Young children's reading for pleasure with digital books: six key facets of engagement

Abstract

This paper offers a new characterisation of young children's (2-8 years) reading for pleasure (RfP) with digital books. This characterisation is rooted in a re-contextualisation of Craft's (2011) conceptualisation of 21<sup>st</sup> century childhoods and a review of the literature concerning young children's RfP with digital books. The paper develops Craft's (2011) work by considering the ways in which digital books can resource the '4Ps of digital childhood' in reading for pleasure. Six facets of reader engagement, nested within Craft's (2011) 4Ps, are presented: affective, creative, interactive, shared, sustained and personalised reading engagements. It is argued that this characterisation of young children's reading engagements can enrich our understanding of the affordances of digital books in relation to RfP in the 21<sup>st</sup> century. The paper thus offers an important new contribution, going beyond established work in the field, which typically explores digital books in relation to children's learning, product design or developmental outcomes.

Keywords: reading for pleasure, e-books, child's engagement, digital books

## Introduction

In response to the rapid expansion of literacies in an ever-widening technological landscape, contemporary childhoods are changing (Facer, 2011; Wohlwend, 2010, 2011). In synthesising informal elements of children's digital lives with the theoretical framework of possibility thinking, Craft (2011) characterises the creative dispositions for learning in the digital age according to four dimensions: pluralities, possibilities, playfulness and participation. These "4Ps" represent Craft's attempt to position children as active, creative players on the digital stage and to both reveal and problematise perspectives on childhood and youth as market-driven and determined. In this paper, we develop her seminal work on the 4Ps, using them as a lens to consider reading for pleasure with digital texts in the 21<sup>st</sup> century. Craft (2011, p.33) sees the 4Ps as being 'key features of changing childhood and youth triggered by the digital revolution' and these key features provide a coherent conceptual structure for our consideration of the use of digital books, which are part of a shifting digital reading landscape.

With the advent of digital books and new reading devices, reading for pleasure has not only diversified, but has become more multi-faceted; underpinned by reading engagements which may well involve dynamic exchanges, creativity and the co-construction of meaning (Roskos, Burstein and You, 2012; de Jong and Bus, 2003). 'Digital books' is an umbrella term encompassing the various kinds of digital texts available for young readers, including e-books, ibooks, storyapps, bookapps and LeapReader books. While there is no officially agreed nomenclature (see Author, 2015), we use the term digital books in this article to refer to digital texts with some kind of interactivity (e.g., the possibility of customising the text or the presence of hyperlinks in the text). Digital books are transforming the ways in which children read, write, engage with and create stories (Marsh, 2006; Burnett, 2010). While some teachers enthusiastically claim that children's book encounters can be

motivated and enhanced through digital interactions, others struggle to find ways to incorporate such books and other digital books into their regular literacy instruction (Abrams and Merchant, 2013; Author et al., 20XX). The latter may in part be a response to the limitations of some national and state curricula that, whilst recognising the value of reading for pleasure, do not consistently afford value to digital books, as in England (DfE, 2013) and the USA for example. The professional challenge may also be a response to the unprecedentedly dynamic and burgeoning market for children's digital books, in which there is little guidance on what constitutes an effective resource and quality interaction around such texts (Hirsh-Pasek, Zosh, Golinkoff, Gray, Robb and Kaufman, 2015). Moreover, there are several new reading platforms that young children can use to engage with stories. In addition to paper-based books, children can become immersed in storyworlds on smartphones, tablets, Wiis, Leapsters, E-readers, X-boxes or DSEs. These devices support different formats and provide different affordances for story engagement, as noted in our previous, empirically based, work (Author, 20XX). While researchers often focus on either digital or print books when studying children's reading practices (e.g., Clark & Rumbold, 2006), children, when given the choice, use both formats seamlessly and for a variety of purposes (O'Donnell B. & Hallam, 2014).

In the current paper, which is conceptual in nature, we focus on children's reading and story-engagement with enhanced digital books, sometimes referred to as story apps (e.g., Stichnothe, 2014; Yokota & Teale, 2014). Such texts are typically presented on iPads and comparable tablets and support some of the following features: audio ('Read to me'), audio with text highlighting, embedded audio and /or video, inbuilt camera and microphone, text magnification, background music, interactive elements or shared passages online. As such, story apps offer multiple possible entry points and forms of potentially pleasurable story engagement that are different from traditional paper-based books. The aim of this paper is to

establish a connection between these novel affordances of children's digital books (story apps) and characteristics of reading for pleasure. The paper offers new understanding regarding reading for pleasure with digital books, and highlights the relationship between Craft's (2011) 4Ps and children's reading for pleasure engagements with narrative. This is important for advancing the current perspective on digital books which is often too removed from the reading for pleasure agenda, and for positioning reading for pleasure in the 21<sup>st</sup> century within the broader dimensions theorised by Craft (2011). The paper also affords a deeper and more balanced understanding of the potential of children's digital books. In the media such books are often portrayed negatively (e.g., Ensor, 2013), with commentators constructing narratives of fear and concern among many parents and practitioners.

## The 4Ps of digital childhood

Craft (2011; 2012) in theorising the key dimensions of digital childhood, concluded that there are four such dimensions inherent in the 21<sup>st</sup> century: 'plurality of identities (people, places, activities, literacies), possibility awareness (of what might be invented, of access options, of learning by doing and of active engagement), playfulness of engagement (the exploratory drive) and participation (all welcome through democratic, dialogic voice)' (Craft, 2011, p.33). The 4Ps are situated between the creative and the performative agendas of contemporary western education and this affords them stability in terms of the often volatile nature of educational fashions (Hursh, 2008). Central to all four dimensions is what Craft (2001, 2005) calls "little c creativity", which she describes as everyday creativity, and which in relation to the current focus, acknowledges the social aspect of digital media in children's lives. More specifically, the plurality and playfulness dimensions refer to the multiple engaging and exciting learning opportunities that cut across traditional classroom learning

boundaries. The participation and possibilities dimensions 'provide a form of compass' for creative education (Craft, 2012, p.186). Furthermore, all four dimensions recognise the numerous ways in which information is made available to and assimilated by children. The importance of diversity and dialogue is incorporated into the 4Ps in that it places emphasis on ideas generated through dialogue and by diverse groups, at any time and in any place or context.

# **Reading for pleasure**

The concept of 'reading for pleasure' is associated with 'reading enjoyment' and is variously described as 'recreational reading' (Ross, McKechnie and Rothbauer, 2006), 'free voluntary reading' (Krashen, 2004) and/or 'independent self-selected reading' (Martin, 2003). It is arguably undertaken for the personal satisfaction of the reader and as a consequence is often characterised as a solitary activity, conducted in privacy. Yet reading is a social and cultural process, embedded within the context of its use (Barton and Hamilton, 1998; Maybin, 2013; Cremin et al., 2009, 2014). Frequently, reading for pleasure is also associated with the concept of 'reader engagement'; engaged readers tend to display positive attitudes to reading, are interested in it and choose to read. Within the Programme for International Student Assessment (PISA) surveys (e.g., OECD, 2010) reader engagement is the portmanteau term used to encompass multiple elements, including for instance: frequency of leisure reading, attitudes, interest, 'depth' (measured by the comprehension strategies that the 15 year olds report using), and reading diversity (Marks, 2000). The term is also employed in other selfreport surveys, although as Fredricks, Blumenfeld and Paris (2004) observe, in research it is often limited to single elements such as behavioural, emotional or cognitive engagement. In this paper, in alignment with Cremin et al., (2014), we adopt the view that reading for pleasure is a volitional activity, and recognise the importance of the reader's sense of agency and desire, their motivation, interest and engagement in the process.

