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Curricula, pedagogies and outmoded ideologies: literacy teaching and learning in the digital era

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In this paper, I draw on a number of research projects conducted in England in a consideration of the possibilities for and challenges to the development of appropriate literacy curricula and pedagogy in the digital era. Following intensive interest over the last decade in the changing nature of literacy due to technological advances, there are national and local initiatives to transform the literacy curricula offered by early years settings and primary schools in order to respond appropriately to the contemporary communicative landscape. These developments have led to a number of innovative and exciting projects that have impacted upon children's motivation, engagement and attainment, in addition to re-energising a generation of teachers who have experienced unprecedented levels of change in educational policy. However, such developments are not without challenges and this paper, in addition to highlighting key achievements, outlines the barriers faced by early years educators and teachers as they strive to push forward the digital literacy agenda in the face of neoliberal educational reform, recurrent moral panics and the increasingly divergent movement of the tectonic plates of home and school. I consider the ways in which the recent developments in England resonate (or not) with similar patterns of curricula and pedagogical change in an international context.

Changing landscapes of communication

In 2003, Gunther Kress outlined the way in which the subject English was being transformed in a new media age due to two shifts: one in the primary mode of communication (from word to image) and the other a shift in dominant media (from page to screen). He stressed that the transformations precipitated by these moves would be profound:

It is already clear that the effects of the two changes taken together will have the widest imaginable political, economic, social, cultural, conceptual/cognitive and epistemological consequences. (Kress, 2003, p1)

The implications of this paradigmatic shift have been widely discussed (Carrington, 2005; Luke and Luke, 2001; Lankshear and Knobel, 2006; Merchant, 2007a) and it is clear that we have reached a point at which traditional approaches to the teaching and learning of literacy need to be radically revised if pupils are to develop the skills, knowledge and understanding necessary for full engagement in the digital world. However, even when policies have been developed that give teachers opportunities to broaden literacy curricula and pedagogy, often practice remains locked into traditional, print-based models. The reasons for this are complex and in this paper I wish to examine current practice in early years settings and primary schools in England in order to examine in greater depth some of the barriers to change.

Part of the difficulty lies in the fact that distinctions are still being made between 'traditional' literacy, focused on print on paper and the alphabetical principle, and 'new literacies', which incorporate a range of modes and include a variety of media. Whilst I will draw on the distinction myself within this paper in order to analyse the changes currently taking place, a more fruitful way forward would be to focus instead on the notion of communication (Street, 1998) and refer to communicative texts, practices and events as they are instantiated across modes and media. In this conceptual framework 'literacy' would signify engagement with lettered representation (Kress, 2003) on both paper, screen and the wider environment and the interaction between literacy and other modes such as sound, image and gesture would be accepted as normal practice. The production and analysis of multimodal, multimedia texts would be embedded within curricula frameworks and emphasis placed on developing learners' skills, understanding and knowledge with regard to communication across all modes and media. In this model, there would be little need then to maintain the distinction between 'traditional' and 'new' literacies. Whether or not this took place within a subject titled 'English' is a moot point, but we do need to challenge the current policy fixation with literacy as the defining term for this subject, a 'literacy fetishism' (Green, 2006, p17) driven by neoliberal concerns,

which means that those engaged in literacy education constantly struggle with terminology in order to make this meaningful in a digital era. It may seem somewhat contradictory, therefore, to use phrases such as ‘new literacies’ or ‘digital literacy’ in this paper, but as they currently signal changing epistemological and ontological engagements with literacy as a social practice (Lankshear and Knobel, 2006) and challenge an over-emphasis on print on paper, their use will be maintained.

In England, national policy has shifted to the point that there is now acknowledgement that something has to change due to developments with regard to digital literacy. The Qualifications and Curriculum Authority (QCA) undertook a consultation in 2004/5, ‘English 21’, which resulted in the publication of the report *Taking English Forward* (QCA, 2005). The introduction to the report states that developments need to take place in order to respond to social and technological progress:

The English 21 responses show that there are challenges for the future, to extend the current curriculum and to move ahead. Changes in society and technology are altering the nature of speaking, listening, reading and writing. The subject English needs to develop in the light of these changes. (QCA, 2005, p3)

In 2006, the Primary National Strategy was revised and the literacy framework introduced work on multimodality and outlined the need for children to respond to and create texts on screen (DfES, 2006). This was a significant development in the light of previous primary and early years curricula frameworks that had ignored the impact of media on subject English (Marsh, 2004). Teachers, literacy consultants and advisers have been responding to these invitations for change in innovative ways over the last few years and in this paper, I will highlight some of this work and identify the key achievements before moving on to analyse the challenges faced in taking forward this agenda.

