Purposes for literacy in children’s use of the online virtual world *Club Penguin*

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This paper reports on a study of the purposes for literacy discernible in young children’s use of the virtual world, *Club Penguin*. Twenty-six children aged between 5 and 11 took part in semi-structured interviews in which their use of virtual worlds was explored. Further, three 11-year-old children were filmed using *Club Penguin* four times each over the period of 1 month in their own homes and they and their parents took part in interviews regarding their use of this virtual world. Findings indicate that the purposes for literacy in virtual worlds such as these are varied and have much in common with purposes for literacy in the offline world. The virtual world *Club Penguin* provided a motivating and enjoyable context for reading and writing and enabled the construction and maintenance of online social networks. The implications for research, policy and practice are discussed.

**Implications for Practice**

*What is already known about this topic*

- Many children use virtual worlds.
- Virtual worlds for children offer a range of opportunities to engage in literacy practices, but these are often prescribed by adults.

*What this paper adds*

- Purposes for literacy in children’s use of virtual worlds correlate with offline literacy practices.
- Children use literacy to construct and maintain social networks in virtual worlds.
- Children engage in literacy practices in which they produce and consume texts for/by peers.

*Implications for practice and/or policy*

- Children’s interest in virtual worlds could be harnessed in the classroom to provide motivating opportunities for reading and writing.
There is extensive evidence that many children in developed societies spend a considerable amount of time online (Livingstone, 2009). In their online activities, children engage in a wide range of literacy practices that are an integral part of their interactions and these practices contribute to their informal learning (Lankshear & Knobel, 2011). The purpose of the study reported in this paper was to analyse the literacy practices embedded in one aspect of children’s online activities, that is their use of virtual worlds. The study of literacy in everyday lives has a long tradition (Heath, 1982). It is important to document the range of literacy practices in which children, young people and adults engage beyond formal institutions such as schools and colleges in order to understand what skills, knowledge and understanding they may bring to sites of learning. Spencer, Knobel and Lankshear (in press), in a review of research in this field, suggest that the driving force behind many studies of out-of-school practices has been a desire to challenge school-based assumptions that there is a lack of literacy in the lives of children living in low socioeconomic neighbourhoods. A further stimulus for the present study is the desire to identify the kinds of literacy practices in which children engage in online environments in order to determine how far they correlate with offline literacy practices. The relationship between online and offline literacy practices is one which has become important to understand, given the increasing amount of time children spend in online environments (Livingstone, 2009).

This study draws on a theoretical framework that integrates three fields: New Literacy Studies (NLS) (Street, 2001), new literacies (Lankshear & Knobel, 2011) and multimodalities (Jewitt, 2008; Kress, 2003, 2010). As a body of work, NLS focuses on literacy as a socially situated practice (Barton, Hamilton & Ivanic, 2000), in contrast to work which originates from a skills-based, cognitive perspective that examines literacy as a set of skills acquired by an individual. As Street (1997, p. 79) suggests, this means that research within the NLS perspective ‘requires language and literacy to be studied as they occur naturally in social life, taking account of the context and the different meanings for different cultural groups’. In this study, the literacy practices of young children as they use online virtual worlds are examined. This demands an extension of the field of NLS to online spaces, given that much of the previous work in this area has been focused on offline literacy practices. The work of Lankshear and Knobel (2006) further develops the NLS tradition to the analysis of digital practices and they have discussed the way in which ‘new literacies’ emerge as children read and write on-screen. Lankshear and Knobel acknowledge that there is a sense in which the term ‘new’ here is unhelpful, given that many of the skills involved in reading and writing on-screen are similar to those used off-screen, but research in ‘new’ literacies signals the way in which literacy practices are developing as they are mediated through new technologies. The phrase ‘digital literacies’ is also used to refer to reading and writing on screens. The current study contributes to the, as yet, limited range of work on the digital literacy practices of young children (Burnett & Merchant, in press).

One feature of developments in the new media age is the way in which children’s communicative practices involve a range of modes, including still and moving image, gesture/animation and sound. Theories of multi-modality (Jewitt, 2008) challenge the privileging of alphabetic print in the analysis of contemporary communication. This study draws on this body of work and thus, while acknowledging literacy as a concept related to lettered representation (Kress, 2003), considers children’s multi-modal communicative practices more broadly in the context of their use of online virtual worlds.
Virtual worlds

Virtual worlds are immersive two-dimensional or three-dimensional simulations of persistent space in which users adopt an avatar in order to represent themselves and interact with others. There are a diverse range of virtual worlds in existence, but virtual worlds aimed at children normally feature the following elements: they enable users to create an avatar, an online representation of self; they enable users to locate the avatar in a ‘home’ environment, which is that avatar’s personal space in the virtual world; they enable social interaction with other users, primarily through online text chat, although a small number of virtual worlds for this age group are now enabling voice interaction; users can earn virtual currency by playing games or engaging in other activities; users can spend this currency buying virtual goods for their avatar or their avatar’s home. Some virtual worlds for children link to toys and artefacts that can be purchased in the offline world and some developers enable children to accrue and/or exchange with other users in the offline world virtual currency and goods that can be used online.

