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What is This?
young children’s play in online virtual worlds

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ABSTRACT

Virtual worlds for children are becoming increasingly popular, and yet there are few accounts of children’s use of these worlds. Young children are spending increasing amounts of time online as technology continues to create significant changes in social and cultural practices in the 21st century. Some of children’s online interactions can be categorized as playful in nature; however, play and technology are frequently positioned as oppositional. In this article, I explore the tensions surrounding the relationship between play and technology and relate it to similar discourses concerning the concepts of ‘real’ and ‘virtual’. I then move on to consider the growing popularity of virtual worlds with young children and examine the way in which the worlds have been marketed to children and parents/carers on the basis of their propensity to offer online play in a safe environment. The article provides an overview of two virtual worlds currently targeted at young children and draws on a survey of primary children’s use of virtual worlds in order to identify the nature of play in these environments. One hundred and seventy-five children aged 5–11 completed an online survey and 15 took part in group interviews in which their use of virtual worlds was explored. This article focuses on the data relating to 17 children aged from five to seven years who used virtual worlds. Findings indicate that virtual worlds offered these young children a wide range of opportunities for play and that the types of play in which they engaged relate closely to ‘offline’ play. The implications for early years educators are considered.

KEYWORDS play, virtual worlds

introduction

Young children's home lives are becoming increasingly shaped by their engagement with a wide range of new technologies (Marsh et al., 2005; Rideout et al., 2003).
Much of this use of technology is playful in nature. Play in this context can be viewed as a phenomenon that, drawing from play theorists such as Broadhead (2004), Pellegrini (1991), Sutton-Smith (1997) and Wood and Attfield (2005) can be defined in numerous ways, but must be seen as an activity which is complex, multi-faceted and context-dependent. The study outlined in this article focused on young children's playful engagement with online virtual worlds. Online virtual worlds are immersive 2D or 3D simulations of persistent space in which users adopt an avatar in order to represent themselves and interact with others. They may or may not include game elements. The study is set within a context in which both the relationship between technology and play and the dynamic between the ‘real’ and the virtual have been subject to extensive critique, issues which will be explored below before I move on to consider the nature of two popular virtual worlds for children.

There have been a number of anxieties expressed in relation to young children's playful engagement with technology for some years. For example, Levin and Rosenquest (2001) suggested that electronic toys posed a threat to children's ability to engage in open-ended, imaginative play. The Alliance for Childhood has promoted a similar negative view of the role of technology in early childhood (Cordes and Miller, 2000), arguing that technology does not promote a healthy childhood and is not developmentally appropriate. More recently, similar concerns have been raised in relation to notions of a ‘toxic childhood’ (Palmer, 2006). Plowman et al. (in press) outline the socio-cultural, cognitive and affective disadvantages that critics suggest are prevalent because of children's use of technology, such as obesity, language delay and social alienation. However, there is a lack of research evidence to suggest that technology leads to these deficits and that play and technology are, therefore, incompatible (Yelland, 1999). In studies of children's use of technology in the home, children's play with technological hardware and software has been identified as being active in nature rather than passive (Marsh et al., 2005; Plowman et al., in press) and children have been identified as gaining a range of benefits from the use of technology, such as technical and operational skills, knowledge and understanding of the world and subject-specific knowledge in areas such as literacy and mathematics (Marsh et al., 2005; Plowman et al., 2008).

A further area of concern in relation to play and technology is the issue of the commercialization of childhood. In much of the discourse surrounding children's use of technology, we can see, as Miller and Rose (1997) depict, the child constructed as the “subject of consumption”, the individual who is imagined and acted upon by the imperative to consume’ (Miller and Rose, 1997: 1). Young children are the targets of commercial advertising from a very young age and their technological playthings are linked to a web of commercialized products. However, the relationship between childhood and consumerism is co-constitutive, and, as Cook suggests, is established well before birth:
... it is important for scholars to be cognizant of the often unexamined assumption that posits children as somehow outside the realm of economic life who are then brought into it either by caring adults, like parents or teachers, or dragged in by media and marketers. That line which divides ‘in’ from ‘out’ fades every day as structures of capital help structure the imagining of the worlds into which a child enters well before its post-partum existence. (Cook, 2008: 236)

This is not to suggest that we need to be unconcerned about the way in which children are positioned as consumers, however. There is a need to explore the complexities embedded within the relationship between childhood and the commercial world in order to identify the ways in which children are positioned within markets and to develop strategies for facilitating their critical engagement with this positioning. In this way, a reductive and narrow rejectionist agenda is avoided and children's own agency in navigating these waters will be enhanced.