In this paper, I draw from three projects that have all involved teachers working in collaborative networks. The first of the projects, ‘Digital Beginnings’ involved nine early years settings in England undertaking projects in which they introduced aspects of popular culture, media and new technologies into the curriculum (Marsh et al., 2005). The second

project (Marsh, 2007), 'Blogging as a critical literacy practice' was undertaken in one primary school in the north of England as part of a United Kingdom Literacy Association (UKLA)-funded two-year research project on critical literacies, which involved a network of teachers across the UK. The third project I will discuss was conceived and led by the British Film Institute and involved teachers and advisers across more than 50 Local Authorities (LAs) in England being trained in the development of moving image media education. The final evaluation report for this two-year project, focusing on the work of 35 LAs, is currently being completed (Marsh and Bearne, in press), but the emergent findings are drawn upon in this paper in order to inform the analysis of the key successes and challenges educators face in attempting to respond to the changes demanded by the needs of the digital age. Due to space limitations, I will not outline the methodologies used across all of the projects, but will indicate that all of them involved teachers who were engaged in action research projects in which they developed new initiatives that were then evaluated using a range of methods, including observations of and interviews with children, analysis of children's work and assessments using national frameworks. This is a model that is well-established as a means of developing literacy curricula and pedagogies that challenge traditional approaches (Nixon and Comber, 2005; PNS/UKLA, 2004).

Key achievements

In all of the projects featured in this paper, there have been a number of highly favourable outcomes in terms of pupil engagement and achievement. The focus on integrating media and new technologies into the literacy curriculum has had a discernible impact. For example, in the 'Digital Beginnings' project (Marsh et al., 2005), nine early years settings introduced aspects of popular culture, media and new technologies into the communication, language and literacy curriculum. Activities included making electronic and digital books, watching and analysing moving image stories and creating presentations using electronic software. One of the aims of the study was to examine the impact of these action research projects on the motivation and engagement of children in curriculum activities related to communication, language and literacy. In order to identify this, practitioners undertook three observations of 14 children prior to the project and three observations of the same children

during the project, using *The Leuven Involvement Scale for Young Children* (Laevers, 1994). Outcomes indicated that children's levels of engagement in activities were higher when the curriculum incorporated their interests in popular culture, media and new technologies (Marsh et al., 2005).

In addition to motivation, levels of attainment in writing rose in those LAs that collated quantitative data throughout the BFI project (Marsh and Bearne, in press). This relationship between the development of digital literacy practices and the impact on attainment, in relation to print-based practices, is a pattern established in previous studies (PNS/UKLA, 2004). What is now needed is a fundamental change to the assessment of literacy so that it moves beyond an emphasis on the word and on the printed page. Whilst these analyses of the impact of engagement in digital literacy practices on children's motivation and engagement are necessary for convincing policy-makers and others of the need to broaden their conceptualisations of literacy, they are in danger of perpetuating the privileging of print-based practices and maintaining the emphasis on assessing outmoded forms of knowledge. There is a need to assess the impact of these curricula and pedagogical changes on a broader range of skills, understanding and knowledge appropriate for the demands of the digital age and work in this area, based in primary classroom, is beginning to emerge (Bearne et al., 2007; Walsh et al., 2006). Table 12.1 outlines some of those competences/outcomes which were developed across the various projects, although the table is not intended to offer an exhaustive list.

There was a range of other successful outcomes in the projects which I do not have space to document here, including enhanced teacher motivation and increased subject knowledge of teachers. Nevertheless, whilst the projects were successful in moving forward the agenda with regard to the teaching and learning of literacy in a digital age, a number of barriers were faced, which I move on to analyse in the next section.

Key competencies	Examples from projects
<i>Understanding of the affordances of various modes and the ability to choose appropriate modes for specific purposes</i>	Children produced a wide range of multimodal texts that required understanding of the affordances of modes and how modes could work best together to achieve goals. These included: texts that were solely written or oral or consisting of only still images or moving images; texts combining one or more of these modes; animated films; live action films; podcasts; animated powerpoint presentations; photostories.
<i>Understanding of various media and the ability to choose appropriately for specific purposes</i>	Children used a wide range of media in the production of texts and made critical judgements about which media to use.
<i>Skills in the various modes that enabled them to decode, understand and interpret, engage with and respond to and create and shape texts</i>	Children developed a wide range of skills including: knowledge of the alphabetic principle and abilities in reading and writing print; ability to read both still and moving images; understanding of the features of various genres; understanding of the principles of transduction in the production of multimodal texts; ability to navigate texts across media, follow hyperlinks, read radially etc.
<i>Ability to analyse critically a range of texts and make judgements about value, purpose, audience, ideologies</i>	In the development of multimodal texts, children were reviewing a wide range of online and offline texts in order to inform their work. They also regularly reviewed their own and peer's work.
<i>Ability to relate texts to their social, cultural, historical contexts and literary traditions</i>	Children were able to relate multimodal texts to their social, cultural and historical contexts and were adept at recognising intertextuality.
<i>Ability to select and use appropriately other texts for use in the design process</i>	In the blogging project, children produced texts that remixed media content. Children made animated and live action films, and powerpoint presentations, that incorporated music.
<i>Ability to collaborate in text production, analysis and response</i>	Children were successful in collaborating both with known and unknown others in the production and analysis of texts. Social networking software, for example, enabled them to comment on others' work and develop an understanding of the value of networks.