International evidence reveals that reading enjoyment is more important for children's educational success than their family's socio-economic status (OECD, 2002; Clark and Rumbold, 2006) and that reader engagement is a strong predictor of literacy test scores (e.g., Anderson, Wilson and Fielding, 1988; Mullis et al., 2007; OECD, 2002; 2010). Additionally, a well-established body of research links both children's attitudes to reading and their motivation to reading attainment (e.g., Guthrie and Wigfield, 2000; Wang and Guthrie, 2004; Medford and McGeown, 2011; Taboada et al., 2009). There is relatively little research that examines the nature of reader engagement and the pleasure derived through reading. Nonetheless, it is well documented that readers who are intrinsically motivated are more likely to have a positive self-concept as a reader, and to read for their own enjoyment and satisfaction (e.g., Cox and Guthrie, 2001; Wang and Guthrie, 2004; McGeown et al., 2012). The aspects of intrinsic motivation that, according to research, predict both reading breadth and comprehension include: curiosity (a desire to find out something or learn new things), involvement in the text, and a preference for challenge (Wigfield and Guthrie 1997; Wang and Guthrie, 2004). Another intrinsically motivating factor is the experience of reading itself, particularly reading narrative, which Ross et al., (2006) claim markedly motivates readers.

## The importance of narrative

Several decades ago Britton (1982) suggested that reading is fostered by a legacy of narrative satisfactions. The centrality of narrative is widely recognised: it is viewed as a major 'organising device' (Langer, 1953, p. 261) enabling humans to order experience, whether real or imagined, as a 'primary act of mind' transferred from life to art (Hardy, 1977), and as a fundamental mode of thought (Bruner, 1986). It is also argued that the experience of narrative helps children to understand 'the symbolic potential of language: its power to create possible and imaginary worlds through words' (Wells, 1986, p. 156). Reading narrative has been described as a form of ludic play (Nell, 1988) enhancing

imaginative engagement and temporary escapism from the everyday. The experience of 'living through' (Rosenblatt, 1978) a text, and engaging affectively in the web of fiction is often linked to children's positive attitudes to reading, the pleasure and satisfaction they encounter as readers and their desire to renew the experience (e.g., Cliff Hodges, 2010; Hitchcock, 2012; OECD, 2002; Dungworth et al., 2004).

In this paper, we focus on reading for pleasure with particular reference to engagement with narrative, which we take to be: 'an account of events occurring over time' (Bruner, 1991, p.6), albeit that in the context of digital books, narratives are often presented differently than in traditional print or picture fiction. While acknowledging the importance of pedagogical understandings of how to foster reading for pleasure in formal learning environments (Author et al., 20XX), our work foregrounds children's personal and social engagement with narrative in digital books.

# Methodology

The research methodology employed for this work draws on our experience as researchers working on a Knowledge Transfer Partnership project between an academic institution and a large UK literacy charity. Part of this involved the design and development of an evaluation tool for children's digital books (see Appendix 1). This is currently being used in a national digital book award and as part of the charity's professional development for teachers focused on using digital books in their classrooms. Our analysis of the affordances of children's digital books drew us to reconsider the literature on reading for pleasure and reading engagement.

In surveying the current literature, we began with bodies of work concerned with reading engagement and dispositions corresponding to Craft's (2011, 2012) four stranded framework, followed by literature more germane to children's engagements with digital books. We were cognisant of the work of the librarian Desang (1999) who noted the radical

and catalytic effect of digital media on children's literature and the introduction of new graphic styles, non-sequential information and multiple meanings in printed texts. In particular though we were mindful to recognise and examine research which focused upon processes of story engagement that directly reflect the novel affordances of digital books, such as their haptic affordances for engagement, increased visual display of images and legibility of texts (e.g., through possibilities to customise fonts, colour and paralinguistic cues accompanying texts), alignment of textual, usability and multimodal features (Meyers, Zaminpaima and Frederico, 2014) and those which enhance or enrich print experiences rather than replicate them (Yokota and Teale, 2014). Out of these processes, we were particularly interested in processes of use that would nurture children's identities as readers and support children's positive dispositions towards voluntarily reading for pleasure. In addition, we focused on reading comprehension processes (Zosh et al., 2013), multisensory behaviours such as touching, listening, looking, moving specific story characters (cf. Roskos, Burstein, Shang, and Gray, 2014), as well as affective and imaginative playful engagements (Millard and Marsh, 2001).