The dichotomy often posited between play and technology is similar to the anxieties frequently expressed about virtual world experiences. There have been numerous ‘doomsday’ scenarios developed regarding children's engagement in virtual worlds, such as that outlined by the development psychologist Putnam, who over a decade ago offered his prediction about the future:

I predict that in ten years we will be faced with a group of socially withdrawn teenagers who are ‘addicted’ to living in their virtual worlds. The window of opportunity to anticipate this problem and to implement research, regulation and intervention efforts is rapidly closing. (Putnam, 1997: 211)

Valentine and Holloway (2002) identified the negative stance adopted by some commentators on virtual worlds (e.g. McLaughlin et al., 1995) and suggested that, ‘In the eyes of the debunkers, the “virtual” (the false, the inauthentic, the new, the disembodied) threatens to invade or pollute “the real” (the genuine, the authentic, the traditional, the embodied)’ (Valentine and Holloway, 2002: 304). However, their study of 11–16-year-olds use of online spaces indicated that in fact there was much overlap between young people's online and offline worlds, as young people interacted online with peers with whom they socialized at school. This phenomenon has been noted by other researchers (Davies, 2009; Thomas, 2007), suggesting that it is futile to separate children's engagement in ‘real’ and virtual environments in this way; instead, we should view their experiences along a continuum in which children's online and offline experiences merge. The studies of children's engagement in online activities are focused primarily upon older children and there is a need to engage in further research with children in their earliest years as they participate in online communities.

The study outlined in this article is focused on young children's use of popular virtual worlds at home, worlds that have been devised by profit-making companies, rather than virtual worlds set up to be used in schools for educational
purposes (see, for example, Johnson et al., 1999; Merchant, 2009). This is because these worlds are becoming increasingly prevalent in children's out-of-school lives and it is important that educators become familiar with the way in which children are using these environments in order to build upon these experiences further.

Virtual worlds for children have a long history, but it is only in recent years that they have become attractive to children and young people. This age group is now perceived as a lucrative market for virtual world developers and at the time of writing this article, it has been reported that there are now over 150 virtual worlds either operating or in development which are aimed at children and young people under 18 years of age. Worlds that are particularly popular with children aged eight and under include: Webkinz™, Neopets™, Club Penguin™ and Barbie Girls™. Whilst the virtual worlds are intended for children's use, parents are targeted in the marketing strategies that surround the sites. Cook (2008) outlines how parents and children are constructed as co-consumers in contemporary commercial contexts and on Club Penguin™ and Barbie Girls™, the two sites that are focused upon in this article, sections of the websites are devoted to outlining to parents how interaction on the sites is tightly controlled and monitored in order to allay their concerns regarding Internet safety. This seems to be a successful strategy, as there are numerous forums across the web in which parents state that they feel comfortable with the safety measures in place, as this typical post attests:

i let my kids use Club Penguin™ and i think it is perfectly safe
i read through all the parents bit and privacy and safety and it is completely safe
it also teaches your kids the rules of chatting online and i would reccomend it to every one else. Posted by: sophie at February 20, 2007 01:22 PM

This parent's desire for her children to learn the practices associated with social networking is one shared by many others. In a recent report, the National School Boards Association (NSBA, 2007) in the USA surveyed 1039 parents and stated that the majority of parents held positive views regarding the educational potential of social networking sites. Similarly, in the Digital Beginnings study, parents demonstrated positive attitudes towards the role of new technologies in their young children's lives (Marsh et al., 2005). Parental confirmation of children's use of virtual worlds may very well relate to the general worries regarding children's play outside of the home. In the 21st century, intensifying concerns about the notion of 'risk' has limited children's activities with regard to outdoor play (Tovey, 2007) and it may be the case that this has led to increased opportunities for online play. In the next section, I move on to provide an overview of two popular online virtual worlds for young children, Club Penguin™ and Barbie Girls™ in order to contextualize the study reported in this article.
Club Penguin™ and Barbie Girls™

*Club Penguin™* was developed by the media company New Horizon Interactive in Canada and opened to public use in October 2005 with approximately 25,000 users. In 2007, there were more than 12 million registered accounts and the world was subsequently acquired by Disney Inc. for $350 million. *Club Penguin™* is currently reported to have 22 million registered accounts. Barbie Girls™ was developed by Mattel Inc. and launched in 2007. It currently has approximately 17 million registered accounts. The worlds differ in terms of their affordances, but both *Club Penguin™* and Barbie Girls™ enable children to create and dress-up an avatar, decorate their avatar’s home, buy and look after pets and play games in order to earn money to purchase items for their avatars and homes.