Table 12.1: Skills, knowledge and understanding developed across the projects

Barriers

There has been extensive work that has reviewed the lack of integration of ICT across the curriculum, an issue which is related but has different concerns to that of the development of new literacies. Nevertheless, this literature can be drawn upon in a review of the lack of curricula and pedagogical progress in relation to new literacies. As Hennessey, Ruthven and Brindley (2005) suggest, in any systematic study of schools' use of ICT in England, "appropriate and effective classroom use of ICT is found to be rare" (2005, p162). There are numerous reasons for this. Ertmer (1999) identifies first- and second-order barriers to more extensive use of ICT in classrooms. First-order barriers are those external to teachers and include factors such as lack of access to resources and training. Second-order barriers are internal and include teacher beliefs and attitudes, some of which may prevent innovative developments from taking place. In a recent review of research in this area, Foon Hew and Brush (2007) reiterate Ertmer's conceptualisation of first- and second-order strategies and suggest that the first-order barriers to integration of technology into teaching are: resources; institution; subject culture; and assessment. Second-order barriers were found to be: attitudes and beliefs; knowledge and skills. Whilst this is helpful in suggesting that the obstructions to progress work at both structural and agentic levels, the factoring together of quite disparate elements in the 'first-order' category means that the roots of the issues are not identified and as a result some barriers are not considered at all. Instead of presenting an external/internal dichotomy, I propose that the barriers to curriculum and pedagogical change in relation to digital literacy are examined in terms of their social and cultural, historical, economic and political roots. This enables a review of structural and agentic issues across key areas and emphasises the dynamic between factors that are internal and external to educators themselves.

Social and cultural

The social and cultural milieu in which educators operate has a significant impact on their work. As technological developments intensify the pace of change in society at large, there is a corresponding proliferation of moral panics in relation to children's use of these technologies. In the UK last year, a letter was sent to a national broadsheet, signed by over 100 early years specialists, academics and

practitioners, which outlined a series of concerns about contemporary childhoods. The letter included the following paragraph:

Since children's brains are still developing, they cannot adjust – as full-grown adults can – to the effects of ever more rapid technological and cultural change. They still need what developing human beings have always needed, including real food (as opposed to processed 'junk'), real play (as opposed to sedentary, screen-based entertainment), first-hand experience of the world they live in and regular interaction with the real-life significant adults in their lives (Abbs et al, 2006).

This is misleading on a number of accounts. There is a false juxtaposition here that sets up engagement with technologies and 'real' play as oppositional. In addition, it should be noted that screen-based entertainment is not exclusively sedentary (Marsh et al., 2005). Further, in March 2006, David Willets, the Conservative Shadow Education Secretary, set up a formal inquiry into 'Lost Childhoods' in England, following a UNICEF (2006) report that indicated that the UK ranked bottom in a well-being assessment of children in 21 industrialised countries. Rather than questioning the methodology utilised in the UNICEF study, this knee-jerk reaction typified a range of responses to the current climate, which included the emergence of a book titled *Toxic Childhood* (Palmer, 2006).

These reactions were symptomatic of the frequent, negative reactions some adults express towards changing childhoods. There is no doubt that contemporary childhoods are being transformed, with social and cultural changes taking place that have significant implications for the teaching and learning of literacy. I will review only a few here in order to highlight the barriers identified by teachers in the studies focused upon in this paper. The first of these is the way in which public spaces are changing for children and young people. Many children and young people are involved in social networking sites such as *Bebo* and *MySpace* (Dowdall, in press) and this is potentially confusing and alienating for teachers who grew up with very different experiences of engagement with known and unknown audiences. Teachers are anxious about safety aspects of the Internet (Demos, 2007) and yet in a recent US study conducted by the National School Boards Association (NBSA, 2007),