These novel affordances of digital books can significantly alter the reading experience (Parish-Morris, Mahajan, Hirsh-Pasek, Golinkoff, & Collins, 2013), and have been found to support pleasurable reading engagements at home (Author, 20XX) and in the classroom (Falloon, 2014).

Our review was broad and conceptual in nature, making connections and distinctions across the field of reading for pleasure and digital books. We explored the affordances of digital books in relation to fostering/ facilitating reading for pleasure with narrative and examined, theoretically, the links between the two in relation to Craft's 4Ps of digital childhoods. The current paper thus complements and considerably extends current studies in the field which focus on the features and affordances of specific digital books in relation to

children's learning (Vanderschantz and Timpany, 2012); product design (e.g., Yokota and Teale, 2014) and developmental outcomes (Chau, 2014). In addition, these studies examine particular digital books, limiting the potential application of their research, while our study considers the pedagogical potential of digital books in supporting the development of children's identities as readers and encouraging their reading for pleasure and the imaginative processes therein.

Although digital books are used by children of various ages, we focused on aspects of engagement for children aged between two to eight years, corresponding to the typical age group taking part in reading for pleasure initiatives (run, for example, in the UK by the Reading Agency; in the US by ChildFund and Better Beginnings in Australia) and targeted by several digital book producers (Common Sense Media, 2011). Mindful of the complexities of a dynamic and rapidly changing reading market, we did not focus on simple electronic books as these are currently being replaced by more sophisticated digital resources (Katuk, Kim and Ryu, 2013), but on the features and affordances of reading engagement with digital interactive books.

Our review led to six main facets of reading for pleasure engagement which we present, nested within the 4 Ps of digital childhood. We present these facets of engagement in order to afford detail of the key issues with regard to each. However, as represented in the Figure 1, in real life, there is a strong interactivity among them and between digital and print books. There is no intended hierarchy in their presentation.

## Figure 1 to be inserted about here

## The facets of RfP engagement

In the next section, we underpin each facet theoretically, with particular attention to research informing pleasurable reading engagements in this digital age.

## Playfulness: Affective and interactive RfP engagement

According to Craft (2011, 2012), playfulness refers to the opportunities digital spaces offer for creating content, and envisioning possibilities by considering 'what if' scenarios and make-believe play. Extrapolating this concept to reading for pleasure with digital books, two facets emerge as key characteristics of digital books that significantly contribute to effective narrative engagements: affective and interactive engagement.

Affective engagement concerns how the child feels when reading a digital storybook and relates to feelings such as pleasure, enjoyment, sense of belonging and inclusion. The intimate relationship between reading for pleasure and sharing one's affective engagement with favourite books and the storyworlds these afford, is alluded to by Author (20XX). Additionally, this research, alongside that of others (e.g., Cliff-Hodges, 2010; Landay and Wooton, 2012), reveals that children's affective and reflective engagement in literature often connects to positive attitudes to reading and promotes reader satisfaction. Texts read for pleasure also provide a powerful aid to critical reflection and creative thought: 'reading for pleasure is oriented towards finding personal meaning and purpose and related to the human need to make sense of the world, the desire to understand, to make things work, to make connections, engage emotionally and feel deeply' (Author, 20XX, p. 174). ... As recognised by the late Wiliam Honig (1987), good books can create empathy which may facilitate children's understanding of shared values and their corresponding social relations. Recent research by Kidd and Costano (2013) claims that high quality literary fiction that requires intellectual engagement and creative thought, enables young readers to develop the complex social skill of 'mind-reading' in order to understand others' mental states. Such empathetic mindfulness is an invaluable personal and social asset. In addition, the affective dimension appears to enhance and sustain children's intrinsic motivation to read, enabling them to make connections to their own lives and those of others. Furthermore, Dungworth et al. (2004) reveal that children see

the affective dimension as a critical motivator for reading, and Appleyard (1990) documents the intense pleasure to be found in finding oneself in the text. Similarly, Arizpe, Colomer and Martínez-Roldán (2014) demonstrate the myriad benefits, personally and culturally (as well as in literacy learning), that accrue when immigrant children are supported to explore wordless books examining difference. Studies also suggest that there is a delicate balance to be sought between affective engagement with personally relevant narratives, and cognitive stimulation through encountering challenging texts (e.g., Kidd and Castano, 2013).

With digital books, the emotional engagement with a narrative is often enhanced through children's affective engagement with digital resources more generally, notably those resources which afford sensory and kinaesthetic experience of touch (Author et al., 20XX). With touch-screen devices, the surface and texture is the same for all objects and yet, it provides a different response when tapped, swiped or dragged. Tapping on the right corner of the iPad may link children to the next level of a digital book. In another digital book, tapping the same place may give them a pre-recorded voice-over for their favourite book character. In another digital book, it may activate the 'buy more' button for purchasing new clothes for their book avatars. Children thus need to distinguish between some complex combinations of touch-manipulable possibilities embedded in the digital books that they can operate. This is a new kind of 'digital literacy skill', which children need to learn through experience and adult-mediated interactions.

In a study with a diverse group of students aged 3 to 19 years whom we observed using a range of iPad-mediated activities, including digital books, in a special school in the English Midlands, we noticed that 'the students' deep engagement in this literacy activity appeared to be further enhanced by the inclusion of somatosensory stimulation in their writing, through physical touch (gently touching the smooth, hard surface of the iPad), vicarious touch (watching other students touching their iPads) and virtual touch (touching

virtual objects on the iPad screen)' (p.113, Author et al., 20XX). The possibility of engaging with the digital books via touch thus further underscored children's sense of belonging in the classroom and their personal enjoyment of the books' content.

Playfulness, Craft (2012) argues, supports interactive experiences that correspond to the dynamics of 21<sup>st</sup> century learning. In relation to digital books, interactive engagement is evident in the reading activity, and requires a child's active contribution. Pedagogically, interactivity with narratives typically happens outside the text, with teachers enabling learners to 'inhabit' the text through drama, for example. With digital books however, interactivity is embedded within the book. For a digital learning environment to be optimally interactive, it is important to strike a judicious balance between an individual's skills and the task difficulty (Csikszentmihalyi, 1993, 1997). To achieve this balance, Csikszentmihalyi (1993) theorised that activities should: 1, have concrete goals with manageable rules; 2, make it possible to adjust opportunities for action to our capabilities; 3, provide clear information on how we (activity participants) are doing; and 4, screen out distraction and make concentration possible' (p. xiv). In addition to supporting individual interactivity through specific features, it is important to facilitate social interactivity. For young children, this happens best through environments where they can play or interact together with other children (Zurita, Nussbaum & Sharples, 2003; Roussou, 2004). Therefore, for both individual and social interactivity with digital books, it is important to manage intrinsic motivation and absorption while avoiding addiction and excessive use of digital media (Nalwa and Anand, 2003). The most effective interactive environments are thus those that support optimal social and individual interactivity.

# Participation: Shared and sustained RfP engagement

Reading for pleasure is a social practice, in the sense that the reader's pleasure from engaging with a narrative is increased through the possibility of sharing this experience with others. With print books, shared engagement around narratives typically happens through joint book reading/ shared book reading, that is reading which involves an adult-child reading activity (Snow & Goldfield, 1983; Snow, 2002). With digital books, however, this engagement can be twofold as readers can share their experiences with others both remotely and/or immediately if they are present. This relates to Craft's (2012) notion of participation, that is making children's voices heard and creating environments of relevance to children and in which they can exert some degree of ownership. The importance of meaningful interaction in shared engagement with texts and accumulating a history of shared reading experiences with others has recently been documented in research into reading for pleasure (Author et al. 20XX). In this, 'texts in common' were seen to prompt multiple conversations and interactions between peers, and between children and their teachers, and these served to create bonds between readers.

