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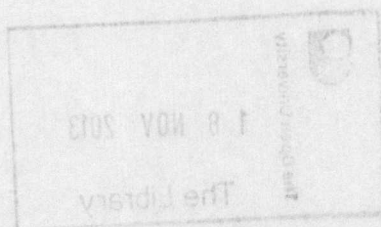
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LITERACY IN A DIGITAL WORLD

SEARCHING FOR COMMON UNDERSTANDINGS

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ABSTRACT

The increasing penetration of digital technologies in society involves substantial changes in literacy practices that need not be marginalised as "digital literacy". The subject of this research is the investigation of emerging changes in literacy in a digitally mediated world, viewed from the perspective of the individual's understandings of the changes taking place.

To explore the extent to which understandings are common the research worked with diverse populations. Three groups of different age ranges (school age, professional adults and retired people) and cultural contexts (México, Spain and the UK) were interviewed. The data set was analysed according to three perspectives: participants' understandings of how their practices have changed; critical understandings of their practices including the contexts in which they take place; and understandings of their own identity as "literate" individuals. The research approach was qualitative, drawing on semi-structured interviews and iterative analysis of the data.

While some of the findings confirm tendencies already observed in the literature, others, such as a sense of non-alignment with cultures of transparency, the lack of perception of the self as creator of artefacts, or tensions between convenience and critical positions, provoke reflection and contribute to a fuller understanding of the nature of literacy in a digital world. The key implications of the report's findings for educational policy and pedagogical practice include the idea that literacy cannot be viewed as a static set of skills, the fact that the evidence presented here suggests that there is no clear demarcation between 'digital literacy' and 'literacy', and the idea that pedagogical practice should take into account the degree of integration of technologies into learners' lives. The report identifies a need for educational policy and

pedagogical practice to focus on the development of 'meta-literacy', or understandings of what

literacy and literacies involve.

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1. INTRODUCTION

1.1 RATIONALE AND AIMS OF THIS WORK

This work is about literacy, and how literacy is understood in a world that is increasingly digitally mediated. It is predicated on the idea that, as the use of digital technology increases, the notion of 'literacy' requires re-examination. Many current researchers are focussing on literacy practices in digital contexts. For example, in the May 2010 issue of Digital Culture and Education, the term *"new literacies"* is frequently used as a device to highlight the idea of a change around our understandings of literacy as it plays out in digitally mediated contexts. Both Kress (in Gillen and Barton 2010) and Wilber (2010) focus on this idea of the 'new'. The former emphasises the fact that digitally mediated literacy practices are not simply traditional literacy carried on in new media, while Wilber focuses on the affordances of the new technological tools, which perhaps could be described as a focus on specifics, and then quoting Knobel and Lankshear (2007) she describes their *"ethos"* or spirit. New literacies are described as more participatory (referring to Jenkins, 2006), multimodal (referring to Kress, 1997, Jewitt, 2009 and Walsh, 2009) and they cross conventional notions of space (referencing Leander, 2008). The idea of change in society due to the advent of the "digital" is perhaps already a commonplace. More than a decade ago Snyder identified a variety of characteristics of literacy practices which remain relevant: *"Speed, instantaneity, flexibility, mobility, on-the spot readjustment, perpetual experimentation, change devoid of consistent direction and incessant reincarnation are some of the hallmarks not only of web literacy practices but also of real life cultural and social practices"* (2002, p. 173). Snyder describes a complex, shifting landscape of practices, that is not easy to cope with or inhabit, let alone map, but the range of issues that emerging literacy

practices raise, for individuals, educators, and society, require a response. It is necessary to explore this kaleidoscopic universe of literacy practices in order to help learners and individuals to find *"ways of being in their world'* (Gee, 1990, p.4).

Over the past 15 years I have been working in different capacities, exploring different ways of integrating emerging digital technologies in education. This work has involved locally financed projects, and EU financed projects. Increasingly I have had the opportunity to view the process from the policy perspective, working for the European Commission since 2002 (Framework Programmes and the Lifelong Learning Programme) on the evaluation of projects, proposals and policies. The plethora of initiatives, often overlapping, and the slowness with which the educational mainstream across Europe is adopting, if at all, the emerging affordances and implications of digital technologies led me to the idea that the changes in literacy practices taking place in individual lives as a result of the adoption of these technologies required further exploration. This is the initial impulse that drove this work.

There is an important connection made in the above quote from Snyder between *"web literacy"* on the one hand, and *"real life practices"* on the other. It is increasingly hard to separate one from the other, and this overlap needs examination. Literacy has always been intimately linked to technologies (such as book and pen). For many users of digital technologies it may be hard, or even meaningless, to speak of a "paper-based" set of literacies, and a separate set of "digitally mediated" literacies. Though the separation may help to make the new practices more manageable or examinable, it is not clear that it reflects the realities of everyday practice, or how individuals understand themselves and their practices.

My interest in this research is focused on these understandings. Wilber (2010) observes that new literacies are *'deictic'*, meaning that they depend entirely on the context in which they are

used. This observation is also present in the New Literacy Studies, which I shall discuss later in this chapter (Section 1.2.1), and points to an underlying continuity in views of literacy. From a research standpoint this means that we must *"research and understand new literacies as they are happening, as users adopt new technologies and make them part of their lives"* (Wilber, 2010, p.2). The deictic nature of new literacies has two implications. The first relates to context-dependency, which potentially militates against any kind of generalization, and hence against useful contributions to pedagogical practice, or policy. This is the case unless various contexts are explored, and commonalities can be found across them. To identify shared understandings across different populations would contribute to an understanding of the complex range of literacy practices of current users. The second implication relates to understanding. While the observation and documentation of practices in digitally mediated contexts is necessary, I wished to explore how those who engage in the practices understand themselves as literate individuals. Within this scope I have three areas of focus; the first of these is individuals' understandings of how their literacy practices are changing; the second is individuals' understandings of themselves as literate individuals (identity); the third is individuals' critical awareness of the power structures and relationships they are involved in or affected by. In this sense the research looks from the level of the individual down towards practices and up towards the wider society, and how people inhabit this digital world.

Burnett's (2002) emphasis on not just shared discourse but also shared understandings of the worlds we inhabit is apposite here; it implies that research on literacy should go beyond descriptions of the activities that take place in different discourse communities to an understanding of the meanings we ascribe to our literacy practices. Snyder (2002) focuses on Williams' idea of communication as a process of *"making unique experience into common*

experience" (1975, p.38). The capacity to convey to others the sense we have made is a vital component of a social view of literacy and we need to understand our own practices to do that. Street points out that social life is *"patterned and persistent even among its rich diversity"* (1997, p.52). My focus is on identifying patterns of understanding that persist across diverse populations. While differences are important, the similarities could provide interesting and useful insights for pedagogy and policy, or at least contribute to better comprehension of the changes that are taking place in this area.

In this introduction, I provide some background to show how I arrived at this particular research focus. First I will discuss changes in conceptions of literacy, and how these inform my own understandings, before discussing some of the changes that appear to be taking place in literacy practices that justify the need for research into literacy in digitally mediated contexts. I will then discuss potential areas of research focus in order to locate my own. I then describe my research questions in detail, and give an overview of the structure of this thesis.

1.2 BACKGROUND TO THE WORK

1.2.1 Changes in conceptions of literacy

In this section I give a brief overview of changes in conceptions of literacy in recent years in order to give a rationale for, and position, my own understanding, which informs the rest of the work, and my research questions.

Popular understandings of 'literacy' tend to see it in terms of knowing how to read and write; a question of learning to manipulate codes. Meanwhile, academic notions of literacy have been the subject of extensive and complex debate, involving concepts that rarely percolate into public discourse. An exploration of the literature reveals a complex and somewhat fragmented

evolution, driven in part over the last 30 years by changes in the way language and literacy were theorised, in the work of authors such as Halliday (for example, 2005) and those associated with the New Literacy Studies (NLS) such as Gee (1990), Lankshear and Knobel (2003), Street (1995), Barton and Hamilton (1998), or Heath (1983). The NLS proposed a view of literacy as a socially-situated practice rather than as a collection of technical skills. Following on from this work, academic understandings of the notion of 'literacy' have undergone a series of shifts. These include a reduction of emphasis on one unique 'literacy'; the emergence of a view of literacy as an activity rather than a skill set; a view of literacy as social; developments in understandings of language and the nature of 'text' as increasingly multimodal; and more recently an increasing focus on digitally mediated 'literacy'. Each of these shifts contributed to my own understanding of literacy, and the development of my research focus, and each therefore requires a brief discussion.

Public debate around 'literacy' is frequently predicated on the assumption that a uniform literacy that is not context-dependent exists. The NLS literature focuses on literacy as a non-uniform social practice, since each context is different and has its own set of 'literacy practices', which taken together can be and are understood as a "literacy". The New London Group (1996) proposed the idea of multi-literacies in part to reflect the plurality this implies. Wallace (2003) notes how the NLS focus on local and vernacular literacies which are located in private individual domains, and many of the micro-ethnographic studies which demonstrate the coherence of the theory, such as Heath (1983), Prinsloo and Brier (1996), Gregory and Williams (2003), Barton and Hamilton (1998), support this. The term "literacies", as opposed to "literacy", has become commonplace in the literature.

However, as Wallace (2003) points out there are difficulties with this idea. The first issue is the

problem of trivialisation; in this view anything can be considered a 'literacy'. A brief literature search produces articles on, among others, financial literacy, clinical trial literacy, cancer literacy, democratic literacy, kitchen literacy and, perhaps ironically, reading literacy. Kress is opposed to this tendency, stating that language and literacy are *"messy and diverse and not in need of pluralising"*. (1997, p.115). Furthermore, he points out that this multiplication *"devalues the term, so that it comes to mean nothing more than skill (as in keyboard skills) or competence"*. Furthermore there can be considerable overlap. Kellner mentions print literacy, media literacy, computer literacy, and multimedia literacy in succession, but as he admits *"the skills...learned in critical media literacy training can also be valuable as part of computer literacy,"* (2002) p.162) which begs the question whether it is useful to separate the two. The impulse to speak of *"literacies"*, though seductive, as it initially appears to help to manage the plethora of practices, simply produces a menagerie of different literacies, each in its own compartment, that postpones the challenge of achieving a wider perspective that may actually prove useful in comprehending the changes that may be taking place.

Another risk is that at times the notion of multiple literacies is blended with the assumption of literacy as uniform, so that each 'literacy' is (paradoxically) viewed as *"fixed and essential"* (Street, 1997, p.50). This leads us to a multiplicity of 'mono-literacies'. Street makes a pragmatic distinction between literacy practices, which are described as the realm of the researcher and formal descriptions of literacy, and on the other hand the plurality of literacies which, although difficult to manage, are useful concepts to help introduce the idea of more than one literacy to institutions and policy makers.

These two perspectives -literacies and literacy practices – co-exist. I see literacies as *"some complex of these domains that varies with context"* (Street, 1997, p.50); as combinations of

practices which involve a range of uses of different channels in different situations. Tyner (1998) refers to the eternal struggle of literacy researchers with the definition of literacy. I have come to a view of literacy as a "semi-plural" noun: it is at the same time a single concept that can be discussed (as a kind of shorthand), and partially understood as singular, and a plural concept that involves kaleidoscopic, shifting sets of literacies, which in turn are groupings of literacy practices. At some moments the focus may be more on the singular, at others on plural literacies and literacy practices. These practices take place in dynamic contexts and involve activities and interactions (*"Literacy is primarily something people do"* Barton and Hamilton, 1998, p.3) by and between individuals and groups that, taken together, constitute a discourse that is in turn constitutive of the context. In this sense the complex nature of the context defines and is defined by these practices. As Lewis and Fabos (2007) point out, literacy practices are distinct from literacy events, in the sense that they include not just the behaviours and locations of literacy but also the meanings that are associated with them. This implies that researching literacy practices involves exploring these meanings, and how they are understood.

Another key idea is the idea of literacy as social, which is to say that the practices involved are always embedded within a social context and cannot be considered independently. Scribner and Cole define literacies as *"socially organised practices [that] make use of a symbol system and a technology for producing and disseminating it"* (1981, p. 236). This is reflected in the NLS, for example the term Street uses, *"social literacies"* (1997, p. 51) or Hamilton's assertion that literacies are defined by the *"social and communicative practices with which individuals engage in the various domains of their life world"* (2002, p.176). The social nature of literacy is echoed by other authors such as Street (2003) and Lankshear and Knobel (2003).

Further changes relate to the way text is understood. This is in part connected to

understandings of the nature of language itself. Street speaks of the dialogic nature of language, describing it as a *"continually negotiated process of meaning making as well as taking"* (1997, p. 51). This dynamic view of language, which derives from Bakhtin (1981), implies that literacy practices are likely to be similarly flexible and dynamic, changing and recombining in relation to contexts, the range of practices present in these contexts and the meanings ascribed to them by individuals and communities.

These changes in the understanding of the nature of language are accompanied by other changes in the understandings of the nature of the text itself. The idea of literacy as multimodal, no longer limited to the reading and writing of the printed word, has already been extended to the spoken word (Heath, 1983, de Certeau 1984, Hamilton, 2002). This extension then continued to visual modes (Swanwick, 2003, Menezes de Souza, 2003), but the rising importance of computers, screens, and the Internet gave special impetus to the idea of literacy as multimodal and a re-examination of the idea of the "text" (Kress and van Leeuwen 1996, Kress, 2003). The media and technologies available (from printing techniques to commercial distribution to the Royal Mail to electric light) have always led to changes in literacy practices and in the ways we understand them. The change from *"page to screen"* (Snyder, 1998) is however perceived as more radical than other previous technological changes. Digital technologies change the nature of "texts" and their contexts. Despite the use of the "page" metaphor in much web design, online text is frequently organized in ways that are impossible in paper formats. The work of Burbules (2002) on hypertext is illustrative of this. The way we interact with text changes, we scroll through and dot around web pages. As Lemke (1998) points out it is necessary to avoid thinking of mere combinations of words and images in multimodal texts, the meanings of words are affected by the meanings of the images that

accompany them and vice versa, which complicates and enriches the possible meanings of the multimodal text. However, though the diversification of media and the focus on multimodality may have led to a loss of emphasis on print literacy (Wallace, 2003), text-based interaction is arguably now more prevalent, through social media and email, and the way conversational turn-taking takes place in online messaging is different to face to face conversation and to asynchronous texting. The text is frequently fragmented and dispersed across spaces (for example messages, "walls", websites, blog comments, mails) and the term "text" has extended to cover not just written text but also audio-visual messages.

These changes in conceptions of literacy, taken together, give a picture of a current broad academic consensus that characterises literacy as a set of practices that are plural, multimodal and socially situated. This view forms the baseline for my own position. It is perhaps best captured in a quote in Rex at al. (2010) whose review of the use of discourse analysis to explore literacy is illuminating. They reference a definition by Carter who describes literacies as the *"social and cultural ways in which students communicate in their everyday lives as they engage, analyse and critique the world around them, which are part of an interpretive framework that informs how they engage in language and literacy events and understand texts"* (2006, p.353). This understanding of literacy contains a series of elements that are central to my understanding of literacy. First of all, it is plural – literacies; next, it is relational, focused on communication between people; it involves interpretation (see for example Freire's (1987) *"reading the world"*) which implies meaning making; it involves critical engagement; and centres around 'texts', though this is a term that, as we have seen above, needs to be understood in its widest sense ('artefact' may be a more apposite term, though 'text' is the common currency in the literature). This is the closest definition to my own understanding.

This section has outlined some of the changes in conceptions in literacy which inform my position and my research questions. In the next section I discuss some of the insights afforded by research into digital technologies, and how they may affect understandings of literacy, and how this has contributed to my research focus.

1.2.2 Changes in literacy in a digital world

As digital technologies have become increasingly widespread, a wide range of terms have been used to refer to a very similar set of concepts. Media literacy, digital literacy, information literacy, visual literacy, technological literacy, computer literacy, and network literacy are terms that overlap and coalesce, though distinguishable they occupy similar spaces. As Tyner, back in 1998, was already observing, when speaking of the first three, that the fact that these fields of study do not link up is *"of significant interest. Perhaps a synthesis, under a different name, will come about in the future"* (Tyner 1998, p. 6). More recently Mills observes: *"Today, many cultural contexts of literacy practice involve digital technologies"* (2010, p. 249). This is neat, it cuts neatly through the Gordian knot of information/technological/media/digital literacies; quite simply, much literacy practice today is digitally mediated. In the same way as the introduction of the use of printing and bookbinding technology, which involved practices that are different to the use of parchment manuscript rolls[1], or typewriting technology, which involved a similar process of assimilation of a new set of literacy practices, the introduction of electronic screens changes the nature of literacy. Edwards (2002, p.1) noted that *"mature technological systems — cars, roads, municipal water supplies, sewers, telephones, railroads,*

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[1] This video at *http://www.youtube.com/watch?v=pQHX-SjgQvQ* provides an amusing commentary on this process

weather forecasting, buildings, even computers in the majority of their uses— reside in a naturalized background, as ordinary and unremarkable to us as trees, daylight, and dirt". The processes involved in the assimilation of new technologies into society tend to involve a movement from a perception of the technology as novelty and different, to its assimilation to a point where the technology becomes invisible, 'part of the furniture', so to speak (the television and the light bulb are cases in point). Digital technologies, in this way, were initially seen as different, and treated accordingly, under separate headings, and this may help to explain how the term 'digital literacy', as distinct from literacy, came about. However, digital technologies are increasingly becoming 'part of the furniture'.

This raises an important issue which requires discussion. It is necessary to avoid conflating digital practices with digitally mediated literacy practices. This is however complicated. All digital activity involves screens on which information in the form of text, icons, or images is presented, and this information needs to be decoded and interpreted by the user. These practices are analogous to interaction with paper formats (this shift is well captured in Snyder's 1998 title: *"Page to Screen"*) although the range of multimodal "texts" and codes involved is much greater in the digital context. If we understand literacy to involve a wide range of multimodal "text" types, and to be fundamentally interpretative, as well as social, there are few practices involving digital devices that do not involve literacy practices in some way, though of course it remains the case that many literacy practices are not mediated through digital devices.

The risk of the conflation of digital practices and digitally mediated literacy practices remains however. In order to manage this risk, it is possible to view the range of digital practices in terms of the degree to which each one is 'literacy-focused'. Doing this generates a 'cline' of

practices, ranging from those that can be characterised as highly 'literacy-focused' to those that involve a very limited or no degree of literacy practice. At one extreme of the cline (See Fig. 1) are activities like reading a PDF, text chat, or the filtering of a collection of search results, as well as the creation of documents which are very clearly literacy practices. Very close to them on the cline, though perhaps less widely accepted as literacy practices due to the absence of conventional alphabetical text, are practices involving the interpretation and exchange of images (static or video) and web layouts, or "reading images" (Kress and van Leeuwen, 1996). Further along the cline we find activities such as taking a photo or using QR codes, which though they may at the moment of action not be construed as literacy practices, are likely to support associated literacy practices such as the discussion and exchange of the photo or interpretation of the information provided by the QR code. At the other end of the cline, there are other digital practices such as video and telephone conversations where, though the initiation of the activity and other activities that take place during the conversation, such as file-sharing, involve associated literacy practices such as the interpretation and management of text, icons or images, the main activity is more a digital practice than a literacy practice[2].

Having said this, however, it is important also to note that the perception may be changing, the NMC Global Imperative document (2005) includes sound in its definition of 21st century literacy: *"21st century literacy is the set of abilities and skills where aural, visual and digital*

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[2] It is worth mentioning that even here it is possible that an understanding of these interactions as 'secondary orality' after Ong (1982), who described it as *"a more deliberate and self-conscious orality based permanently on the use of writing and print"* and as therefore related to literacy, merits exploration. Bounegru (2008) in a blog post titled *"Secondary Orality and Microblogging"* at http://tinyurl.com/olr957b has noted the resemblance of online interactions and social space to oral storytelling.

literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms."(p.2). And as I mentioned in section 1.2.1, other authors such as Heath (1983) de Certeau (1984) and Hamilton (2002) have posited the extension of understandings of literacy to incorporate the spoken word. This view does not yet appear to be widespread however.

MORE "LITERACY – FOCUSED"

READING A PDF
DOCUMENT CREATION
TEXT CHAT
INTERPRETING SEARCH RESULTS

INTERPRETING WEB PAGE LAYOUT
EXCHANGING IMAGES
 "READING" IMAGES

TAKING A PHOTO
MAKING A VIDEO
USING QR CODES

VIDEO CONVERSATION
AUDIO CONVERSATION

LESS "LITERACY-FOCUSED"
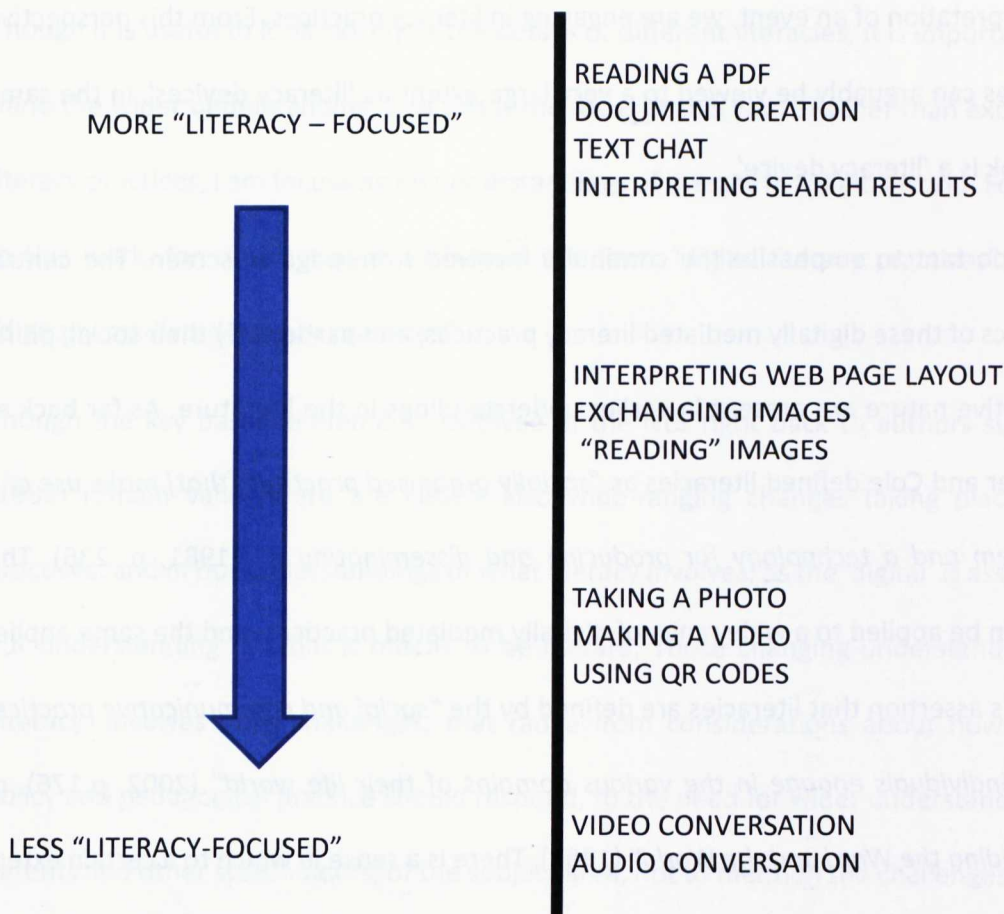
Fig. 1 – Literacy focus in a range of digital practices

It is important to bear this cline in mind and recognise that at one end of it we find digital practices that can only tenuously at present be described as digitally mediated literacy

practices. These are mostly oral/aural conversations mediated by video or telephone. Though it is possible to view these as "texts", especially once recorded, and indeed this is commonplace in fields such as language learning and applied linguistics, in this work my focus has been at the other end of the cline. It is however necessary to emphasise the prevalence of digitally mediated literacy practices involving "text" as I mentioned in section 1.2.1. Whether interpreting icons on a screen, participating in a conversation that is mediated by a screen with a particular layout in which a range of texts are exchanged, or creating a video that expresses a visual interpretation of an event, we are engaging in literacy practices. From this perspective digital devices can arguably be viewed to a very large extent as 'literacy devices', in the same way as a book is a 'literacy device'.

It is also important to emphasise the continuity involved from page to screen. The central characteristics of these digitally mediated literacy practices, and particularly their social, plural and interpretive nature are present in earlier understandings in the literature. As far back as 1981 Scribner and Cole defined literacies as *"socially organised practices [that] make use of a symbol system and a technology for producing and disseminating it"* (1981, p. 236). This definition can be applied to a wide range of digitally mediated practices, and the same applies to Hamilton's assertion that literacies are defined by the *"social and communicative practices with which individuals engage in the various domains of their life world"* (2002, p.176), or Freire's *"Reading the Word and the World"* (1987). There is a sense in which to a certain extent we are still focused on the same overall understanding of literacy and literacies as 30 years ago, albeit using different media. Though it is clear that the multimodal nature of the digital context extends the definition, there is a continuity involved in digitally mediated literacy practices. As the findings of this research will show in Chapter 6, the participants understood the adoption

of digitally mediated literacy practices as an extension rather than a substitution of their personal collection of literacy practices. The digital is not separate.

It is possible, then, that Tyner´s *"synthesis"* (1998, p.6) could involve an expanded understanding of the word ´literacy´. Though this might be conceived of as blurring boundaries between categories, I believe that this wider, more inclusive perspective, is necessary for a fuller understanding of contemporary literacy. Collins and Blot (2003) speak of *"literacy and literacies"* and as I have mentioned earlier (p.12) it is possible to view literacy as "semi-plural". Though it is useful to look closely at the details of different literacies, it is important to bear in mind the wider understanding, and this is the focus of this work. Rather than exploring digital literacy practices, I am focussing on understandings of literacy in a digital world. For this reason in this work, for clarity, I have eschewed the term "digital literacy practices" in favour of "digitally mediated literacy practices".

Though the key baseline elements involved in the NLS right back to authors such as Heath (1983) remain valid, there are clearly also wide-ranging changes taking place in literacy practices, and in our understandings of what literacy involves, as the 'digital' is assimilated into our understanding of what it means to be literate. These changing understandings of what 'literacy' involves pose challenges, that range from considerations about how educational policy and pedagogical practice should respond, to the need for wider understandings, among parents and other stakeholders, of the subject area, not to mention the challenges involved for researchers. To give one example of these challenges, Beavis points out that the kinds of text that the young are involved with are *"significantly different from those with which English and literacy teaching practices and curriculum have traditionally been associated"* (2002, p.47). This lack of connection between the young and their educational curricula is closely related to their

literacy practices, some of which are digitally mediated (in Beavis's case the texts were largely involved with gaming). One way of addressing this challenge would be to investigate how this lack of connection looks from the point of view of the individual, and this perspective is the focus of my research.

As I shall discuss in the Literature Review chapter (Section 2.1.1) a range of insights have emerged from research into the use of digital technologies that seem to flag challenges and justify the need to research understandings of literacy in digitally mediated contexts. These include the idea that digital tools have affordances that provide a potential for individuals to become more in charge of and responsible for their literacy practices, and the identities they project through the artefacts they create. There are also indications that engaging in the process of creation can also lead to a greater degree of critical understanding of what lies behind an artefact. Much digitally mediated activity also has social elements. Artefacts are created collaboratively or shared with others and commented on. Literacy as a social practice is an activity in a context, principally interaction with others, and especially so in the digital environment. These are aspects I will discuss in more detail later (Section 2.1.1).

What comes through is a sense of substantial change. Kist, for example, speaks of the *"staggering changes in media choices that have occurred"* and *"what they mean for how to define literacy"* (2005, p.3). There is however sometimes a distance between the understandings of professionals who write about the subject and the 'everyday' perceptions of individuals. My research focuses on these individual understandings. I described earlier (Section 1.2.1) my own understanding of literacy as plural, relational and interpretative. In my view, a rounded view of the digitally mediated changes taking place in literacy, if it is interpretative – a 'reading' of the world - necessarily requires exploration of the reader's

'reading'. In other words, there is a need to research individual's understandings of their own practices and how they are changing.

This background section has described how I arrived at the focus of my research. Before describing my research questions in detail, it is necessary to locate the work in relation to other potential foci. The next section focuses on this.

1.3 POTENTIAL AREAS FOR RESEARCH ON LITERACY

The NLS literature is rich with accounts of the practice of literacy in concrete contexts. Much of the work involved is made up of micro-ethnographic studies, as I have mentioned earlier (Section 1.2.1), and there is a sense in which those authors eschew generalization, preferring to focus on insights derived from local studies. This however is an aspect that has been criticised. Brandt and Clinton (2002) point to the *"limits of the local"* and Collins and Blot (2003) comment that the context-specific nature of these studies precludes the identification of common literacy practices across studies and hinders a coherent influence on policy.

The UNESCO Education for All Global Monitoring Report based on a review of the literature, laid out four views of literacy; *"literacy as an autonomous set of skills"*, *"literacy as applied, practiced and situated"*, *"literacy as a learning process"*, and *"literacy as text"*. (2006, p.148) Interestingly the document avoids taking a clear position; it captures and highlights the different viewpoints but remains agnostic. This is perhaps understandable. The definition of literacy has always proved a challenge to researchers in the field (as Tyner 1998 for example points out) and in recent years, as Mills (2010) points out, the issue of what counts as literacy, has proved especially challenging due to the changes I have outlined above. The very term 'new literacies' implies an emergent concept that is still in the process of definition. The question

that arises for researchers who wish to explore these changes is where to focus the attention.

One potential area of focus is the 'macro' level of policy, looking at the ways in which new digital technologies are being assimilated across society and how this may affect understanding of literacy in society, governments and in schools. In addition to the UNESCO document, many institutional strategies have been proposed to engage with these changes. A variety of recent reports, which I shall discuss in the Literature Review chapter, set out frameworks or guidelines that constitute responses to the progressive integration of digital technologies into all walks of life. Most address the need for understandings of education and literacy to change, but the plethora of overlapping recommendations is arguably unhelpful. There is a sense that the policy level requires further input, or evidence, before a clearer view can coalesce. This implies the need for further research before policy recommendations can be made. This aspect is further explored in the Literature Review chapter.

As well as the NLS research mentioned earlier, much other research into new and digital literacies has focused on what could be termed called the 'micro' level of specific literacy practices, such as the ways in which language is used and interpreted, and how practices have changed as multimodal texts become more common. Mills reviews a wide range of articles, all of which focus on predominantly ethnographic research into digitally mediated literacy practices, in a wide range of countries and contexts. She identifies a series of characteristics that emerge: *"The literacies are digital, pluralized, hybridized, intertextual, immediate, spontaneous, abbreviated, informal, collaborative, productive, interactive, hyperlinked, dialogic (between author and reader), and linguistically diverse"* (2010, p.255). The list is useful, but the review fails to engage fully with the criticism made by Walton that *"digital literacies, such as online chat, blogs, wikis, digital media production, games, and podcasting, are 'exotic*

practices' for the 'majority of the world'..." (2007, p. 197). These studies come from diverse countries and contexts, and their aim is not necessarily to be representative of a "majority", but the criticism does point to a possible limitation of this level of focus.

There is however an intermediate focus, which could be termed the 'meso' level. At this level the focus is neither at the micro level of specific practice, nor the macro level of policy. Instead it is on individuals and their understandings of their practices as a literate or perhaps 'newly' literate person. These include both understandings of one's 'literateness' in relation to others, and the wider society, and of how individuals' literacy practices may constitute them as 'literate' in a digitally mediated context. This level of focus constitutes a bridge between the macro focus of policy, which needs to be informed by the realities of practice, and the fragmentary nature of practice at micro level. It also importantly allows for the perspective of the ordinary user to be included in discussions about 'new' literacy and literacies. It is for this reason that in this work I have chosen to focus on this "meso" level, particularly on the meanings that individuals ascribe to the literacy practices in which they engage, how they understand themselves as literate and how they understand their literacy in relation to society and particularly power structures.

1.4 THE RESEARCH QUESTIONS

Having described the rationale and background to my research focus, and situated the focus on the level of the individual, it remains in this introductory chapter to describe in detail the three research questions on which I wish to focus. In a section of Gillen and Barton's (2010) Digital Literacies briefing, Garnett enumerates a range of areas of focus in relation to digital literacies (p.22). These are critical thinking, media literacy and participatory culture, digital

inclusion, and digital citizenship/ internet safety. Any of these might constitute potential areas of focus for this research, but it is notable that most have a "critical" element. Garnett also points out that while identity is not included in this list it perhaps should be. Both criticality and identity issues are explored further in separate sections of the Literature Review chapter, but their relevance as areas of focus in this exploration of literacy in a digitally mediated world is highlighted here.

To sum up, my focus is expressed in the following research questions:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies in relation to:

- *their understandings of how their literacy practices have changed, and continue to change, as a result of their engagement in digitally mediated activity?*

- *their critical understandings of their literacy practices, the contexts in which these take place, and the ways in which they structure and manage these practices in order to make sense of the contexts they inhabit?*

- *their identity as "literate" individuals and how their literacy practices affect their identity, and the ways in which they structure and manage these practices in order to make sense of their own identities and those of others?*

1.5 THE RESEARCH CONTEXT

Before describing the structure of the thesis, it is necessary to make some comments about the research context, and the participants. As I will describe in the Literature Review section, much recent research has focused on young people's digitally mediated literacy practices, as opposed to the wider adult population, despite the fact that more and more sectors of society

are coming online and engaging in digitally mediated literacy practices (Pew Research Centre, 2009). In addition to this, the idea of the "expert" young user of digital technologies, as I will discuss in the Literature Review, is questionable. This indicates a need to explore not just the literacy practices of the young, but of a range of segments of society in a range of contexts. A last caveat relates to the danger of technological determinism. While the affordances of new participatory web technologies may make the contextual, social nature of literacy practices more clearly evident, the technologies themselves are less important than how they are used and how these uses are understood. As Clay Shirky observes *"A revolution happens not when a society adopts new tools, it happens when a society adopts new behaviours"* (Gormley, 2009).

I therefore decided to focus on a wider range of individuals. I interviewed three groups of individuals – people of school age in Eastern Spain, people in work in México DF and the retired in Southern England. These groups differ substantially in terms of age group, socio-cultural background, geography, and this ensured that the common understandings that emerged could be described as potentially generalizable, due to their presence in three different populations. I decided to focus on advanced users, since this would avoid issues of unfamiliarity and a lack of consolidation of their practices that might occur with less experienced users. I also decided to focus on ordinary users, with little understanding of the currents involved in literacy research, in order to try to identify 'everyday'" understandings. (There is a more detailed description of the participants in Chapter 4 which describes the research process.) Despite the strong likelihood that different understandings would emerge between the contexts, my objective was to attempt to identify shared understandings across them that could point the way to a kind of common ground, without pretending to constitute it as literacy with a capital L - as Tyner (1998) points out in her discussion of Graff *"strong descriptions of*

literacy tend to fail" (1995, p.323).

1.6 THE STRUCTURE OF THE THESIS

This Introductory Chapter 1 has set out a rationale and background for my research focus and located it in relation to some other possible areas of focus in literacy research, as well as describing briefly the contexts in which I did the research. The thesis contains 5 other chapters. These are as follows:

Chapter 2 – Literature Review aims to situate the research questions I focus on in relation to relevant literature with the objective of grounding my research in relation to other work, and expanding on some of the issues I have touched on in this introductory chapter. I discuss issues relating to policy, research into digitally mediated literacy practices, issues relating to identity in digitally mediated contexts and lastly issues relating to criticality in digitally mediated contexts.

Chapter 3 - Methodology focuses on the challenges involved in devising an appropriate methodological approach for my particular research focus. It focuses on research methods and discusses my decision to adopt an approach based on the use of interviews as the central data collection technique and the implications of that. It ends with a description of the initial analytical frameworks I created, based on some of the literature examined in Chapter 2.

Chapter 4 - The Research Process describes the characteristics of the participants in the research, the interview process that I used to collect the data, and the process of analysis of the data, through the generation of initial codes to the identification of patterns. The chapter also discusses issues that emerged during the research process.

Chapter 5 – Analysis focuses on a description and initial discussion of the patterns of codes that

emerged during the coding process. It is divided into three main sections each of which is dedicated to one of the main research questions. These sections, after some introductory remarks, each describe a series of patterns (second cycle groupings of codes) identified in the analysis of the data, with some remarks in relation to the question on which the section focuses.

Chapter 6 – Findings focuses on the shared understandings of the participants that emerge from an analysis of the patterns described in the previous chapter, the commonalities that are the subject of the title. After some initial discussion, it is divided into three main sections each of which is dedicated to one of the main research questions. These sections each describe a series of commonalities that I identified across the three groups interviewed, followed by some concluding remarks in relation to the question on which the section focuses.

Chapter 7 - Conclusions contains a set of conclusions, or insights, derived from the patterns identified in the research. I make some recommendations based on the findings in regard to policies relating to literacy, and in relation to the implications of the findings for pedagogical practice. The chapter ends with a discussion of the limitations of the research, followed by a description of my plans for continuing this line of research and a list of references and appendices which provide background about the participants and examples of the data work.

2. LITERATURE REVIEW

The discussion in the Introduction chapter (Section 1.2.2) describes the extent to which the extensive penetration of digital technologies into society has permeated into literacy practices, and justifies the need for research into this. Mills (2010) and Wilber (2010) are examples of literature that describes and explores the degree of change. However it is necessary to explore a little further the literature context in relation to the ways in which practices are changing, and how this is or is not reflected in policy, and pedagogical practice. In this chapter I review the literature relating to these changing practices (the focus of my first research question) further, before reviewing literature relating to identity and criticality which are the foci of the other two of my research questions.

2.1 CHANGING PRACTICES

My research question in this area was as follows:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies in relation to their understandings of how their literacy practices have changed, and continue to change, as a result of their engagement in digitally mediated activity?

In this section, I explore the literature on literacy practices in digitally mediated contexts. I look at what it says about the nature of the changes taking place and the challenges involved, and the tendency to focus on young people as subjects of the research. I also examine the degree to which understandings of these changes have percolated into policy, and the sense that this is a still evolving field in which research of the kind I have undertaken is required.

2.1.1 Recent research into digital literacies

Mills (2010), discussed in Section 1.3 of the Introduction chapter, provides a useful review of a range of different empirical studies of literacy practices in digitally mediated contexts. There is no shortage of other literature with a similar focus, ranging from the work of Lankshear and Knobel (2003), and Jewitt and Kress (2003) to more recent studies such as Bitz (2009) and Kinlock (2010). A review of the arguably less 'academic', but more agile (in terms of publishing cycles) "blogosphere" for example Downes (2012), Watters (2012), Nash (2012), Fryer (2012) or Siemens (2012) to name just a few, provides a similar picture of rapid change, and emergent practices.

Much has been written about the potential of Web 2.0 tools, such as blogs, wikis, video-editing and sharing software, and others for developing creativity and collaboration (Walsh 2009, Vossen and Hagemann 2007, Haythornthwaite, 2006). Web 2.0, before the term was coined, was referred to as the Read/Write web, a more transparent term to describe the changes these tools imply, which is defended as a move from a web in which users consume artefacts, to a web in which in which they are also autonomous creators (and owners of their creations). The implications for literacy practices are important, since there is a potential for individuals to become more in charge of and responsible for their literacy practices, and the identities they project through the artefacts they create. The process of creation is also potentially likely to lead to a greater degree of critical understanding of what lies behind an artefact. Much of the literature is optimistic about these potentials, as I mentioned in section 1.2.2. There is evidence of these changes in media choices. A search on almost any concept on the Net will now throw up, in addition to the user-generated Wikipedia page, a range of user-created artefacts; photos on Flickr, blogs on Wordpress, videos on Youtube. Educational institutions have also carried out

a large number of projects exploring these potentials. Much of this activity has social elements. Artefacts are created collaboratively or shared with others and commented on. Bigum (2002) observed that the most important change afforded by new technologies is a change not in information provision but in relationships. Literacy as a social practice is an activity in a context, principally interaction with others, and especially so in the digital environment. This predates the rise of social networking tools such as My Space, Friendster, Orkut, and the more recent emergence of Facebook and a number of other more specialised tools such as Habbo (for children), LinkedIn for professionals, or localised tools, such as Tuenti in Spain or hi5 in Latin America. These tools have been extremely successful[3] and appear, along with the emergence of mobile internet connections, to be responsible for a large part of the substantial growth in Internet penetration in recent years[4]. The opportunity to communicate and participate appears to have been a major influence in the penetration of digital technologies, and some authors locate the key changes in literacy practices not in multimodality but the potential for interaction. Sefton-Green observes for example that *"interacting with a game or other digital texts, from CD-ROMs to online World Wide Web sites is qualitatively different from the relations between reader and writer in the domain of print literacy.... If a fixed relation between writer and reader is the hallmark of the old literacy then an interactive dynamic is at the heart of the new literacies"* (1998, p.10). This is an interesting remark. Though much online activity involves interaction between individuals, especially through social media, there is also a plethora of static information, in which there continues to be (if there ever was) a 'fixed relation' between

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[3] Facebook 31/03/2012 had 835,525,280 users. Source: http://www.internetworldstats.com/facebook.htm viewed 09/05/2012
[4] March 2007 17.2% to March 2012 32.7% Source: http://www.internetworldstats.com/emarketing.htm viewed 09/05/2012

writer and reader. The literature says less about whether individual users share this understanding of the radical change.

Luke (1997) emphasised that changes in literacy practices were already occurring as "just to get into any basic computer program requires facility with both print literacy and any number of symbolic languages so that we know where to click in order to move through menued choices. Already we take that kind of literacy for granted" (p.4) and foresaw "new text-based social repertoires, communication styles, and symbolic systems for accessing and participating in new knowledge and cultural configurations" (p.4). This notion of foundational change persists in work that focuses on the changes involved in the progressive integration of digital technologies into personal, professional and learning lives. 12 years after Luke, for example, Beetham et al focused on the nature of the change as not simply cumulative: *"Digital literacies cannot be bolted onto learners' existing practices and prior conceptions: these must be recognized, incorporated and (if necessary) re-conceptualized"* (2009, p.11). This is a key issue, and implies that the term 'digital literacy' may be unhelpful, if it means that digitally mediated literacy practices are marginalized into a separate box from other literacy practices, when what is required is a re-examination, or possibly reconceptualization, of what literacy involves. This is already taking place in some contexts; Goodfellow, for example, examines the way *"literacy itself is being reconceptualised through its harnessing to digital communication in higher education"* (2011, p.3). The practices involved in "digital literacies" appear to be a fundamental part of what it means to be fully literate. It is possible to argue that the notion of functional literacy should, nowadays, include the ability to interact effectively using digital technologies. Though the tone is generally optimistic, there are dissenting voices in the critiques of authors such as Birkerts (2006), Siegel (2008) or Keen (2007). The *"new literacies"* are presented as a

substantial change with which education needs to engage, and much of the research provided focuses on how this has been done in specific contexts with particular technologies and practices.

However, some aspects require comment. Much of this research into digitally mediated literacy practices has focused on young people; see, for example, Hicks (2003) who centres on the idea of schooled discourses, Abbott's (2002) emphasis on how literacy practices enable young people to get involved in the processes which control their lives, or Snyder *"The print-based industrial model of education needs to be redesigned to take account of the reality that young people are more likely to develop complex literacy repertoires outside educational institutions"* (2002, p. 8). The wider adult population is less well-represented, though there is some work, such as that of Snyder et al. (2005). Eshet-Alkalai and Chajut, observed in their five year study of digital literacy skills across age groups that *"experience with technology, and not age, accounts for the observed lifelong changes in digital literacy skills"* (2009, p.1). This indicates a need to explore these lifelong changes more widely, exploring them in a wider range of contexts. The word 'experience' with its subjective connotations, also points to a need to focus on how these changes are understood.

2.1.2 Recent policy initiatives

In Section 1.3 I referred to the range of policy frameworks that refer to digital literacy, information literacy, media literacy and other terms. These include reports that focus on policy such as Beetham at al. (2009), JISC's Information behaviours of the researcher of the future (2008), the Leitch report (2006) the NMC 21st century skills partnership (2005) or the yearly Horizon reports, and documents produced by national and supra-national organisations such

as UNESCO (2005), the OECD PIACC report (2009) or the European Commission (2010). The penetration of digital technologies and the consequent emergence of digitally mediated literacy practices is focused on in many of these policy documents. One of the tendencies in the policy literature is a view of these new practices as separate from "literacy", in some cases as just a new set of skills or competences to be acquired. The UNESCO Global Monitoring Report (2006) treats literacy as to do with text, referring to digital literacy as a separate issue focused on technical skills, and the European Commission Digital Agenda for Europe also speaks in terms of a *"digital literacy deficit"* (p.7). Digital literacy is framed as distinct from the wider issue of literacy. This may be due to a sense that the new literacies are still in the process of emergence, which perhaps makes this separation of digital literacy comprehensible. Any emergent development takes time to percolate into policy, and the rapid emergence of the "new literacies" may contribute to a perception that the issue is still evolving.

Emerging responses have begun to address the issue however. The PIAAC Literacy Expert Group report discusses a *"broadened view of literacy that includes skills and knowledge related to information and communication technologies"* (2009, p.2). The focus however remains on *"written texts"* (p.9) as the locus of literacy, although these texts may be published in electronic media. Multimodal 'texts' are not included in the definition. The NMC Global Imperative document (2005) creates a definition of 21st century literacy: *"21st century literacy is the set of abilities and skills where aural, visual and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms."(p.2).*This involves an incorporation of visual and aural literacies with digital literacies, and constitutes in this way a move towards integration of the different literacies. But there is

still a sense in which this is a separate literacy. In January 2012, the Horizon Project Retreat communique identified 10 'metatrends' in emerging technologies in education. One of these was *"The Internet is constantly challenging us to rethink learning and education, while refining our notion of literacy"* (p.2). There is a sense here of an evolving process in which research continues to be necessary.

Wilber (2010) discussing the conversations taking place around 'new literacies' cites Coiro et al (2008): *"Research questions on the new literacies of the Internet and other digital technologies take place in contexts that are far too complex and too rich for any single perspective to account for all that is taking place. We believe that to understand these new literacies will collectively require us to bring multiple sets of perspectives to research on new literacies."* (p.3). Given this need for multiple perspectives, my approach appears to have the potential to make a contribution.

2.2 LITERACY AND IDENTITY

My research question in this area was as follows:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their identity as "literate" individuals and how their literacy practices affect their identity, and the ways in which they structure and manage these practices in order to make sense of their own identities and those of others?

Hughes and Oliver (2010) observe that it is hard to say exactly what identity is: *"For example, identity may be viewed as an essential quality, a biographical narrative, a performance, a discursively produced subjectivity, or as membership of a large-scale social grouping. Whichever of these perspectives is chosen for a particular piece of work, it is necessary to be*

clear why, and be aware of what is lost or excluded from this perspective." (2010, p.2) In this section, I explore the literature that relates particularly to this research question. I focus on what it shows about the relationship between literacy practices and identity, different notions of identity and common elements between them that relate especially to literacy practices, and how these practices change in a digital context. The indications of this exploration support the need to ask this research question.

2.2.1 The relevance of identity in relation to digitally mediated literacies.

As I mentioned in the Introduction chapter, in Gillen and Barton's (2010) Digital Literacies briefing, Garnett sets out a series of potential research areas in relation to digitally mediated literacies. He mentions that identity has not been included in this list, but that perhaps it should be. This raises the question why it has not been included, especially since, as Birr Moje et al. (2009) point out, there has been a recent 'identity turn' in literacy studies. These authors are critical of the conceptions of identity in much of contemporary literacy research and as they suggest identity is a notion that needs some unpacking. I shall attempt to do this in this section. First, however, it seems important to explore why identity is relevant in the context of digitally mediated literacies.

Caldas-Coulthard and Iedema (2008) discuss the idea that *"social life is losing stability and certainty as to who we can be and what we can do and say"* (p.1). They make reference (p.1) Baumann's (2000) *"liquid modernity"* and Sloterdijk's (2004) *"foamy present"* to characterise this, and quoting Sloterdijk (2005) locate its source particularly in the way modern society involves an increasing dissolution of the attachment to place. This is not new, Sloterdijk locates

its roots in the expansion of Western trade in the 15th and 16th centuries, but it is exacerbated by the rise of the Internet. As they put it: *"For the deterritorialised self, social coherence is pursued through more and more intense and dynamic forms of communication, seeking to create and recreate a sense of interactive place, however temporary."* (p.2)

For Internet users, 'dynamic' communication and interaction with others, as evidenced by the popularity of social media mentioned earlier, is central to their digital presence. Kraut et al. (1999) were among the first to identify the importance of communication for internet users, locating the access to communication as a key factor for staying online for Internet "newbies". Davies (1989) notes how the texts we produce both reflect and produce the self, and this linkage between identity and literacy practices is important. Erstad et al. (2009) show how narratives of self are related to digitally mediated literacy practices, and Wesch (2009) focuses on how the possible loss of the sense of place in online contexts may lead to heightened self-awareness, due to the need to provide more clues about ourselves in these contexts than is necessary in face to face contexts. These ideas link to the notion of the self as relational, (Baldwin 1997, Andersen and Chen 2002), and McKenna (2007) discussing this concept notes the way the individual incorporates important relationships and group identities into the sense of self. If both literacy practices and identity are understood as relational, then it is useful to explore the linkage between them.

As White and Le Cornu (2010) point out, for users of social media platforms, the issue of the digital identity is particularly relevant. As we navigate the web and pitch our tents in different communication spaces it may be that we are more nomads, than "residents" or "natives". The need for research into the identities presented, as the nomad arrives and interacts with others camped close by is vital. *"The emphasis now is on how rather than if such identity development*

happens" (Hughes and Oliver, 2010, p.3). Individuals engaging in digitally mediated literacy practices, experience their own practices and those of others, and in the process, since their practices also involve interpretation, develop understandings of these practices. My research focuses on these understandings.

2.2.2 Framing identity

It is useful to bear in mind that many of the insights and debates around identity that are discussed in researching online mediated literacy practices are not new. Throughout the literature on identity, there is a tension between the notion of a true essential self and the notion of self as a constructed set of multiple identities. McKenna (2007, p.207), referring to the work of Rogers (1951) and Horney (1946), discusses the notion of the "true" self. These are conceptions of self that are not expressed socially, which the individual possesses but is unable to show, and are perceived as in some way essential. Despite a widespread movement in the literature away from essentialist notions of identity, as Benwell and Stokoe (2006) observe, the notion is persistent and influential in the wider society. For example, Mark Zuckerberg, the founder of Facebook states that *"You have one identity. [...] The days of you having a different image for your co-workers and for the other people you know are probably coming to an end pretty quickly. [...] Having two identities for yourself is an example of a lack of integrity."* (quoted in Pepe et al., 2011,p .1)

Contrary notions, such as the idea of identity as multiple and fragmented are however frequent in the literature. Caldas-Coulthard and Iedema (2008) refer to the idea that we are *"crisscrossed with meanings, resources, feelings and regimes of being that reference a multitude of others, other places, other times and other practices"* (p.4) and quote Latour (1996) on the way in

which *"the person we are addressing is a product of history that goes far beyond the framework of our relationship"* (p.4). Lemke (2008) also observes that the idea of a multiplicity of identities and these ideas are also present in the work of Goffman (1959) and symbolic interactionism.

The idea of identity as constructed, through social interaction, is also present, again in Goffman and also Cooley (1902) relating to the *"looking-glass self"* which is constructed through our reflection in others, and Jan Smuts (1926) speaks of how his *"very self, so uniquely individual in appearance, is largely a social construction"* (p.7). Birr Moje et al (2009), also note that identity is not so much individually as socially constructed. Wortham (2008) focuses on the construction of identity over a series of intertextually linked episodes, echoing (2008) the idea of identity as involving a series of different *"timescales"* (Caldas-Coulthard and Iedema, 2008, p.4) As Benwell and Stokoe (2006) put it, identity is *"dynamically constituted in discourse"* (p.4). It is, in its broadest sense, about *"who people are to each other"* (p.6).

A range of frameworks have been put forward to try to capture the different facets of identity. As Birr Moje et al. (2009, p.417) point out there is a lot of *"slippage"* and overlap in this area perhaps due to the sheer weight of meaning the concept of identity has to carry. Though a full thesis on identity cannot be put forward in this text, an exploration of some of these frameworks proved useful. They contain a series of elements that reflect the tensions I have identified, and have parallels with my understanding of literacy (Section 1.2.1). The categories they propose shed light on a series of tensions that affect the way identity may play out in digitally mediated contexts as well as having an influence on the initial analytical framework relating to understandings of identity used in this thesis (See Section 3.7).

The first common element relates to notions of the 'true self' or what Hecht (2002) calls the individual's *"conception of self"*, (quoted in Joseph, 2004, p.80), Gee refers to *"nature- identity"*

(2000, p.100) which is described as a *"state"*, this identity arises out of our nature, it is outside our control, and has little to do with what we have done or accomplished. The frameworks I examined also take into account the contrasting notion of multiple identities, which has echoes in the idea of literacy as plural. In the same way as we engage in different sets of literacy practices, we have different identities in different settings. Some distinguish between professional identities and group identities, such as Gee who refers to "institutional-identity" and "affinity-identity" (2000, p.100). The former is described as a "position" that is authorized, sanctioned by some kind of institutional power. In this sense the identity and the way it is defined can be described as "owned" by the institution. This is why Gee separates it from the latter, which relates to shared experience among members of a group, and derives its power from the participation in the practices of that group. Greenfield (2008) also separates these elements into *"someone"* (p.117) and *"anyone"* (p.211), the former a consumerist status-driven identity, in which the individual is looking for recognition as an individual, the latter the individual subsumed into a collective. Hecht (2002) similarly includes a *"communal"* category of identities as part of collectives.

These identities relate in turn within the frameworks to the notion of identity as relational, Hecht (2002) refers to the enacted identity, or how identity is expressed through communication, and the relational, described as identities interacting with each other. Gee (2000, p.100) describes "discourse-identity" as related to individual traits that derive their power through their recognition in the discourse of others. These identities are constructed through dialogue between individuals rather than due to the sanction of institutions. This relational element has parallels with the idea of literacy practices as social.

A further element is the idea of fictional identity. It is present in Greenfield's *"nobody"* identity

(2008, p.208), and Joseph (2004) focuses on the tension between real and fictional identities. The idea of play identities in which the individual explores possible identities, in contrast to identities that are more constrained by biological 'fact', institutional or social limits, is important in relation to digitally mediated literacy practices, especially in relation to literacy practices around privacy and disclosure, as I shall discuss in the next section.

Each of the authors I have mentioned looks at identity though a slightly different lens. Hecht´s (2002) layers form a kind of baseline for understanding the identity as defined in relation to self and others. Gee's (2000) definitions are similar to Hecht´s in the focus on self and others but incorporate a critical perspective, locating and identifying potential constraints. Power relationships form part of the definition. Greenfield's focus on consumerism also contains a critical element.

Benwell and Stokoe (2006) focus on the contexts in which identity is constructed. They focus on conversations, institutions, narratives, commodification of identity, spatial identity and virtual identities. Again the idea of the social construction of identities through interaction is present, subdivided into a more individual narrative mode and the conversational co-construction. The critical notion of commodification of identity and the institutional identity are also important. However given previous discussion of the embeddedness of the virtual in everyday life (see for example Wellman and Haythornthwaite, 2002), the separation of the virtual from the rest seems distracting.

Birr Moje at al. (2009) take a different perspective, focussing on the metaphors used to work with identity. They identify five which are identity as difference from others, identity as the self, identity as mind, or consciousness, identity as narrative, and identity as position. These different identities clearly overlap. They provide a different way of understanding and sensibly

eschew the idea of a fixed framework, opting instead for loose and related categories.

The different elements I have described above proved useful as initial, provisional perspectives for exploring notions of identity. There is 'slippage' between them and each of these sets of layers, views, categories or metaphors overlap internally and share common elements with other frameworks. The series of tensions I have identified –essential versus multiple identities, fixed versus constructed identity, and identity as defined for the self versus identity as presented to others will be discussed in the next section as I examine the literature that explores how identity may function in digitally mediated contexts.

2.2.3 Identity in digitally mediated contexts

Much of the early literature on identity on the Net focused on the notion of anonymity. The famous cartoon of a dog at a computer with the caption *"On the Internet no-one knows you are a dog"* (Steiner, 1993) captured the idea of the freedom to explore identity through anonymity, pseudonyms etc. Research into interaction on MUDs and MOOs explored this potential and writers such as Bruckmann (1993) or Turkle (1995) focused on the idea of identity play and exploration as a liberating feature of the new technology. Wallace (1999) described the Net as an "identity laboratory". In their work on instant messaging Lewis and Fabos (2005) show how young people used these channels in a critical way to build a network of friends and multi-voiced performative identities. The work of Hagood (2008) on the way people use popular culture to construct identities also indicates that active identity management is a common digitally mediated literacy practice. Davies (2012) focuses on social practices in Facebook that include blends of both traditional and new ways of interacting. She indicates that *"Text-based social networking has become something that people 'do' and for many has*

become embedded in their quotidian lives. It seems that Facebook, in particular, has become an integral part of our identity work and of 'doing' friendship" (2012, p.10)

In social spaces in the digital sphere the attraction of anonymity has lost emphasis with the rise of social media. Bayne (2005) writes about common perspectives among students in which online identity formation practices are viewed as a *"dangerous deceit or deviance from the 'natural' "* (p.26). In Chester and Bretherton's (2007) account of an experiment with undergraduates on impression management online, they noted that profiling was carried out carefully and in a limited way, the participants exercising a great degree of control over self-representation through their profiles. They also noted that greater experience of online activity also correlated to more 'truthful' presentations both in profiles and interactions. This however did not lead to total transparency, for example two Caucasian participants each believed throughout the trial that the other was Asian. McKenna (2007) discusses the tension between the need for containment of identity for privacy and the need for self-expression and this is also mentioned by Amichai-Hamburger (2007) who refers to Brewer's (1991) optimal distinctiveness theory which posits that people are motivated by conflicting needs; to express their individuality and to belong to a significant group. Chester and Bretherton's (2007) group used tactical non-disclosure as a means of managing identity rather than disclosure of all the elements they wished to be seen as parts of their identity. For example *"both caring and intelligence feature in ideal impressions. