Chapter 4

It Is Real Colouring?
Mapping Children’s Im/Material Thinking in a Digital World

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ABSTRACT

Situated in the context of the role digital technology plays in the lives of young children in today’s society, this chapter is comprised of four sections examining children’s thinking involving digital spaces. First, a succinct overview of current research will be presented, focusing on emergent themes regarding young children navigating digital spaces and their im/material thinking. Following this is an examination of the issues raised from this research. This section highlights disparate access to technology and children’s construction of identity in digital spaces. The next section presents the gaps in current research and the final section of this chapter focuses on implications for literacy practice, policy, and research.

INTRODUCTION

Media and literature often polarize the debate regarding the benefits and downfalls of exposing young children to digital worlds (Cordes & Miller, 2000). Parents and educators alike worry if exposure to digital worlds at a young age is dangerous for a child and counters healthy child development. Adults often romanticize childhood and a protectionist type of attitude has traditionally prevailed within the field of early childhood education (Robinson & Diaz, 2005). As part of a larger ethnographic study of integrating iPads into early childhood educational contexts, we asked parents a series of survey questions related to children’s access and use of digital worlds in the home environment (for a discussion of research methods see Harwood, forthcoming). Additionally, we also inquired about parents’ personal beliefs related to play, literacy, education, and the digital world.
Overall, the 24 parents who responded to the survey demonstrated a cautious attitude toward the idea of integrating iPads into early educational contexts, favoring ideas of using technology only for clear educational aims with well-defined time limits. In response to one of our questions, how much time in your child’s kindergarten program should be dedicated to ‘new technologies’ (e.g., tablet), a parent stated:

Not a major portion...It is more important that a child should be taught about all the aspects of life like learning to co-operate, adjust with peers, how to cope with failure as well as how to behave when you win. Be competitive in a positive manner. All these endless character formations can never be learnt with the use of ‘new technologies’. Making a child concentrate on new technologies would make him more a techie and robotic. I see many kids who do not talk or play with others but spend all their time in front of a computer or iPad. This should be discouraged. So, it is very important that children should be taught new technologies and should spend some time with it, without [sacrificing] other major activities.

The crux of the debate appears to be fuelled by a general lack of understanding and information about how children’s thinking through/with digital worlds is impacting how they learn and approach the learning environment. Yet, digital spaces are increasing at a rapid rate (Burke, 2010; Lim & Clark, 2010), and young children are immersed in the world of digital media (Rideout, Vandewater, & Wartella, 2003). One only has to make a quick stop at a local toy store to realize that children’s play and learning has extended into these digital spaces. Toy store offerings include such items as the Fisher-Price® Laugh & Learn Apptivity™ Storybook Reader. This ‘baby’ aged intended toy offers parents a book-like case to house their digital device and the capability to interact with applications that focus on early literacy. And although in this chapter we are not advocating for either side of the debate regarding the age of appropriateness for introducing children to the digital world, what is apparent is that digital worlds are as much a part of a child’s early experiences as other traditional types of play (e.g., lego, sand/water play, doll play). And as these digital spaces continue to evolve and expand, how they affect children’s thinking and learning in these converged spaces have become key questions for society (Burke, 2010; Marsh, 2007). Collectively, in this paper, we use the terms digital spaces and digital worlds interchangeably to refer to and encompass digital technologies and media, digital toys and games, and virtual spaces that children occupy. The chapter is broken up into four parts, which examine children’s im/material thinking: the first section presents a succinct overview of the research; the second section examines the issues raised in relation to the existing research; in the third section, several gaps in the existing research are discussed; the fourth and final section draws out the implications of such research for literacy practice, policy and research.

**SUCCINCT OVERVIEW OF THE RESEARCH**

This section will review current research with young children involving the intersection of literacy and digital spaces in relation to children’s im/material thinking. The research reviewed in this section involves how children construct identity and meaning, make complex compositional choices, form and forge collaborative spaces, as well as navigate and create within digital spaces. Additionally, research concerning crossing the im/material boundaries between the physical and digital, as well as children’s virtual worlds is also presented.