Sustained engagement describes the pedagogic practice of supporting group interactions of a sustained nature (Sylva, Melhuish, Sammons, Siraj-Blatchford, Taggart & Elliot, 2003) and motivating children to read by providing them with ample and uninterrupted reading time. In the case of reading for pleasure, sustained engagement is paralleled with perseverance and the need to develop a sense of the text's flow. In classrooms, where children are given regular opportunities to engage in reading for pleasure for a long time, children's reading proficiency scores and intrinsic motivation to read are higher (Taylor, Frye, & Maruyama, 1990; Mizelle, 1997;Cremin et al., 2014).

With digital books, sustained engagement can be supported with specific features embedded in the books, such as the opportunity to take on various characters (different persona) during reading, and thus experiencing a different facet of the story at each reading encounter (Author, 20XX). In addition, the fact that additional titles or books of similar content can be easily accessed online means that children's reading engagement can be tailored to their individual reading preferences and adjusted to their reading level more easily than with print books.

#### Possibility awareness: Creative RfP engagement

Craft (2001, 2010) conceptualises children as 'possibility thinkers' who can generate new ideas by asking 'what if' and 'as if' questions. The research that underpins the theoretical framework for possibility thinking has been undertaken in both early years settings (Author et al., 20XX; Chappell et al., 2007; Craft, McConnon and Matthews, 2012; Author et al., 20XX) and in primary school contexts (Craft et al., 2012). In this paper, recognising that making hypothesises is central to reading narrative, (Ross, McKechnie and Rothbauer, 2006) we focus on creativity conceptualised as possibility thinking, in relation to reading for pleasure with digital books. This has not been fully developed in the literature on digital books. However, with novel reading formats and informal learning contexts, such as those mediated by digital books, creative engagements can be facilitated in several ways, fuelled by possible options within the text. The opportunity to innovate, create new reading content and remix this with others' stories, is for example, a particularly salient affordance of digital books (Hobbs, 2008). Also, the possibility to be imaginative and innovative, which is at the core of possibility thinking (see Craft, 2012), is endemic to digital reading engagement (e.g., Dunn, Niens & McMillan, 2014). For example, with digital books (e.g., Mr Glue stories<sup>TM</sup>), children can create their own story endings, personalise the individual story characters and record their voices when reading.

## Plurality of identities: Personalised RfP engagement

According to Craft (2011, 2012), plurality refers to the digital experiences beyond the classroom or home boundaries, to spaces where children can engage in a multitude of literacies and activities. When considering reading for pleasure and digital books and the plural engagements they afford, personalisation becomes very significant. Personalisation has several meanings, but in the context of digital book reading refers to the possibility to relate the reading material to self or to others, and thus recognise the boundaries framing a given narrative (Author, 20XX). Personalisation refers to choice in reading, identity engagement, the notion that it is a highly personal endeavour as the reader defines and loses herself. Meek (1996, p.26) points out that 'book learning is both life-to-text and text-to-life' and others too recognise the importance of personal encounters with texts and high affective involvement, foregrounding personal agency in the choice of texts in order to support reading for pleasure (e.g. Cliff Hodges, 2010;Cremin,2007).