The *Club Penguin™* site is well designed, with strong use of primary colours and stylized features of the landscape (for example, snow, sea, mountains and forests) that are depicted across all areas of the world, thus offering a coherent and well-defined environment. The use of multicoloured penguins as avatars means that cultural representations of identity are not narrowed in the way that they are in other worlds that use human forms, such as Barbie Girls™. However, artefacts, including clothing and furniture, throughout the world are generally ‘Westernized’ in nature and there is little to denote cultural heterogeneity.

*Barbie Girls™* is a very restrictive world in comparison. Whilst *Club Penguin™* appeals to both boys and girls, the home page for Barbie Girls™ makes it clear that this world is intended for girls only. Representations of femininity are very limited and stereotypical in nature. The range of skin colours that users can choose for their avatars is restricted, as is the range of hairstyles, most of which appear to be more appropriate for Caucasian ethnic groups. The predominant colour used throughout the world is pink and there is a high level of use of pastel shades, a pattern that is often seen in relation to young girls and technology and is a phenomenon I have referred to elsewhere as ‘pink technologies’ (Marsh, in press). Unlike the environment of *Club Penguin™*, which features shops and buildings within a natural environment, the landscape of Barbie Girls™ is that of a shopping mall, with a single park that enables avatars to mingle. The discourse here is similar to that surrounding numerous texts and artefacts aimed at young girls, as Carrington has outlined in her analysis of Bratz dolls (Carrington, 2003). ‘Barbie bucks’ are easy to earn in a range of games which include painting nails and giving Ken a make-over. Ken is described as ‘totally crushworthy’, which emphasizes that throughout this hetero-normative world, the ‘heterosexual matrix’ (Butler, 1990) is writ large.

Commodity purchasing is a key activity in both Barbie Girls™ and Club Penguin™. Users earn coins by playing games and then are able to spend the coins dressing their avatars and homes. Both virtual worlds offer free membership and an additional layer of paid membership which provides access to additional
goods and in-world opportunities. It would appear that just as forms of capital (Bourdieu, 1990) operate in virtual worlds inhabited by adults, such as *Second Life*, the child-orientated worlds are also shaped by social, economic and cultural capital. In addition, the global flows of mediascapes and ideoscapes (Appadurai, 1996) can be seen to permeate the world of sites such as *Barbie Girls™*, which is located within a nexus of commercialized practices that operate across online and offline worlds (Grimes, 2008).

This overview of the virtual worlds offers a review of the key discourses that frame their use. Against this backdrop, I will now explore the nature of young children’s play in these online worlds. There is a need to determine the extent to which children’s online and offline worlds relate, as many assumptions are made about the relationship between both in critiques of play and technology. The research question addressed in this article is: ‘What is the nature of young children's play in online virtual worlds?’

**the study**

The study was undertaken in a primary school in a large city in England. The school serves a primarily white, working-class community located on a housing estate. An online survey was set up, using ‘Google Docs’, which asked children a range of questions about their Internet use, including asking children to identify if they used virtual worlds outside of school and, if so, how often. Questions also focused on the nature of children’s activities when using virtual worlds, that is, if they shopped, played games, read the in-world texts and chatted to friends. Many of the questions were multiple choice to enable ease of completion. Children were also asked ‘What do you like about playing in virtual worlds?’, which was an open question. Children were invited to complete the survey when they attended ICT lessons in the IT suite, which each class in the school did twice a week. The IT teacher in the school frequently used online surveys in ‘Google Docs’ and therefore the practice was not unfamiliar to the children.

A total of 175 children across all year groups (ages 5–11) completed the survey. Thirty-eight children aged between five and seven completed the survey. Some of the younger children were supported in their completion of the online survey in that questions were read out to them when necessary and their responses inputted by an adult, but the majority of children completed the survey independently.