The use of these virtual worlds is becoming more prevalent in many societies. Based on user data relating to active accounts in virtual worlds, the virtual worlds consultancy company KZero (2011) suggests that there are an estimated 320 million active users in the 5–10 age group worldwide. There is a strong economic driver to the development of virtual worlds, indicated by Bray and Konsynski (2008, p. 12) who state that in June 2007, users of one popular virtual world for adults, Second Life, exchanged an average of $1,700,000 a day for the in-world currency, Linden dollars. This is, therefore, a significant area of activity and one that merits further analysis by literacy researchers in order to determine the implications for literacy learning and practice. In this paper, I analyse the literacy practices of children aged 5–11 who used virtual worlds. The focus for the paper is the virtual world Club Penguin, which is owned by Disney. The aim of the study reported here was to identify the range of literacy practices that children undertake in this virtual world, given that very little is known about young children’s engagements in these sites.

Literacy in virtual worlds

While there have been numerous studies of the relationship between gaming and literacy (Apperley & Beavis, 2011; Beavis & O’Mara, 2010; Gee, 2003; Sanford & Madill, 2007), research on literacy in virtual worlds is more limited. The studies that have been undertaken thus far suggest that literacy is central to social interaction in online virtual worlds. Steinkuehler (2007, 2008) studied the literacy practices embedded in the Massive Multiplayer Online Game (MMOG) World of Warcraft and found that literacy was a key aspect of the game. She developed a map of the ‘constellation of literacy practices’ within the game, which contained three main groups of practices: in-game text-based interaction, in-game literacy practices and the out-of-game literacy practices undertaken in fan sites (Black & Steinkuehler, 2009, p. 278). In-game text-based interaction consisted primarily of instant messaging between players. In-game literacy practices included reading and rewriting narratives that framed the gameplay. Beyond the game, Steinkuehler found numerous websites in which players wrote about the game and their play within it, which included blogs, discussion boards and fanfiction sites. Steinkuehler’s (2007, 2008) work illustrates how the literacy practices of the players of World of Warcraft are rich and multilayered.

The use of virtual worlds in education has become more prevalent in recent years, although the focus for research appears to be learning in general rather than specific aspects
of engagement, such as literacy. However, Gillen (2009) reported on the literacy activities that were undertaken during a 15-month study of Schome Park, a virtual island world for teenagers in *Second Life*. Gillen (2009, p. 72) analysed the interactions that took place in an asynchronous chat forum and a wiki within the virtual park and concluded that ‘participating in Schome Park is a hugely literate activity’. The teenagers demonstrated considerable textual dexterity and creativity in their online interactions and literacy was central to their communication in-world.

In a study reported by Merchant (2009), 10 primary schools in one town in England collaborated in a project in which a virtual representation of the town was created using the *Active Worlds* software. Children and teachers created avatars and interacted online to complete a series of tasks. The virtual world included environmental print, tool tip clues, hyperlinked texts and avatar chat. Merchant reports that the project offered broad scope for a variety of literacy practices, but that it raised questions about the need for teachers to give up some of their pedagogical authority in order to enable children to take risks and be playful in their engagement with each other.

There is emergent interest in the potential that commercial virtual worlds offer in terms of literacy for children. Black (2010) undertook a qualitative content analysis of the popular virtual world *Webkinz* and identified that the provision of games and the ability to communicate using messaging systems offered users the opportunity to engage in a range of new literacy practices that are valuable in a digital age. She does sound a note of caution, however, suggesting that the design of the site is grounded in traditional notions of literacy learning, in that users are positioned as passive recipients of knowledge produced by expert others. In an analysis of primary children’s use of the site in an after-school club in the United States, Wohlwend, Vander Zanden, Husbye and Kuby (2011) also suggest that *Webkinz* privileges adult-centric notions of literacy, which children frequently circumvented by drawing on visual conventions learned from video games.

While studies of literacy practices in virtual worlds are limited in number, emergent work in this area indicates that literacy is central to online interactions in these spaces and that there are a variety of opportunities for reading and writing in the worlds. The study reported in this paper builds on this work by reviewing the purposes for literacy in children’s use of virtual worlds. There is a long history of studying the purposes for literacy in young children’s out-of-school contexts (Taylor & Dorsey-Gaines, 1988; Teale, 1986). Cairney and Ruge (1998) studied the home literacy practices of 24 families in Australia and they identified four main purposes for literacy in offline contexts (p. 38), which are literacy for establishing and maintaining relationships, literacy for accessing or displaying information, literacy for pleasure and/or self-expression and literacy for skills development.

It is important to note that the terminology adopted to discuss these issues is not unproblematic. I have chosen to utilise offline/online as a marker for periods when children are engaged in the use of virtual worlds on the Internet, and periods when they are not engaged in Internet use. This pattern has been characterised as the difference between the ‘real’ and the ‘virtual’ and, as Valentine and Holloway (2002, p. 304) suggest, this is often depicted in terms of the ‘real world’ being characterised as the authentic mode and the virtual world representing falsehood and inauthenticity. However, as many commentators have noted, there is a continuum in users’ engagement with the ‘real’ and virtual and all of their activities are physically embodied in the offline world (Slater, 2002). The sociologist Malpas notes that:

A basic starting point for any serious discussion of the virtual must be recognition of the non-autonomy of the virtual – a recognition of the fact that the virtual does not constitute an autonomous, independent, or ‘closed’ system, but is instead always dependent, in a variety of ways, on the everyday world within which it is embedded (Malpas, 2009, p. 135).
A fundamental approach taken to this study, therefore, was to attend to the literacy practices in which children engaged in Club Penguin in ways that recognised their significance for children’s offline activities. The research question that informed the aspects of the study reported in this paper was: ‘For what purposes do children engage in literacy practices in a virtual world?’ This question is of interest to literacy researchers who wish to identify the way in which children’s literacy practices might be changing in online contexts. In the next section, I move on to outline the way in which this question was addressed.

Methodology

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, which has public and privately owned houses. The research was undertaken in collaboration with the ICT teacher in the school who wished to undertake work relating to virtual worlds. The teacher was located in an ICT suite and worked with all of the children in the school at some point over a normal week. In order to determine what children knew already about virtual worlds, it was agreed that children would be asked to complete a survey. An online survey was set up, using ‘Google Docs’, which asked children a range of questions about their Internet use. Questions were both open-ended and multiple choice, and explored whether or not children 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. Pupils were invited to complete the survey when they attended ICT lessons in the ICT suite. The children were used to completing online surveys in ‘Google Docs’ as part of their ongoing curriculum work. A total of 175 children across all year groups (ages 5–11) opted to complete the survey. The survey data enabled the identification of the most popular virtual world used in order to inform subsequent stages of the study.

In total, 52% ($n = 91$) of the 175 children aged 5–11 surveyed stated that they used virtual worlds on a regular basis, 53% ($n = 49$) of whom were girls. The most popular virtual world used was Club Penguin, which is a virtual world that was originally developed by an independent Canadian company and acquired by Disney Inc. for $350 million in 2006. The virtual world environment is a representation of the Antarctic and avatars are penguins. Each avatar has an igloo as a home base. Avatars can roam the environment using a map, which contains key sites such as a town centre (which contains a coffee shop, a disco and a shop), a plaza (which features a theatre, pizza parlour and pet shop), a cove, a dock, a ski-centre and other areas of interest. Players earn coins by playing games and these coins can be spent on clothes for avatars and on artefacts for igloos. As with other virtual worlds, there is two-tier membership. Free membership does not allow users to purchase many items. Paid members can access a wide range of items. All users can engage in in-world activities, which include chatting to others using either set-phrases or open chat and opportunities to read books in a library and a weekly newspaper. While these opportunities for literacy are offered, the world is primarily geared to entertainment purposes and it promotes a wide range of play (Marsh, 2010).

Following the completion of the online survey, 26 children across the year groups, 15 boys and 11 girls, took part in a series of group and individual semi-structured interviews over the course of 2 academic years. Children who stated that they used virtual worlds on a regular basis were invited to take part in the interviews during lessons in the ICT
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. In addition, three 11-year-old children were filmed using the virtual world Club Penguin in their homes. Children in the final year of primary school were invited to participate in this stage of the project. Four children volunteered, but the parents of one child did not give their consent for their child to participate, and therefore three children, Emily, John and Sally, were filmed in their homes. The children were all white, monolingual and were from working-class families.

Each child was filmed four times over the period of 1 month, from the time at which they logged on to Club Penguin to the time they logged off. If the children were already logged on to the virtual world when I arrived, I filmed them from the point of my arrival to the time they logged off. Emily was filmed in total for 2 hours, 38 minutes and 52 seconds; John for 3 hours, 19 minutes and 38 seconds; and Sally for 2 hours, 50 minutes and 25 seconds.

The camcorder was placed on a tripod and sited to the rear and side of each child, so that their screen movements could be recorded. I sat to the side of the children and observed their online movements and their eye movements when necessary (i.e., when they read text). The children were asked questions occasionally as they used the virtual world in order to determine motives for actions, or to ascertain the level of comprehension of what they had apparently read on screen. Interviews were conducted with children and one of their parents after the final filming session in order to explore children’s uses of and responses to the virtual world and parents’ attitudes towards their children’s use of Club Penguin. Families were given a gift voucher as a means of recognising the time and commitment they had devoted to the project.

The focus for this paper is on the children’s in-world literacy practices. The video data were coded in terms of the types of activity in which the children engaged (e.g., playing games, reading, writing, dressing their avatar, etc.) and the length of time they spent on each activity. Interview and observational data were then subject to qualitative analysis. The data were analysed in relation to the literacy events that were observed or reported. Following Barton and Hamilton (1998), ‘literacy event’ was defined as an activity in which children could be observed reading or writing in Club Penguin. An event began when children began to read or write a particular text and ended when they stopped reading or writing that specific text. If children returned to a text and began to read/write again, the event was deemed to be new. In terms of deductive coding, literacy events were categorised using a priori codes consisting of the four purposes identified by Cairney and Rouge (1998, p. 38), in addition to a further purpose identified in a previous study of young children’s engagement with media and new technologies (Marsh, 2006), that of literacy for identity construction and performance. Finally, I analysed the data inductively in order to identify any additional purposes for literacy that were not classified by Cairney and Rouge (1998) or Marsh (2006) and an additional purpose emerged from this analysis: literacy for establishing and maintaining social networks. These purposes, along with an operational definition and an example of each, are outlined in Table 1.

In some cases, the purposes for a particular literacy act were multiple and in a minority of cases, could not be determined at all (e.g., where the purpose was not discernible in the event itself and I had not asked the child why he/she was reading or writing a particular text). In the following discussion, the purposes for literacy in Club Penguin are discussed in the light of illustrative data from both the interviews with 26 children and the observational data of the three case study children.
Table 1. Purposes for literacy.

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Operational definition and examples</th>
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<tbody>
<tr>
<td>Literacy for establishing and maintaining relationships</td>
<td>Practices in which literacy is used to make contact with others, such as sending messages or postcards.</td>
</tr>
<tr>
<td>Literacy for accessing or displaying information</td>
<td>Practices in which literacy is used to find out information, such as how to play a game.</td>
</tr>
<tr>
<td>Literacy for pleasure and/or self-expression</td>
<td>Practices in which literacy is used to increase enjoyment and/or to express thoughts and feelings, such as reading a book.</td>
</tr>
<tr>
<td>Literacy for skills development</td>
<td>Not present in this study. An example would be when literacy is used in the development of specific skills, such as learning to spell.</td>
</tr>
<tr>
<td>Literacy for identity construction and performance</td>
<td>Practices in which literacy is used to construct or express identity, such as the adoption of particular phrases which signal specific identities.</td>
</tr>
<tr>
<td>Literacy for establishing and maintaining social networks</td>
<td>Practices in which literacy is used to establish and maintain social networks, such as when a message is sent to a group of other people.</td>
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</table>

Literacy practices in Club Penguin

Literacy was central to children’s use of Club Penguin. All of the children interviewed reported a range of reading and writing activities in which they participated in-world, which included writing messages to other users; sending postcards to other users; reading books in the virtual library; reading catalogues; reading the newspaper, Club Penguin Times; reading signs and labels and reading instructions for games and quests. In relation to the three children who were observed using Club Penguin, an analysis of the activities undertaken over the 8 hours, 48 minutes and 55 seconds of video data indicates that reading was the second-most frequent activity, after the playing of games. The children spent 28% of their time in Club Penguin playing games and 22% reading, either intensively reading or skim reading (see Figure 1).

In the following sections, I will outline the purposes for literacy in Club Penguin, utilising the categories outlined previously. Of these six categories, the only one that is not
discussed is literacy for skills development. This is because none of the purposes identified could be attributed to this category. This is not to suggest that children’s engagement in literacy in *Club Penguin* did not lead to skills development; however, none of the children overtly engaged in literacy in *Club Penguin* with this purpose in mind and the methodology employed did not enable any measurement of skills development.

**Literacy for establishing and maintaining relationships**

Literacy has always been central to the establishment and maintenance of relations between individuals, as indicated by the long history of person-to-person communication, including letters and postcards (Gillen & Hall, 2010). Reading and writing was also integral to the practice of establishing or fostering one-to-one relationships in *Club Penguin*. Instant messaging was used by children to contact others, and there was some evidence that this in-world messaging was replacing the previous use of Microsoft Messenger for some children. For example, Terence stated that:

> I send some (instant messages) to my cousins and once I said, ‘Hello, can I come over?’ because he lives near Morrisons. Sometimes I say, ‘Can I come over?’ But sometimes his mum doesn’t let me … so I say, ‘OK, I’ll see you later’. (Terence, aged 7)

What is of interest more generally is the way in which developments in the use of new technologies mean that convergence in literacy practices seems to be occurring; that is, two previously separate means of communicating merge, such as in this example of chat in virtual worlds and instant messaging. Social network sites, such as *Facebook*, also enable this kind of convergence to occur as it combines elements of emailing, instant messaging and blogging. Literacy convergence is not a new phenomenon (consider, e.g., the combination of the literacy practices involved in emailing and developing newsletters, which has led to the proliferation of email newsletters), but it does appear to be occurring at accelerated speeds due to developments in technologies.

When in-world, children wrote messages to other avatars in attempts to communicate:

<table>
<thead>
<tr>
<th>Time</th>
<th>Duration</th>
<th>Action</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.07</td>
<td>10</td>
<td>Sally’s avatar enters the Ski Lodge and moves to a ‘Connect 4’ game. There is another avatar in the Ski Lodge.</td>
<td>Sally writes ‘Come play with me’.</td>
</tr>
<tr>
<td>8.17</td>
<td>04</td>
<td>The other avatar comes over and starts to play ‘Connect 4’ with Sally’s avatar.</td>
<td></td>
</tr>
</tbody>
</table>

Children could use open chat, or they could choose to select from a set of phrases; on some servers, children could only choose from these set phrases. Younger children, whose parents want the added safety level of the inability to engage in open interaction, generally use these servers. Given that in-world chat is a key form of communicating with others in virtual worlds, it is inevitable that literacy played such a central role in relation to this purpose.

The sending and receiving of postcards was also a significant literacy practice for the children in the study. Users could choose ready-made postcards from a range that included phrases such as ‘Let’s explore!’ and ‘Party at my igloo’. Barton and Hamilton (2005) draw on Wenger’s notion of reification, ‘the process of giving form to our experience by producing objects that congeal this experience into “thingness”’ (Wenger, 1998, p. 58), to suggest
that literacy artefacts can serve as reifications and thus texts can embody specific social and cultural practices and create shared meanings in context. These virtual postcards evoked important messages regarding friendship and interpersonal communication for children and were used as shorthand for the expression of intimacy or desired intimacy between users. Children in the interviews reported receiving and sending postcards that asked other users to be their friends, for example. Postcards were also used to send friendly messages to unknown users, as in the following example:

<table>
<thead>
<tr>
<th>Time</th>
<th>Duration</th>
<th>Action</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>28.22</td>
<td>27</td>
<td>Emily’s avatar enters the igloo of another avatar.</td>
<td>The other avatar writes ‘Hello’.</td>
</tr>
<tr>
<td>28:49</td>
<td>15</td>
<td>Emily clicks on the postcards icon. She chooses a postcard that has the message ‘Cool igloo’ on and sends it to the other avatar.</td>
<td></td>
</tr>
</tbody>
</table>

Literacy was, therefore, key to communication among the users of this virtual world in ways that replicated uses of literacy in everyday life (Cairney and Ruge, 2008).

*Literacy for accessing or displaying information*

Children accessed information in the virtual world in a variety of ways. One key source of information was the newspaper, ‘*Club Penguin Times*’.

For example, in an interview, Ewan, aged 7, stated:

I read newspapers because it tells you what’s new and what you can buy. I read it every single day.

Children accessed the newspaper to search for information about new collectable ‘pins’ that were hidden around the environment, or to identify the recent narrative themes that had been introduced into *Club Penguin* by the producers. It was a key source of information about what to do in the virtual world. For example, in the following observation, John returned to the newspaper having already looked at it once in this episode. He had visited the newspaper at 2:04 and then undertaken a variety of activities, such as playing a sledging game and visiting his igloo to feed his puffle (adopted pet).

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Dialogue</th>
</tr>
</thead>
</table>
| 12:51| John clicks on the newspaper. | Jackie: ‘Why are you going back to the newspaper?’
| 12:52|                | John: ‘Cos there’s nothing else to do and see if there’s anything else to do or read.’ |

In addition to the newspaper, signs and other texts in the virtual world were significant sources of information. In the observations of Emily, John and Sally, it was clear that literacy was essential for navigation purposes. The children regularly used maps and environmental print to find their way from site to site within the world. When children needed to find information, for example, when undertaking quests that were set up by the producers,
they were adept at locating the information they needed by clicking on relevant menus and submenus.

There were occasions when children sent instant messages to other users in order to try and find out information (which, while this practice was also avatar-to-avatar communication, was coded primarily as ‘literacy for accessing or displaying information’). For example, Emily had purchased a flat screen TV for her igloo. On her visits to other igloos, she had noticed that some televisions displayed moving images and wanted her own television to enjoy this facility. Therefore, she tried a variety of strategies to find out how she could adjust her television accordingly, such as entering the igloos of other avatars and asking them, examining the catalogue, reading the newspaper and contacting the Club Penguin producers directly:

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.40</td>
<td>Emily clicks on the ‘Ask Auntie a question’ page in the newspaper. She types in the question ‘If you buy a television for your igloo, how do you turn it on so that you can watch matches on it?’</td>
<td>Emily: ‘They have never answered me before but there is always a chance, I suppose.’</td>
</tr>
</tbody>
</table>

Lankshear and Knobel (2011) identify the way in which knowledge is distributed in online spaces and activities such as these enable children to develop the skills needed to identify the gaps in their own understanding and seek and evaluate knowledge from others.

**Literacy for pleasure and/or self-expression**

Children reported engaging in a range of reading activities that they found pleasurable, which included reading books in the library and reading poems and stories in the newspaper. Some children in the interviews reported that they found this reading exciting, which contrasted with their attitudes towards reading in the offline world:

Bradley (aged 7): When I go fishing, I take a book to learn how to do it.
Jackie: Do you like reading in real life?
Bradley: No.
Jackie: Why not?
Bradley: Because it just gets me stressed out.
Jackie: So why do you like reading in ‘Club Penguin’?
Bradley: Because it’s got exciting stuff.

A further way in which literacy was embedded within pleasurable in-world activities was in relation to consumption practices. As outlined previously, virtual worlds offer users the opportunity to engage in the purchase of virtual goods. This was a popular activity in Club Penguin. The three children in the case study spent time looking at the catalogues, which outlined the various goods that could be purchased for their avatars and igloos.

Previous research has indicated that engaging with popular cultural texts can be very motivating (Dyson, 1997, 2003) and it would appear that for some of the children in this study, virtual worlds offered a means of engaging in literacy practices that interested them.
This was also the case for writing activities, although not to the same extent that children read in-world for pleasure. Two children in the study reported that they had written poems and jokes for the site that had been submitted to *Club Penguin* Times, but not published. Beyond the sending of messages to other users, there were no opportunities for writing or multi-modal authoring in the virtual world.

**Literacy for identity construction and performance**

Obviously, all of the children’s activities in-world were an integral aspect of identity construction and performance. The relationship between identity and literacy is a symbiotic one. Literacy serves to construct particular identities and in turn identity shapes the take-up of specific literacy practices. Moje and Luke (2009) identify a number of metaphors that represent identity in literacy research; one of these is identity as a sense of self/subjectivity. I would suggest that in *Club Penguin*, literacy and multi-modal practices served to construct and project particular senses of selves in a social context. The most obvious way in which this operated was in the construction of avatars, which involved choices regarding colour and clothing. Further, the choice of reading and writing activities themselves presented opportunities for constructing and projecting particular identities. Avatars could choose to visit a virtual library, for example, in which they could be seen to be engaging in reading, or they could engage in quests which involved extensive reading as they solved problems, resulting in a prize which, when attached to the avatar’s identity card, could signal achievement of that particular task. In this sense, ‘identities are posited as aspects of a self being consciously built by individuals’ (Moje & Luke, 2009, p. 425), albeit within the limitations imposed by the producers of this particular site.

**Literacy for establishing and maintaining social networks**

I have separated this from a previous category, ‘literacy for establishing and maintaining relationships’, because, in the main, that category in Cairney and Ruge’s (1998) original model related to offline relationships between individuals who were familiar to one another and was largely focused on one-to-one communication. What emerged from the analysis of the data in this study, however, was that literacy also served to establish and maintain online social networks between groups of children who were both known and unknown to each other and was used in communication between an individual and many interlocutors. ‘Literacy for establishing and/or maintaining social networks’, therefore, can be distinguished from the category ‘Literacy for establishing and maintaining relationships’ because of the former’s online nature, its focus on communication in groups and the nature of the ties between individuals in such networks, which can range from tight friendships/family bonds to loose and fluid connections with known and unknown others.

In this study, children reported arranging to meet other children they knew, including siblings, in *Club Penguin* at particular times. This practice has been documented in relation to older children and young people’s use of social networking sites (Davies, 2009; Dowdall, 2009a). Children also engaged in social networking with unknown interlocutors. In these online interactions, whether with known or unknown users or a mixture of both, literacy was used to develop social networks. This was done in various ways, such as users choosing to have their avatar state the same phrase/s as other avatars at the same time, or through participation in joint activities, as in the following example:
Users of the virtual world sometimes initiated new social networks through placing their avatar in central places and then writing phrases such as, ‘Fashion show at my igloo!’, with the aim of attracting the general *Club Penguin* public to their igloos. Networks are also developed through ritualised play, in which literacy frequently plays a significant role (see Marsh, 2010).

Further, there is evidence that children across the globe access social networks relating to *Club Penguin* outside of the virtual world itself in order to extend these communities of practice. There are numerous fan sites in which children can chat with others about their *Club Penguin* activities. There was no evidence from this study that the children in this school contributed to these sites, but they did report trying to find *Club Penguin*-related texts that were made by other children. For example, it appeared that searching for *Club Penguin* machinima on YouTube was a favourite pastime for some. ‘Machinima’ is a conflation of the words ‘cinema’ and ‘machine’ and refers to films that are made inside games and virtual worlds using screen capture software. These texts were popular with some children in the study, as reported in the interviews:

Owen: I go on ‘YouTube’ sometimes and they have like little presentations on … it’s funny because it’s like the funniest clips of ‘Club Penguin’ and stuff and they fall and stuff…

Stacey: You can type ‘Club Penguin’ and it comes up and there’ll be like and there’s music in’ background and it can show you slideshows.

The most popular machinima feature avatars in *Club Penguin* stating the lyrics to popular songs as they conduct activities related to those lyrics. Other machinima take the form of television chat shows in which avatars interview other avatars through the chat facility. An example of this genre is a machinima that features a television chat-show-style interview with an avatar named ‘Lady GaGa’, obviously fashioned after the popular pop star. There are a number of literacy skills required in the construction and deconstruction of these texts, which is the case for many online activities in which children engage (Davies, 2009). In addition, such activities are embedded with the ‘mediascapes’ (Appadurai, 1996) of contemporary childhoods, which means that they are particularly motivating and engaging for children. Through the practices involved in searching YouTube for these machinima, children in this study were participating in social networks in which children were producing texts for the enjoyment of other children.

**Discussion**

There was extensive evidence in this study that children engaged in a range of literacy practices for a variety of purposes, summarised in Table 2.

It is not just inside the virtual worlds that opportunities for literacy exist, as suggested in the example of the children’s searches for *Club Penguin* machinima. Steinkuehler’s (2007)
notion of a ‘constellation of literacy practices’ includes both within-world practices and a range of related activities that involves reading and writing about World of Warcraft on a variety of Internet sites such as discussion boards, chat rooms, wikis and blogs. This range of external activities can also be identified in relation to children’s virtual worlds. Club Penguin, for example, generates a large number of fandom sites that promote role-playing, allow the exchange of information about what is happening in Club Penguin, enable comments on aspects of the site and facilitate the exchange of jokes, stories and poems about Club Penguin, among other things. However, the focus for this study was on the virtual world itself and it was clear that literacy was central to children’s engagement with the site. As Spencer et al. (in press) suggest, studies of children’s out-of-school practices can serve to challenge assumptions that there is a lack of literacy in the lives of children living in low socioeconomic neighbourhoods. This study indicates that the children in this largely working-class community were engaged in a wide range of online literacy practices in their use of virtual worlds.

A further contribution this study makes is the extension of the coding categories of Cairney and Ruge (2008), which were applied in their study to children’s offline home literacy practices. The analysis of young children’s online practices has led to the identification of a further purpose for literacy, which involves young children in establishing and maintaining online social networks. In these social networks, one-to-many communication is common, involving communication with both known and unknown interlocutors. Further, children in the study enjoyed accessing texts (machinima) produced for participants in social networks, which consist of users who share similar interests. As Dowdall (2009b, p. 91) has noted in her study of teenagers’ social networking practices, ‘the act of producing texts for one’s “networked public”’ (Boyd, 2007) occurs as part of some young people’s essential everyday communication patterns and within their everyday play spaces (Davies, 2009). Many children have had opportunities to engage with their peers’ written productions within

<table>
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<tr>
<th>Table 2. Purposes for literacy in Club Penguin.</th>
<th>Examples from observational and interview data</th>
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| **Literacy for establishing and maintaining relationships** | • Communicating to other penguins via chat/safe chat  
• Using emoticons to express emotions to other penguins  
• Sending postcards to other penguins  
• Using Club Penguin to instant message others |
| **Literacy for accessing or displaying information** | • Reading the newspaper to find out about events/tips etc.  
• Reading catalogues  
• Using environmental print to navigate the virtual world, for example, signs  
• Reading game instructions  
• Reading clues on quests |
| **Literacy for pleasure and/or self-expression** | • Literacy integral to play – fantasy play, sociodramatic play, role play  
• Reading poems, jokes and stories in the newspaper  
• Reading books in the library  
• Submitting jokes, poems and stories to the newspaper  
• Language play  
• Searching for Club Penguin machinima on YouTube |
| **Literacy for identity construction and performance** | • Choosing avatar’s clothes and artefacts  
• Choosing emoticons and phrases to express identity |
| **Literacy for establishing and maintaining social networks** | • Communicating to two or more other penguins via chat/safe chat  
• Using chat in group ritual play |
classroom contexts (Dyson, 1997, 2003) and now the Internet is allowing this peer-to-peer sharing of texts across time and space through various mobile communication platforms, with significant consequences for notions of authorship and readership in the digital age.

The identification of purposes for literacy, while useful in terms of enabling a broad understanding of the literacy events and practices that occur in specific contexts, is limited without an attempt to move from the micro to a macro analysis. That is, questions that need to be asked include, ‘What does all of this mean? Why is the classification of the purposes for literacy in a virtual world environment of interest to literacy researchers and educators?’ I would suggest that the responses to these questions are threefold. First, it is clear from this investigation of children’s engagement in a virtual world that there is much consistency between online and offline literacy events and practices in terms of purposes and functions. The purposes for literacy that are apparent in children’s offline activities in family contexts are largely present in their online worlds. Thus, rather than discerning a disjunction between children’s online and offline experiences (and reading the online as ‘othered’ in this process), we can trace continuities as well as differences. In the face of widespread critique of children’s use of these worlds (cf. Valentine & Holloway, 2002), it is important to document the value that such activities might have and the way in which it is a continuation of everyday life, not discontinuation. Second, the study points to the need to examine the ‘reification’ (Wenger, 1998) process in both online and offline contexts in order to identify the practices, texts and artefacts that ‘congeal … experience into “thingness”’ (p. 58) that cross the ‘virtual’/‘real’ boundary. For example, it is of interest that the extensive use of virtual postcards in the children’s use of the virtual world is not always replicated in offline contexts, as it is normally adults who send postcards to other family members in the offline world (Gillen & Hall, 2010). The reification process is therefore differently constituted in relation to the textual artefact of a postcard in these families’ lives and this – and other such differences – deserves further consideration by researchers. Third, the relationship between motivation and the purposes for literacy is important. The children in the study were not reading and writing for its own sake, but because literacy events enabled them to fulfil personal desires, which included individual pleasure but also focused on social interaction that involved intertextual references to their popular culture. If schools could build on these out-of-school activities in ways which enabled children to pursue similar textual pleasures, albeit taking account of the challenges that occur when this pedagogical practice takes place (Lefstein & Snell, 2011), then this might offer opportunities for enhanced motivation for classroom literacy practices. Ironically, it was the original aim of the ICT teacher at the school involved in this study to develop work based on this virtual world, but he was not able to pursue his plans because the firewall prevented access to Club Penguin. This has key implications for policy both at a national and regional level. Schools need to be able to determine what sites should be accessed for educational purposes, rather than meet firewalls that are often set up by bodies external to themselves. Unless schools are able to access social networking sites that offer opportunities for authentic and meaningful literacy practices, they will be unable to engage in the full range of multimedia, multi-modal textual activities that are significant in contemporary society (Jewitt, 2008).

**Conclusion**

This study indicates that this virtual world offered multiple opportunities for these children to engage in pleasurable and meaningful literacy activities. There are a number of
implications for research and policy in literacy education. There needs to be further research on the purpose for literacy not examined in this study – literacy for skills development. What are the literacy skills children acquire in these environments and what are the optimum conditions for acquiring these? In addition, how extensive are the factors which support children’s literacy development established in the many virtual worlds which exist today? The factors that deserve consideration are, based on an analysis of the affordances of Club Penguin: extensive environmental print throughout the virtual world; opportunities for one-to-one social interaction through a chat system and the sending and receiving of postcards, text messages and letters; display of chat that facilitates one-to-many communication; a range of texts available for reading in-world such as a newspaper, books and magazines; games that require reading in order to solve problems and achieve goals; opportunities to create texts to submit to in-world publications; links from the site to related sites that promote reading and writing, for example, fan sites, blogs. While the study examined the purposes for literacy in Club Penguin that had been facilitated by these factors present in that site, it may be the case that other virtual worlds offer less extensive opportunities for literacy.

The analysis of virtual worlds, such as Club Penguin, is important for educators because they are indicative of the kinds of texts that will become increasingly central to children’s play and literacy practices over the coming years. In these worlds, children construct, reconstruct 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 (Davies, 2009; Dowdall, 2009a, 2009b), 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. These worlds are becoming a part of the everyday landscape of play for young children and rather than dismiss them as irrelevant, or deride them as potentially harmful environments, policy-makers, 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 reflect on how those experiences can be built upon in Early Years settings and schools (see Merchant, Gillen, Marsh & Davies, in press). There is little doubt that literacy is being fundamentally transformed in the new media age (Kress, 2003, 2010) and the more information we have regarding the purposes for literacy in children’s online as well as offline lives, the better informed we can be of the exact nature of that transformation.

References


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