With digital books, such individual experiences are supported with several personalising features. Children's digital books can be *customised* in terms of their display (e.g., an image can be made bigger or font enlarged) or they can be *personalised in* terms of their multimodal content (e.g., by inserting children's own voice-overs or 'selfies' into their favourite story). Personalised stories support several literacy skills, promote children's positive attitudes to reading and broaden teachers' views about the role of literacy in children's lives (Bracken, 1982; Allen et al., 2002; Bernhard et al., 2008). When evaluating personalisation in children's stories, it is important to distinguish between customisation and deep personalisation. Customisation refers to the possibility to adjust or edit user-generated content in relation to a pre-established story template. On the other hand, personalisation refers to the possibility to adjust or edit user's own content to an open-ended or minimally structured story. So that young readers can explore multiple identities, they need to be given the opportunity to experiment with both

customisable and personalisable story characters. However, we ought to be aware that customisation is often underpinned by a commercial agenda which favours personalisation in pursuit of a broader market rather than an individual reader's meaningful engagement (Author, 20XX, 20XX).

A particular characteristic of personalisation that is implicit in the notion of reading for pleasure is the concept of self-paced reading and choice of texts facilitating the reader's personally-paced engagement. Self-paced reading is one of the experiences which increase children's motivation and engagement for reading, a point emphasised several decades ago in the US Reading for Pleasure Guidelines that specified self-selected, self-paced reading as central to individualised reading programmes (Spiegel, 1981). With print books, it is also well-established that self-selection and motivation are closely related (Hunt, 1970; Edmunds and Bauserman, 2006) and that specifically that choice and interest enhance readers' motivation, self-determination and engagement (Krashen, 1993; Moss and Macdonald, 2004; Clark and Phythian Sence, 2008; Pihl, 2012). These assets of books are enhanced in digital books as they allow for more customisation options.

#### Conclusion

Our review led us to six facets of RfP engagement which are nested within Craft's 4Ps and are particularly brought to the fore by digital books: affective, shared, sustained, creative, personalised and interactive RfP engagements. These are graphically represented in Figure 2.

## Figure2 to be inserted about here

We subscribe to the view that reading fulfils many purposes and the needs of various stakeholders (Clark and Rumbold, 2006). The integration of several perspectives under one umbrella of fostering reading for pleasure was thus a deliberate attempt to exemplify how

diverse perspectives on effective book reading engagement can reciprocally enrich the research and design, implementation and evaluation of children's digital books. The presentation of various kinds of engagement alongside each other was intentional as we aimed to show that children's engagement with digital books has several Rfp engagement facets and each has its own equal value. Despite the fact that, as technology advances, the affordances of digital books are likely to evolve over the years, the fundamental properties and characteristics of children's engagement will, we argue, hold firm. This focus on affordances and engagements rather than specific products gives our work stability and a visionary value, and complements the current work in evaluation of digital books that tends to focus on specific products (e.g., Children's Technology Review,

# http://childrenstech.com/).

Because this paper highlights the beneficial uses of children's digital books, it would be easy to overlook the balance between digital and non-digital books. As the EU Expert Panel on Literacy state (EU, 2012, p. 42), 'there should not be any hierarchical ranking in children's reading material', all genres and all reading formats are equally valid, as long as they support children's reading for pleasure and are used in moderation alongside each other. The notion of balanced engagement with stories is also rooted in the concept of transmedia which 'engage multiple literacies, including textual, visual, and media literacies, as well as multiple intelligences' (Herr- Stephenson, Alper, Reilly & Jenkins, 2013, p.14). What we refer to here is a facet of transmedia in that digital books should provide cross-platform experiences, which, by default, include traditional printed books. Thus, when considering the potential of a digital book for reading for pleasure, it is important to consider whether and how this text might enrich the offline version of the activity (Author, 20XX). Although such 'offline story extensions' are not as yet an integral feature of children's digital books, it is possible to ascertain their implicit presence by studying the processes of children's reading

engagement and the extent to which they are combining online and offline reading, notably with 3D story apps (Marsh, 2014).

It should be noted that our approach was embedded in a context of Western reading and writing experiences, where pleasure for reading is emphasised as a way of nurturing readers' identities and the development of life-long readers. We encourage researchers and practitioners using the facets presented here to be cognisant of their own research and practice contexts. Another caveat relates to the fact that our conceptual work was specifically concerned with reading for pleasure, thus this focus should be reflected in any assessment and evaluation practices of digital books resulting from this work.

Additionally, the six facets of engagement can only be considered if the digital books fulfil the basic criteria for usability and safeguarding, which are part of several rubrics for digital books and storyapps online, for example Best kids' apps (Netmums & Mumsnet); Children's Technology Review (Dust or Magic Institute); Guardian best children's Android and iPad apps (App playground). However, the conceptually derived digital book criteria developed through this current work connect such texts to reading for pleasure and the 4 Ps (Craft, 2011) of digital childhoods. It therefore represents a new evaluative tool through which both the teaching profession and parents seeking to foster children's reading for pleasure can critically consider children's digital books. Publishers too can design new, or evaluate and adapt their current, digital books in response to the six key facets of engagement (see Appendix 1). For educational researchers, the work offers a new alignment between children's digital books and reading for pleasure, it offers an alternative way of perceiving children's digital resources and has the potential to feed-forward and influence research processes in this area. As Hirsh-Pasek, et al. (2015) recommend, researchers and digital book publishers need to work together and our work offers a resource around which shared discussions, with a common focus on the potential for nurturing reading for pleasure with

digital books, can occur. The work reflects our explicit effort to provide the different stakeholders (children's educators, publishers or librarians) with an informed basis to choose from the wide menu of options currently dominating the digital book landscape, and to empower them to harness the full potential of these resources.

Acknowledging the variety and diversity of contexts of use and goals of individual projects, we expect the six facets of reading for pleasure engagement to interact with a variety of factors which invariably govern the individual stakeholders' choices of reading resources. For teachers, for example, these would include: teachers' own knowledge of children's texts (Author et al., 20XX), awareness of the everyday reading practices and preferences of young readers (Author, 20XX), and professional attitudes towards reading for pleasure and towards the use of digital reading resources with young children overall (Guernsey, Levine, Chiong and Severns, 2012).

In conclusion, this paper develops Craft's (2011) '4Ps of digital childhood', that is the creative dispositions for learning in the digital age, by presenting six key facets of reading for pleasure engagement which uniquely characterise young children's reading engagements with digital books in the 21<sup>st</sup> century. This characterisation avoids all previous foci on specific resources or learning outcomes and extends our understanding of the affordances of digital books for nurturing children's reading for pleasure in the new media age. In a world in which literacy landscapes are complex and rapidly developing, the significance of theoretically informed guidance around reading for pleasure engagements with digital books is likely to be of increased importance across the coming decades.

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Appendix: Evaluation tool for children's digital books in the context of reading for pleasure (adapted from Booktrust, 2015)

Before considering individual indicators, the digital book should be pre- screened for meeting basic principles of effective digital book design, including:

A, The digital book needs to be age-appropriate

B, The digital book needs to be related to literacy (ie reading and writing rather than other activities)

C, The digital book needs to be simple, clear and intuitive to use

The evaluation system comprises several indicators of quality; the final score should be based on the overall sum of all indicators. Each indicator should be rated on a 5-point scale, where 1 indicates low value and 5 indicates a high value, i.e. the higher the rating, the higher the potential of the digital book to support reading for pleasure.

*Affective engagement:* relates to feelings and behavioural engagement, it is about how the child feels when using a digital book.

*Shared engagement:* relates to collaboration and a feeling of shared experience during the reading experience.

*Sustained engagement:* relates, in this case, to real-time presence during the reading experience, concentrated attention and focus on the reading resource.

*Creative engagement:* relates to an immersive experience which encourages children to entertain 'what if' scenarios and possibilities.

*Personalised engagement:* relates to experiences individualised for each child, personally meaningful for him/her.

*Interactive engagement:* is about active involvement in the reading activity, requiring a child's input and contribution.

All indicators should be considered in relation to 1), the context of use of the digital books and 2), children's engagement with non-digital reading resources. The individual indicators stand in a synergistic relationship to each other, ie a combination of indicators is stronger than their individual contributions. In other words, effective reading for pleasure with digital books is more than a sum of each kind of engagement.