only 0.08 per cent of young people reported meeting people they had met over the Internet without their parents' permission. This is not to minimise the concerns expressed by teachers, but suggests that instead of becoming over-protective in online spaces, we need to engage with young learners as they develop further their critical capacities and begin to make judgements about, for example, which aspects of their identities they share with which audience(s) at any one time. In addition, as Web 2.0 dissolves further the boundaries between production and consumption and celebrates a 'mash-up' or 'remix' culture (Lankshear and Knobel, 2006) in which 'produsage' (Bruns, 2006) abounds, anxieties around copyright and the line between collaboration and collusion proliferate. Peter Winter, the teacher involved in the blogging project, for example, had a number of concerns about this as the children began to mine the web for material to place on their blogs, but instead of becoming paralysed by fears surrounding this issue, he encouraged the children to consider the nature of their sources and acknowledge them where appropriate, or link directly to their web source. There are no simple solutions to an area that confounds many copyright lawyers and as this field develops, teachers need to be part of the dialogue about the nature of intellectual property in the digital age.

A further social and cultural barrier to change identified by teachers in the studies focused upon here was the presence of concerns about a digital divide. Teachers expressed worries that increasing the use of technologies in classrooms might exacerbate the differential expertise of children due to their access to and use of hardware and software outside of school. However, at times teachers assumed that all working-class children would have more limited access to technology than middle-class children. Whilst there are some social class differences in children's access to and use of technologies outside of school (Livingstone and Bovill, 1999; Marsh et al., 2005), there are also indications that socio-economic status does not relate simply to access and use (Selwyn and Facer, 2007; Valentine, Marsh and Pattie, 2005). In the future, the digital divide might focus more squarely on the differences between those who have an understanding of how technologies and related resources (such as social networking sites) can enable them to achieve their aims than those who do not (Lankshear and Knobel, 2006).

Finally, in relation to the social and cultural dimension, an additional challenge to be faced, and one which featured in all of the studies, is the growing divide between home and school literacy practices. Butler and Robson (2001), in an analysis of the way in which social class operates in neighbourhood change in London, described different social class groups as tectonic in nature in the way in which the various groups they studied rarely integrated in social and cultural institutions. They suggested that, “Social groups or ‘plates’ overlap or run parallel to one another without much in the way of integrated experience” (Butler and Robson, 2001, p2157). I think that this metaphor can be meaningfully applied to the way in which school and home contexts operate in the digital age. Whilst not ignoring the way in which children and young people transfer practices and knowledge across the various spaces they inhabit (Bulfin and North, 2007), the tectonic plates of home and school appear to be moving in very different directions in relation to digital literacy practices. This can be characterised across numerous digital literacy practices, but here I will focus on one in order to illustrate the extent of the difficulties faced by educators, that is the use of social networking sites, one example of which is online virtual worlds. Virtual worlds have become increasingly popular with primary-aged children over the last two years and sites that are frequently mentioned by children and parents include *Club Penguin*, *Webkinz*, *Neopets* and *Barbie Girls*. The worlds differ in terms of their affordances, but sites such as *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. Both of these virtual worlds also enable interactive chat that is tightly controlled and monitored in order to allay parental concerns regarding internet safety. This seems to be a successful strategy, as there are numerous sites 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 recommend it to every one else

Posted by: sophie 20 February 2007 at 01:22 PM1

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, parental attitudes demonstrated positive attitudes towards the role of new technologies in their children's lives (Marsh et al., 2005).

Although these virtual worlds are ostensibly aimed at 8–14 year-olds, inevitably there are reports of five- and six-year-olds using them. These sites offer children opportunities for engaging in online social networking with others and the literacy skills, knowledge and understanding they can foster include:

- reading skills and strategies including: word recognition (e.g. the vocabulary choices in 'safe chat' mode; instructions; in-world environmental text), comprehension, scanning text in order to retrieve appropriate information, familiarity with how different texts are structured and organised, understanding of authors' viewpoint, purposes and overall effect of the text on the reader;
- writing skills and strategies including: spelling, punctuation, syntax, writing using and adapting a range of forms appropriate for purpose and audience, using language for particular effect;
- writing for known and unknown audiences;
- using text to negotiate, collaborate and evaluate.

¹ Posted on 'Business Week' blog at:
http://www.businessweek.com/careers/workingparents/blog/archives/2006/09/while_moms_away.html

In addition, children develop skills across the visual, gestural and aural modes. There are aspects of these sites that deserve further investigation, such as the restrictive representations of femininity in *Barbie Girls* and the promotion of commodity purchasing as a key activity in both *Barbie Girl* and *Club Penguin*. In addition, 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 the flows of social, economic and cultural capital. Nevertheless, it is clear that these sites are becoming increasingly popular with the 5–11-year-old age group and will no doubt become even more pervasive in the years ahead.

However, despite the burgeoning popularity of virtual worlds and other Web 2.0 sites for this age group, primary schools in general have yet to recognise their potential. Indeed, firewalls implemented by many LAs prevent teachers from exploring these worlds and other social networking sites in school. In the blogging project, for example, the children were originally able to link to their school-made films posted on YouTube but then the LA blocked this site from the authority network and another host had to be found. Even in cases in which LAs have enabled schools to be more adventurous, there is no guarantee that these sites will be used in schools in ways that replicate home uses. Merchant (2007b), for example, reports on a network of primary schools in England that created a virtual world for children using Active Worlds, but then recounts how traditional practices were embedded within the design of the worlds and the use made of them by teachers. This is a phenomenon replicated across most of children's out-of-school digital literacy practices. In the 'Digital Beginnings' project (Marsh et al., 2005), it was found that the digital literacy experiences young children had in homes and early years settings were very different in nature. Parents of 1852 children aged zero to six were surveyed about children's use of media and new technologies in the home, in addition to 524 practitioners in 104 early years settings the children attended, who were asked to report on the use of media and new technologies in the settings. The differences in uses of some of the 'newer' technologies might be explained by the lapse in time that often occurs between a new technology emerging and its adoption in schools, but we found a worrying disparity in the use of 'old' technologies. For example, 53 per

cent of the children had access to a computer at home in the week prior to the survey, but only 46 per cent of practitioners reported having planned the use of computers in the settings in the same week – and as the survey included practitioners based at the same early years settings, the percentage of settings using computers was, consequently, much lower than that. Therefore, as digital literacy practices become more ubiquitous in the lives of young children, many schools and early years settings in England offer an increasingly out-moded educational experience.

In this section, I have reviewed a number of the social and cultural changes taking place that constitute barriers to further development of a literacy curriculum that reflects changes in digital practices in the world external to schools. In the next section, I will move on to analyse the historical factors that might preclude curricula and pedagogical development.

Historical

There are a number of historically-constituted barriers to change, not least the way in which educational institutions operate on 19th- and 20th-century models in terms of subject divisions. In relation to the development of the subject of English, we are in a period characterised by immense change and uncertainty (Kress, 2003; 2006). There are numerous phrases used which relate to the more extensive engagement with multimodal multimedia texts which is occurring, such as ‘media literacy’ (Ofcom, 2006), ‘digital literacy’ (Merchant, 2007a), ‘new literacies’ (Lankshear and Knobel, 2006), ‘multimodal literacy’, ‘visual literacy’ and ‘information literacy’, to name but a few. Many of these developments share common features and foci, with an emphasis on the analysis and production of multimodal texts across a range of media. One might argue that this proliferation of literacies presents few problems as they all point to slightly different issues and have distinct histories, but in reality this multiplicity is leading to theoretical and conceptual confusions in addition to contributing to political nervousness regarding further developments. We appear to be at a key juncture in curriculum development and need to consider the implications for the subject English (Green, 2006; Kress, 2006). A focus on the development of the subject so that it encompasses the analysis

and production of multimodal, multimedia texts and involves integration of activities that currently occur in areas of the curriculum such as media studies, ICT or 'information literacy' is timely. Whether or not this subject continues to be titled 'English' or 'Communication, language and literacy' or even 'Communication Studies' appears at the moment to be the least of the challenges faced, given the lack of common understanding about what the subject should look like in theory and practice. In the face of this turmoil, the work of Kress (2006) has been significant to furthering understanding of how the subject should be shaped in the 21st century and he emphasises the need for it to focus, above all else, on meaning:

In a society dominated by the demands of the market, by consumption therefore, by its constant and insistent demands for choice – no matter how spurious that choice may be – there is an absolute demand that the curriculum overall should include a subject that has *meaning* as its central question, has as its central concern principles for making choices (Kress, 2006, p3).

A further historical difficulty is a lack of a tradition of research and development in relation to new literacies, particular within early years and primary literacy learning and teaching. Historically, research in the area of early literacy development has focused on the acquisition of the alphabetic principle and this has led to a lack of knowledge about the stages of learning in relation to other modes. In the BFI project, for example, there was evidence of repetition of work on moving image texts across different age groups and limited understanding in relation to what progression in terms of analysis of multimodal texts might mean. Teachers expressed anxieties about the lack of a framework for supporting continuity and progression in this area. Whilst there are some models of progression in relation to media texts or moving image texts (see, for example, BFI/DfES, 2003), these need to be integrated into the literacy curriculum in order for schools to make substantial progress. This is not to suggest that models developed should be linear or lead to narrow conceptualisations of what children are able to do at any given age, but there is a need to develop research projects that enable teachers to understand continuity and progression in relation to the analysis and production of multimodal texts.

There are other ways in which the present is informed by the past and in turn shapes future developments in teaching and learning in this area. Bourdieu's concept of habitus (Bourdieu, 1990) can be drawn upon in order to understand why teachers' own attitudes, beliefs and practices can stand in the way of curricula and pedagogical change (Marsh, 2006). In the projects reported on in this paper, teachers' subject knowledge was limited in key areas and this in turn framed their improvisational capacities in relation to habitus. In addition to individual habitus, a number of researchers have utilised the concept of institutional habitus in an exploration of student choice of higher education institute (Reay, David and Ball, 2001). Reay and colleagues define institutional habitus as "the impact of a cultural group or social class on an individual's behaviour as it is mediated through an organisation" (Reay, David and Ball, 2001, np). In those LAs that effected the most productive changes in curricula and pedagogy in the BFI project, LA advisers focused on working at an institutional level with schools in order to address barriers to change. In some cases, this involved more than a focus on curricula and pedagogy, it also included work on schools' relationships with their wider communities. As Thomas (2002) notes, "institutional habitus should be understood as more than the culture of the educational institution; it refers to relational issues and priorities, which are deeply embedded, and subconsciously informing practice" (p431). However, schools are constrained not only by their institutional histories, but also by financial considerations. In the next section, I move from an analysis of historical barriers to curricula and pedagogical change to focus on economic restrictions.

Economic

Across all of the studies, teachers and advisers identified a lack of resources as a key limiting factor in their abilities to move the digital literacy agenda forward. For example, in the BFI project, teachers were unable to access a wide range of short films that could be utilised within the constraints of timetabling. This sometimes led to an over-emphasis on the use of extracts from moving image texts. Whilst the children's literature publishing industry appears to be growing from strength to strength in terms of book sales, the production of short films for young

children is very limited and, with changes in Ofcom's² regulations regarding financing of films and television programmes in the UK currently taking effect, this imbalance is unlikely to change in the short term. Other resource issues teachers mentioned as barriers were: a lack of time in the curriculum overall to extend the literacy curriculum in the way that they would wish to, a lack of teaching assistants to support individual and group work and limited or no technical assistance with the hardware and software used. Whilst some of these economic factors linked to local and national educational policy, others were embedded within institutional habitus, with some schools choosing to prioritise traditional literacy practices in terms of acquisition of resources. These decision-making processes take place within specific political contexts, of course, and so I turn to this as the final area of analysis.

Political

Whilst there have been recent moves to include multimodality in the literacy curriculum in the UK, the policy context remains resistant to more radical revision. Indeed, in the same year that the curriculum opened the door to the analysis and production of multimodal texts, the Rose Review of early reading took place (DfES, 2006b), with its revisionist agenda regarding the teaching and learning of phonics. This is a clear example of the policy phenomenon Luke and Luke (2001) note, which is:

A rhetorical displacement of the emergent problems raised by new communications technologies, cultures and economies for print based educational systems onto a new emphasis on early inoculation models of basic skills in print literacy (Luke and Luke, 2001, p95).

Alongside the narrowing of the political focus in relation to literacy, there has been a corresponding withdrawal from the systematic funding of teachers' professional development as budgets are devolved to individual schools, which has led to lack of consistency in provision and take-up. Teachers are not receiving the support they need in order to develop their subject knowledge and pedagogical content knowledge in relation to new literacy practices.

² Ofcom is the independent regulator for the UK communications industries.

When the barriers to curricula and pedagogical development are analysed in this way, rather than focusing on factors external and internal to teachers as two separate entities, it becomes clear that they work dialectically and that the strand that has normally been excluded from analyses of barriers to progress is the social and cultural dimension. In order to illustrate this, I have mapped the factors identified in the most recent review of barriers to integration of ICT (Foon Hew and Brush, 2007) against the areas discussed above. Inevitably, some of the factors cross boundaries, but I have placed them in the following table in terms of their primary orientation.

Barriers to curricula and pedagogical change identified in this paper	Barriers to curricula and pedagogical change identified in Foon Hew and Brush, 2007
Social and cultural	-
Historical	Attitudes and beliefs Knowledge and skills Institution Subject culture
Economic	Resources
Political	Assessment

Table 12.2: Comparative analysis of barriers

Whilst individual teachers' attitudes and beliefs are shaped by the wider social and cultural context in which they work, and so this factor could arguably be placed in the first box, Table 12.2 indicates that there has been a lack of attention in research on barriers to social and cultural issues. Strategies need to be developed that will enable educators to address some of the challenges faced in this area, alongside approaches that have been outlined to address the other areas, such as the provision of sufficient resourcing and professional development and changes to assessment regimes (Foon Hew and Brush, 2007). The additional

strategies need to counter social and cultural barriers could include, for instance, facilitating educators' sustained critical analysis of media discourses around issues such as 'toxic childhoods' or engaging with teachers in collaborative research projects which explore the way in which the public/private divide is changing for children in contemporary society and analyse the implications for their classrooms.

Conclusion

This analysis has focused upon developments in England. However, in the political context in which neoliberal policies roll out similar educational reforms across international boundaries, a number of the same issues can be identified elsewhere. In Australia, for example, the recent review of literacy teaching (DEST, 2005) echoed the narrow focus on print-based texts embedded in the Rose Review in England (DfES, 2006b). In addition, because there is a longer history in Australia than the UK of engaging in work on digital literacy and critical literacy, some sociocultural barriers to progress are arguably more pronounced as moral panics grow proportionately, as can be seen in the recent media criticism of critical literacies (see, for example, Slattery, 2005). In the USA, barriers to change are compounded by the fact that there is a lack of historical attention to areas such as critical literacy and media studies in schools and therefore educators have greater challenges to face in terms of moving textual analysis away from an 'inoculation' model. In the developing world, very different patterns of access and use of ICT leads to other concerns and interests in relation to digital literacy (Mutonyi and Norton, 2007). However, consistent across these spaces is the need for educators to become more familiar with how literacy curricula and pedagogy are shaped by both global and local concerns. In the years ahead, therefore, it will be important to develop more extensive international collaborations and conversations in order to address some of the barriers outlined above.

Whilst the studies reported upon in this paper can offer only partial glimpses into some of the possibilities and challenges faced by primary and early years educators in England as they respond to a rapidly changing world, they do signal a need for steady reflection on the current state of affairs and careful consideration of the steps needed in the years ahead. In addition, they emphasise the value of engaging with

teacher-researchers in collaborative communities of reflective practice as we take these tentative steps into the future. That task in itself brings its own challenges, but is a necessary one if theory, policy and practice are to relate effectively.

References

- Abbs P et al (2006). Modern life leads to more depression among children. Letter to the *Daily Telegraph*, 12 September, 2006. Retrieved 10 August 2007, from:
www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/09/12/njunk112.xml
- Bearne E, Clark C, Johnson A, Manford P, Mottram M, Wolstencroft H. With Anderson R, Gamble N and Overall L (2007). *Reading on screen*. Leicester: UKLA.
- BFI/ DfES (2003). *Look again: A teaching guide to using film and television with three- to eleven-year-olds*. London: BFI.
- Bourdieu P (1990). *The logic of practice*. (R Nice, Trans.) Cambridge: Polity Press (original work published in 1980).
- Bruns A (2006). Towards produsage: Futures for user-led content production. In F Sudweeks, H Hrachovec & C Ess (Eds), *Proceedings: Cultural Attitudes towards Communication and Technology 2006*, (pp275–84). Perth: Murdoch University. Retrieved 22 August 2007, from:
http://snurb.info/files/12132812018_towards_produsage_0.pdf
- Bulfin S, North S (2007). Negotiating Digital Literacy Practices Across School and Home: Case Studies of Young People in Australia. *Language and Education*, 23(3): 247–263.
- Butler T, Robson G (2001). Social capital, gentrification and neighbourhood change in London: A comparison of three south London neighbourhoods. *Urban Studies*, 38(12): 2145–2162.
- Carrington V (2005). New textual landscapes, information and early literacy. In J Marsh (ed), *Popular Culture, New Media and Digital Literacy in Early Childhood*. London: RoutledgeFalmer.

- Demos (2007). *Their Space – Education for a Digital Generation*. Retrieved 20 August 2007, from: www.demos.co.uk/files/Their%20space%20-%20web.pdf
- DEST (2005). *National Inquiry into the Teaching of Literacy: Report and Recommendations*. Canberra: DEST. Accessed August 2007, at: www.dest.gov.au/nitl/report.htm
- DfES (2006a). *Primary Framework for Literacy and Mathematics*. London: HMSO.
- DfES (2006b). *Rose review of the teaching of early reading: Final report*. London: HMSO.
- Dowdall C (in press). The texts of me and the texts of us: improvisation and polished performance in social networking sites. In M Robinson, R Willett & J Marsh (Eds), *Play, Creativities and Digital Cultures*. New York: Routledge.
- Ertmer P A (1999). Addressing first- and second-order barriers to change: Strategies for technology integration. *Educational Technology, Research and Development*, 47(4): 47–61.
- Foon Hew K, Brush T (2007) Integrating technology into K-12 teaching and learning: current knowledge gaps and recommendations for future research, *Educational Technology Research and Development*, 55(3): 223–252
- Green B (2006). English, literacy, rhetoric: Changing the project? *English in Education*, 40(1): 7–19.
- Hennessy S, Ruthven K, Brindley S (2005). Teacher perspectives on integrating ICT into subject teaching: commitment, constraints, caution, and change. *Journal of Curriculum Studies*, 27(2): 155–192.
- Kress G (2006). Editorial. *English in Education*, 40(1): 1–4.
- Kress G (2003). *Literacy in a new media age*. London: Routledge.
- Lankshear C, Knobel M (2006). *New literacies: Everyday practices and classroom learning*, 2nd Edn. Maidenhead, Berkshire: Open University Press.
- Laevers F (1994). *The Leuven Involvement Scale for young children*, LISYC Manual and video tape, Experimental Educational Series No. 1. Leuven, Belgium: Centre of Experimental Studies.

- Livingstone S, Bovill M (1999). *Young people, new media: Report of the research project: Children, young people and the changing media environment*. London: London School of Economics and Political Science.
- Luke A, Luke C (2001). Adolescence lost/childhood regained: On early intervention and the emergence of the techno-subject. *Journal of Early Childhood Literacy*, 1(1): 91–120.
- Marsh J (2007). New literacies and old pedagogies: Recontextualizing rules and practices. *International Journal of Inclusive Education*, 11(3): 267–281.
- Marsh J (2006). Popular Culture and Literacy: A Bourdieuan Analysis. *Reading Research Quarterly*, 46(2): 160–174.
- Marsh J (2004). The Primary Canon: A Critical Review. *British Journal of Educational Studies*, 52(3): 249–262.
- Marsh J, Bearne E (in press). *BFI Training Scheme for Lead Practitioners on Moving Image Education: Final Evaluation Report*. UKLA/University of Sheffield.
- Marsh J, Brooks G, Hughes J, Ritchie L, Roberts S (2005). Digital beginnings: Young children's use of popular culture, media and new technologies. Sheffield, UK: University of Sheffield. Retrieved 11 June 2006, at www.digitalbeginnings.shef.ac.uk/
- Merchant G (2007a). Writing the future in the digital age. *Literacy*, 41(3):118 –128.
- Merchant G (2007b). Daleks and other avatars. Paper presented at the UKLA Conference, University of Swansea, July 2007.
- Mutonyi H, Norton B (2007). ICT on the margins: Lessons for Ugandan education. *Language and Education*, 21(3): 264–270.
- Nixon H, Comber B (2005). Behind the scenes: Making movies in early years classrooms. In J Marsh (Ed), *Popular culture: New media and digital technology in early childhood* (pp219–236). London: RoutledgeFalmer.
- NSBA (2007). *Creating and connecting: Research and guidelines on social – and educational – networking*. Retrieved 20 August 2007, from: www.nsba.org/site/docs/41400/41340.pdf

Ofcom (2006). Media Literacy Audit: Report on media literacy amongst children, London: Ofcom. Retrieved 20 August 2007, from: www.Ofcom.org.uk/advice/media_literacy/medlitpub/medlitpubrssi/children/children.pdf.

Palmer S (2006). *Toxic Childhood*. London: Orion Press.

Primary National Strategy (PNS)/United Kingdom Literacy Association (UKLA) (2004). *Raising boys' achievement in writing*. London: HMSO.

Reay D, David M, Ball S (2001). Making a Difference? Institutional habituses and higher education choice, *Sociological Research Online*, 5(4). Accessed August 2007 at: www.socresonline.org.uk/5/4/reay.html

Selwyn N, Facer K (2007). *Beyond the digital divide: Rethinking digital inclusion for the 21st century*. Bristol: Futurelab. Accessed August 2007: www.futurelab.org.uk/resources/publications_reports_articles/opening_education_reports/Opening_Education_Report548

Slattery L (2005). Put literacy before 'radical' vanity. *The Australian*, 30 July 2005. Retrieved 20 August 2007, from: www.theaustralian.news.com.au/story/0,20867,16089271-7583,00.html

Street B (1998). New literacies in theory and practice: what are the implications for language in education? *Linguistics and Education*, 10(1): 1–24.

Thomas L (2002). Student retention in higher education: the role of institutional habitus. *Journal of Education Policy*, 17(4): 423–442.

Toffler A (1971). *Future Shock*. London: Pan

QCA (2005). *Taking English Forward*. London: HMSO.

UNICEF (2006). Child poverty in perspective: An overview of child well-being in rich countries. Florence, Italy: Unicef. Accessed August 2007 at: www.unicef.org.uk/press/news_detail_full_story.asp?news_id=890

Valentine G, Marsh J, Pattie C (2005). *Children and Young People's Home Use of ICT for Educational Purposes: The Impact on Attainment at Key Stages 1–4*. London: HMSO.

Walsh M et al (2006). *Literacy for e-learning and multimodal classroom contexts*. Sydney: CEO/ACU.