Following the completion of the survey, 10 children aged six and seven and five children aged 10 and 11 took part in a series of group and individual semi-structured interviews. It was explained to the children in these age groups that I wished to ask questions about their use of virtual worlds. Four of the group of six- and seven-year-old children who were interviewed had not completed the
online survey because they had been absent from the relevant IT sessions, but indicated at a later date that they used virtual worlds and so joined the interviews. The interviews took place in the school dining room and were digitally recorded, then transcribed. The interviews explored in depth children’s activities when using virtual worlds outside of school. The interview data and responses to open questions in the survey were analysed inductively (Strauss, 1987) and emergent themes identified. Children’s responses have been anonymized.

In total, 52 per cent of the 175 children aged 5–11 surveyed stated that they used virtual worlds on a regular basis. In this article, I focus on the data from the youngest children, aged five to seven, who stated that they used virtual worlds. The total number of children who reported using virtual worlds in the five to seven age group was 17 (13 of the 38 children in this age group who stated that they used virtual worlds in the online survey (34%), plus four children who had not completed the survey, but took part in the interviews with the group of six- and seven-year-olds). The article reflects on the findings of the survey of 13 pupils and the interviews with all 10 children aged six to seven.

the use of virtual worlds

Twenty-seven of the 38 children aged five to seven who completed the survey were regular users of the Internet at home; 11 reported that they never went online at home (29%). Of the 27 in the survey who used the Internet, 13 reported that they used virtual worlds on a regular basis, six girls and seven boys. Four five-year-olds, three six-year-olds and six seven-year-olds stated that they used virtual worlds in the survey. Of this group of children, nine accessed virtual worlds once a week or more, three used them once or twice a month and one child used them less frequently than once a month.

The choice of worlds for this youngest group appeared to be gendered in nature. Five of the six girls who completed the survey stated that they used Barbie Girls™ and none of the boys stated that they used this world. The sixth girl could not remember the name of the world she used, but she said it was ‘one with pets on it’. This could include sites such as Neopets™ or Webkinz™, both of which are popular with girls. Five of the boys who completed the survey played on Club Penguin™ and two played on Nicktropolis. None of the younger girls who completed the survey played on Club Penguin™ although one of the girls interviewed, but who had not completed the survey, used the site. Whilst research relating to older users of virtual worlds suggests that people often adopt avatars of a different gender than themselves (Hussain and Griffiths, 2008), this was not the case with these young players, all of whom apart from one stated that their avatars were the same gender as themselves. In their responses to this question, issues relating to border-policing of gendered identities (Thorne, 1993) could be discerned, as children expressed the reasons for not wanting differently gendered avatars to
be one of aversion. For example, in an interview, Lisa suggested that her avatar was a girl because, ‘. . . boys are dirty and smelly’ (Lisa, aged seven). Unusually, one boy’s avatar was a girl and this was because, he explained, his older sister had made him adopt a girl avatar.

Children were asked why they used the virtual worlds. Playing games featured strongly in the responses across both the survey and interviews:

It’s [Club Penguin™] got some ski game. It’s really good so I can ride on sleds and it goes really, really fast. (Leo, aged seven)

It’s all games. I like the games. (Ewan, aged five)

Games appear to be a major draw for young children in their use of the Internet (Marsh et al., 2005). Indeed, online gaming is not a phenomenon limited to childhood; it is a strong feature of older children and adults’ use of the Internet (Livingstone and Bober, 2005). Some researchers have identified a range of learning opportunities related to the use of computer games (Gee, 2003) and there is further research to be undertaken regarding the educational benefits of using games in these online virtual worlds.

**play in virtual worlds**

The types of play that children reported engaging in within *Club Penguin™* included fantasy play, socio-dramatic play, ritualized play, games with rules, and what might be called ‘rough and tumble’ play, albeit that I am suggesting here a virtual version of offline physical play. I will consider each of these categories in turn.

