical perspectives, ethics and research which we term 'Ethical Praxis'. This fusion is embodied in all EECERA research and development activity, but we anticipate the book series will have a stronger focus on the development of pedagogic praxis and policy. In addition to offering a forum for plural, integrated pedagogic praxis, the series

offers a strong model of praxeological processes that will secure deep improvements in the educational experience of children and families, of professionals and researchers across international early childhood services.

The book series acknowledges pedagogy as a branch of professional/practical knowledge which is constructed in situated action in dialogue with theories and research and with beliefs (values and principles). Pedagogy is seen as an 'ambiguous' space, not of one-between-two (theory and practice) but as one-between-three (actions, theories and beliefs) in an interactive, constantly renewed triangulation. Convening beliefs, values and principles, analysing practices and using several branches of knowledge (philosophy, history, anthropology, psychology, sociology amongst others) constitutes the triangular movement of the creation of pedagogy. Pedagogy is thus based on praxis, in other words, an action based on theory and sustained by belief systems. Contrary to other branches of knowledge which are identified by the definition of areas with well-defined frontiers, the pedagogical branch of knowledge is created in the ambiguity of a space which is aware of the frontiers but does not delimit them because their essence is in their integration.

Praxeological intentions

There is a growing body of practitioner- and practice-focused research which is reflected in the push at national and international levels to add research and analysis skills into the professional skill set of all early childhood practitioners. This is a reflection of the growing professionalism of the early childhood sector and its increased status internationally. The development of higher order professional standards and increased accountability are reflective of these international trends as the status and importance of early education in the success of educational systems is acknowledged.

Each book in the series is designed to have the following praxeological features:

- strongly and transparently positioned in the sociocultural context of the authors
- practice or policy focused but based on research and with strong conceptual/theoretical perspectives
- topical and timely, focusing on key issues and new knowledge
- provocative, ground breaking, innovative
- critical, dialogic, reflexive
- euro-centric, giving voice to Europe's traditions and innovations but open to global contributions
- open, polyphonic, prismatic
- plural, multidisciplinary, multi-method
- praxeological, with a concern for power, values and ethics, praxis and a focus on action research, the learning community and reflexive practitioners
- views early childhood pedagogy as a field in itself, not as applied psychology

- concerned with social justice, equity, diversity and transformation
- concerned with professionalism and quality improvement
- working for a social science of the social
- NOT designed as a text book for practice but as a text for professional and practice/policy development.

This third book in the series exemplifies these underpinning philosophies, pedagogical ethics and scholarly intentions beautifully. We believe it is topical and timely, focusing on key issues and new knowledge, and also provocative and critical, encouraging and opening dialogue about our thinking and actions in developing high quality early childhood services internationally.

ACKNOWLEDGEMENTS

While we take responsibility for the content of this book, we wish to acknowledge the debt we owe to our colleagues for the shared research projects on which we now report. Also, the many remembered debates and conversations we have shared with colleagues, both locally and internationally over time. In particular, Christine acknowledges the substantial contribution working with Lydia Plowman and Joanna McPake made to developing her interest in, and understanding of, young children's engagement with digital technologies. Susan thanks her collaborators Joce Nuttall, Susan Grieshaber and Elizabeth Wood for growing her understanding of the contextual nature of digital play and learning.

Our work has depended on the willing participation of many children, families and educators. We are grateful for the time and insights these participants have gifted us. We extend our thanks to Chris Pascal for inviting us to contribute this book to the EECERA series 'Towards an Ethical Praxis in Early Childhood: from Research into Practice' and for her editorial support and patience. Our families have also been patient and endlessly supportive during the ups and downs of producing this book – thank you.

Finally, we acknowledge the superb formatting and editorial care provided by Carmela Germano with financial contributions from the Australian Catholic University.

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TOWARDS A NEW KNOWLEDGE PERSPECTIVE

Introduction

As he pretended to be a delivery driver, three-year-old Sam handed over an imaginary parcel and was offered a small plastic card in payment. He tapped it on the corner of the old mobile phone being used as a card reader and having completed this contactless transaction climbed back into his van, turned a key to start the engine and called goodbye. This was a familiar play episode for Sam. He was enacting the kind of transaction he frequently observed during shopping trips. A card is tapped on a small rectangular box and a purchase is handed over. But his grandfather, his partner in the play, noticed his use of the contactless electronic with some surprise, although he would not have commented on Sam accepting pretend coins or even trying to place the card into the old phone and typing in some numbers. He was not surprised either at the use of a pretend motor vehicle and the actions of driving. Contactless payment is a relatively new practice for Sam's grandfather and therefore noteworthy in a way that did not necessarily extend to his own everyday experience of paying electronically with a card and PIN number – and especially with driving a car. Sam's understanding of shopping, communicating and engaging with digital technologies might seem different from that of earlier generations but just like his grandfather's experience it is embedded in his daily life.

Books about young children and technologies often open with observations such as this one describing Sam and his grandfather. Typically, the vignettes are used to highlight what the authors present as the remarkable capacity of modern day children to use technologies. However, in this book we suggest that Sam and his grandfather are quite unremarkable. Culturally, both the child and the grandfather are of their time. Sam's technological practices illustrate the evolution of knowledge, its application in technological innovations and the ways in which new knowledge and technologies transform the everyday practices of adults and children

over time. This book is about cultural change, change in what is known and in the technologies made possible by new knowledge and understandings. Here we will argue that it is necessary to make sense of the evolution of changes in society's knowledge and what that means for the technologies at our disposal and our everyday actions and interactions if we are to understand and respond to young children's play and learning in contemporary times.

Culture is central to our thinking in this book. By culture we mean the dynamic nature of knowledge in the practices of everyday life. We explore how the process of cultural-historical change gives rise to contemporary knowledge (conceptual, practical and theoretical) and cultural tools and creates the conditions for transformative future innovation. It is our contention that this cultural perspective enables educators, policy-makers and parents to both understand the nature of the changes in play and learning in the digital age and, importantly, respond to these changes in ways that reflect the values and desires of contemporary times and the opportunities and challenges for future transformations. In order to think about how we can respond to the implications of technological change for young children's play and learning in the digital age we will introduce some theoretical ideas about the relationship between people and technologies. One such important idea is that of taking a critical perspective on technologies. We will argue that adopting a culturally informed and critical perspective empowers educators, parents and all those responsible for caring for and educating young children in the digital age. Thinking culturally and critically is challenging. It requires a proactive and questioning approach that seeks to appreciate the cultural-historical transformations of the past, understand the present and consider future possibilities. However, we argue that just as changes in knowledge have informed technological innovation, so too should knowledge in the field of early childhood education evolve in the digital age. In what follows we seek to demonstrate the value of a cultural and critical perspective on young children's play and learning in the digital age. First, however, to open our thinking and to lead the way in better understanding what we mean by a cultural and critical perspective we open this introductory chapter with an account of how research into young children's engagement with technologies moved from being a predominately niche area of early childhood scholarship into a mainstream concern of early childhood education.

From niche research area to mainstream concern

Ten to 20 years ago, research about young children's play and learning with technologies was a niche area of investigation. Defined as birth to eight years, the early childhood period tended to attract the interest of a committed band of scholars and researchers interested in understanding what types of technologies young children were using and how these technologies were being put to use in children's play and learning (e.g. Haugland, 2000; Marsh *et al.*, 2005; Yelland, 2005). Most of the research about young children's technological experiences was conducted in relative isolation, focusing on what is variously labelled as preschool, nursery or early

years education. Other sectors of education, such as primary, secondary and tertiary education, were pre-occupied with their own pedagogical technological issues and paid little heed to what was occurring in the early years (see for example: Collins & Halverson, 2009; Greenhow, Robelia, & Hughes, 2009). The early childhood sector meanwhile – in those moments when it did pay attention to young children's engagements with technologies – tended towards a continuous re-enactment of the 'benefits versus risks' orientation towards the role of technologies in the lives of the very young. This orientation is most evident in the 'Fools Gold' debate occurring between Cordes and Miller (2000) and Clements and Sarama (2002) in the early part of the new century. What and how young children might be playing and learning with technologies was not a mainstream consideration for the field. However, leaders researching in this area continued to establish the empirical evidence base regarding young children's technology use in multiple settings, including at home and in educational contexts (Plowman & Stephen, 2005). New ideas and concepts for understanding young children's digital literacies (Marsh, 2004) and the emergence of digital play were slowly percolating (Zevenbergen, 2007).

Then, in 2010 came the iPad. Arriving with a suddenness that made the iPad seem as if it had arrived from nowhere, the early childhood sector was ill-prepared to greet this new technology in the lives of young children. Putting computing technology literally at the fingertips of the very youngest of children, an explosion of interest in young children's technology use in the early years suddenly occurred. A quick Google search reveals a rapid succession of research publications focused on iPads in the early years. With titles such as 'iPads as a literacy teaching tool in early childhood' (Beschorner & Hutchison, 2013) and 'Touch, type, and transform: iPads in the social studies classroom' (Berson, Berson, & McGlinn Manfra, 2012) technology research in the early years was unexpectedly high on the agenda. There was interest from the popular media too. 'Are iPads and tablets bad for young children?' asked the *Guardian* newspaper (Cocozza, 2014) and 'Toddlers obsessed with iPads: could it hurt their development?' (Chang, Rakowsky, & Frost, 2013). Yet, despite this high profile rush of interest, research into young children's technology use at home and in early childhood education settings had gone on somewhat quietly unnoticed for many years. Indeed, outside of the specifics of early childhood technology research, studies in the areas of media and new media had already provided many important insights and understanding about young children's engagements with technologies – particularly those pertaining to what was once, at some earlier point in time, the newest of the new – first radio, and then television (Buckingham, 1993).

In this book we pay attention to the range of research and thinking pertaining to young children's play and learning in the digital age. We consider both the 'niche' research of the past 20 years, and newer research and theorisation regarding young children's engagements with technologies. In particular, we draw on our own research – some of which was conducted and published during the 'niche' era, and some of which makes a more contemporary contribution. For example, we draw heavily on the ground-breaking work of Stephen and colleagues in their three