Fantasy play involves children creating imaginative narratives involving characters and roles that are not necessarily based on ‘real-life’ examples. *Club Penguin™* promotes fantasy play through the provision of costumes that enable children to adopt a range of imaginary personas, such as pirates and mermaids. The producers also develop narratives that run across specific time-scales and which invite children into narrative-related play. Each narrative theme involves children collecting special ‘pins’ that are placed in the virtual world for as long as that narrative runs. This encourages children to keep returning to the site and mirrors the collection-driven play offered by other commercial products such as *Pokémon* and *Beanie Babies*. Children reported collecting pins and dressing in fantasy costumes in order to engage in these narratives, but more frequently referred to socio-dramatic play. Sociodramatic play involves children undertaking play activities based on domestic, everyday practices and involves social interaction. Smilansky’s (1968) set of defining characteristics of socio-dramatic play is still influential in the field and consists of the following elements:

- Imitative role play
- Make-believe with objects
• Make-believe with actions and situations
• Interaction
• Verbal communication
• Persistence

Each of these elements existed within children’s reports of socio-dramatic play in Club Penguin™, although verbal communication was replaced by communication through text-messaging. As in children’s sociodramatic play in the offline world, children reported adopting a range of adult roles in the virtual worlds and sometimes drew on adult-focused cultural scripts in this play, as reported in the interviews:

Me and my friends and my cousins and strangers who come to my party, we all went to the disco room and then when we were all drunk we went back to my house and had a little lay down. (Brendan, aged seven)

As in the offline world, this kind of play was not always co-operative. For example, Lisa described in her interview how she sometimes behaved when she went to the parties of other penguins:

I like dance around and check if they’ve been looking after their puffles and if they’ve got security cameras, I throw snowballs at them and block them. (Lisa, aged seven)

There was certainly some indication in this study that the relative anonymity offered by the virtual worlds meant that children engaged in behaviour that did not reflect their offline social activities, and this is a matter that needs further exploration. The behaviour reported by Lisa is playful rather than menacing in nature, but other types of anti-social behaviour were reported by older children (such as ‘scamming’ and stealing passwords). However, the discourse surrounding cyber-bullying is such that there is a need to tread carefully to ensure both that assumptions about patterns of behaviour are not made and that peer-to-peer bullying is recognized and dealt with appropriately (Shariff, 2008).

Children reported engaging in various forms of ritualized play whilst in Club Penguin™. For example, Billy stated in his interview that he had learned to demonstrate affection for other penguins by using the heart emoticon:

I like reading messages and falling in love with girl penguins. I have got about five girlfriends. You have to win a loveheart and then you can send them to them. (Billy, aged seven)

The development of in-world rituals in Club Penguin™ is typical of similar online environments aimed at adults. In a study of Massive Multiplayer Online Games (MMOGs), such as World of Warcraft, Steinkuehler (2005: 12) noted that ‘In-game social groups devise rituals and performances . . . and generate in-game antics and adventures’ which develop social communities of practice. A range of such rituals and antics can be identified in Club Penguin™, some of which are captured
for posterity and posted as machinima\textsuperscript{5} on YouTube for post-ritual celebration and reiteration of the bonds. For example, a machinima\textsuperscript{6} which outlines a 'war' featuring various gangs garnered comments such as the following, which mark membership of a community of practice.

i was in that vid im naruto6168 awsome =D. (narutofreak616)
me was there. (homeofravensrh4755)
awesome! I was there!(: Thats my home server its usualy quiet, then one day it's full, amazing lol. (supposedcp)
cool l was there fighting with rpf. (pokemon12d)
same here. i rember dat. i think i was on the gold. (cplpg123)

In this context, ritualistic play serves the function of providing ‘social glue' and enables users of virtual worlds to signal online allegiances in the way that such play is often used in offline spaces to cement friendships. Whilst the young children in this study were not recording their ritualistic play and posting this on YouTube, three children who were interviewed did report searching YouTube for \textit{Club Penguin}™ machinima, thus acting as consumers of the recorded play of older children and young people.

Rule-bound games are an integral part of many virtual worlds aimed at children. These games enable children to accrue in-world currency, which allows them to purchase items for their avatars and homes. However, in addition to the games offered by the producers of the virtual worlds, children reported in the interviews playing rule-based games in the virtual world that they had first played in the offline world, such as hide-and-seek. Finally, whilst ‘rough and tumble play' is normally used to describe physical play such as play-fighting, wrestling and chasing, I adopt this term in this instance to describe online play that involved deliberate attempts by children to engage in avatar-to-avatar contact, including chasing and snowball fights, a form of play in which the majority of children interviewed reported having been involved.

For the children in this study, it was clear that the relationship between online and offline play was close and that there were many similarities between them. Primarily, play was a social practice that was constructed through interactions with others; this is the case both in the virtual world and the physical world. Many categories of play remain the same across these spaces. However, there are a number of differences between online and offline play. One key difference is that one does not always know who one is playing with online, although children in this study reported that they arranged to meet friends and relatives online. This correlates with other research, which suggests that older children and young people often interact online with people they know in the offline world (Davies, 2009; Thomas, 2007). A further difference relates to the materiality of the play and the way in which embodiment is related to play online and offline.
Whilst children are not physically involved in the play in the virtual world other than the movement of arm, hand and fingers to control the mouse, they are embodied in the play through their avatars and as Karoff and Johansen (2009: 3) suggest is the case with play using Nintendo DS games, ‘Simulating actual physical actions, it [play on screen] can be said to cross or at least challenge the borders’ between offline and online worlds.

The final aspect of virtual world play that I wish to consider in this article is the relationship between play and identity. In the next section, I outline the way in which these young children played with aspects of their identity in online worlds.

**play and identity in virtual worlds**

In addition to children's engagement in a range of types of play, children's use of these virtual worlds also enabled them to play with identity representation. As Pahl (2005) noted in relation to young children's play on computer games:

... I suggest that the ‘figured worlds’ of console games such as Spyro and Super Mario offer an opportunity for children to ‘play’ with different identities, and to re-fashion identities in relation to those worlds. (Pahl, 2005: 128)

Children reported undertaking different roles in their in-world play. In their analysis of children's use of the BBC virtual world Adventure Rock, Gauntlett and Jackson (2008) suggest that there were eight different roles that were adopted by the users of that site. These were:

- Nurturers
- Explorer-investigators
- Self-stampers
- Social climbers
- Fighters
- Power-users
- Life-system builders
- Collector-consumers

Although children in this study did indicate that they adopted these roles at various times, it is unlikely that children remain in one category. However, there were three dominant categories in the reports of children in this study: ‘fighters’, ‘nurturers’ and ‘collector-consumers’. Seven of the six- and seven-year-old children interviewed mentioned taking part in snowball fights in Club Penguin™. Whilst this appears to be a relatively innocuous activity, there is evidence of more sustained fighting in the machinima on YouTube™ which feature gang wars, discussed previously. In this study, eight of the 10 six- and seven-year-old children interviewed indicated that they were ‘nurturers’ who looked after ‘puffles’ in
Club Penguin™. Caring for pets in virtual worlds is a popular activity with young children, as indicated by Ruth's reason for enjoying the use of a virtual world focused on pets, reported in the survey:

It's good because you get to feed the pet and play with it. (Ruth, aged seven)

This is a phenomenon that has a long history in children's play, with toys such as the Tamagotchi being popular in the late 20th century. Club Penguin™ attempts to inculcate in the players a sense of duty towards these pets and the producers remove pets from players' igloos if they fail to take care of them. As Lisa stated:

Lisa: I go on the games . . . all the money I get back I save it up to buy furniture and pets and things. And I've already got some pets but one of them ran away.
Jackie: Why did it run away?
Lisa: I weren't feeding it – I left it at home. They're supposed to be left at home. I can't take all 15 of them out for a walk. It were called 'Princess'.

Here, Lisa expresses frustration with the requirements imposed by the game makers, requirements which are very much related to Disney's desire to promote 'stickiness', to ensure children keep returning to the site over time. Barbie Girls™ offers similar opportunities to buy and look after pets, although the groomed poodles and pooches on offer there look rather different to the ruffled puffles on Club Penguin™.

There was also evidence that many children adopted a 'collector-consumer' role in Club Penguin™ and Barbie Girls™. Shopping is a popular in-world activity. In the survey, four out of seven boys and five out of six girls stated that they enjoyed the shopping activities. Girls were more likely to mention shopping when asked more broadly what they enjoyed about virtual worlds:

It's fun and activities and I like going shopping for the shoes. (Charlene, aged six)
I like going to the shop. I like to buy shoes. (Eve, aged five)
You get to see a lot of the Barbie things. You get to buy handbags and umbrellas what's got Barbie on. (Judy, aged five)

However, shopping created problems for those children who would have liked greater agency in relation to the construction of artefacts. The prospects for creation within Club Penguin™ and Barbie Girls™ are limited at present. Lisa, aged seven, appeared to be most frustrated that she could not be creative in terms of enabling her avatar to wear a wig and a tiara at the same time:

Lisa: I got it this mermaid's costume with this tiara. And I got it a wig and it's just like that [makes shape of a beehive] . . . The thing I thought in the end, I should have never bought the wig or the tiara.
Jackie: Why?
Lisa: ‘Cos I thought I could wear the wig underneath and then the tiara on the top, it would be a lot more nicer.

Jackie: And can't you?

Lisa: No, it just takes it off. I wish there were a reverse button where you could get your money back. Like a garage sale.

Unlike virtual worlds for young people and adults which include the opportunity to utilize programming skills in order to create in-world objects and artefacts and customize avatars (as is the case in Second Life, for example), the virtual worlds aimed at younger children do not foster such creativity. Given the extent to which children and young people are engaged in developing user-generated content in out-of-school contexts (Lankshear and Knobel, 2006), indeed becoming ‘produsers' (Bruns, 2006), this appears to be a short-sighted approach.

It can be argued, therefore, that the children in this study were engaged in a range of complex play behaviours whilst using virtual worlds. This was not, however, ‘virtual’ play, but ‘real’ play. Play in itself is mimetic in nature, which, in the case of play in virtual worlds, creates layers of modality. Cross (2008) suggests that in play, children can move from catotropic mimesis, which involves reproduction of external reality, to metatropic mimesis, a re-creation, re-arrangement of external reality. This movement across a continuum between the two positions could also be discerned in comments made by children in this study. At times, children reproduced narratives observed in their offline worlds and confirmed to the rules of game playing and at other times children played with the rules themselves, reconfiguring the representations of external realities. However, Albrechtslund contends that mimesis can never be simply a replication of reality but is:

. . . understood as a configuration in fictive terms of something already prefigured in the life experience of the reader, and becomes an active reconfiguration of the reality of the text interacting with the reality of the reader. Thus, the world of the text and the world of the reader are united through the preconception of the reader, since the text's reference to a known, common world is a condition of its understandability.

(Albrechtslund, n.d.: 2)

Play in virtual worlds is not virtual play, a reproduction of playful behaviour in the ‘real’ world; these activities are ‘real’ to the users of virtual worlds. The tendency of some to place more value on ‘real’ world activities, as identified by Valentine and Holloway (2002), may lead to some devaluing of this virtual play for young children. It will be important in the years ahead, as this type of play becomes more widespread, for early years educators to examine such play in ways which enable an objective overview of both its positive and negative aspects, rather than resort to outright dismissal of its value.
conclusion

The young children involved in this study demonstrated engagement in a range of play activities that replicated offline practices but that also sometimes enabled interaction distinct to online spaces. The limitations of sample size mean that it is not possible to generalize more broadly from the findings, but patterns identified here were replicated in the larger sample of 175 five- to 11-year-olds. However, my intention was to focus particularly on the data relating to the children in the early years of schooling, for it is this age group that is frequently overlooked in analyses of online social networking. In virtual worlds, children have opportunities to construct, re-construct and perform identities and learn how to engage with others in online forums. Given the extent to which online social networking appears to be a popular activity with older children and young people (Dowdall, 2009), young children's engagement in online virtual worlds might offer useful opportunities to develop skills that will enable them to navigate online environments more safely and appropriately. Nevertheless, the restrictions in relation to gender, 'race' and identity and the commercial aspects of the worlds raise concerns and deserve further consideration by educators so that children's critical stances towards these aspects can be enhanced further. These virtual worlds are fast becoming a part of the online landscape of play for young children and rather than dismiss them as irrelevant, or deride them as potentially harmful environments, academics and educators need to examine their affordances more closely in order to identify what children gain from their playful engagement in these worlds and how their experiences can be built upon in early years settings and schools.

notes

3. KZero research, reported in February 2009 at: [http://www.kzero.co.uk/blog/?p=2700]
4. KZero research, reported in February 2009 at: [http://www.kzero.co.uk/blog/?p=2700]
5. Machinima are films that are made within 2D and 3D worlds, such as computer games and virtual worlds.
6. 'Club Penguin™ War' by Fever, posted at: [http://www.youtube.com/watch?v=NLUkm9ZdGSo].

references


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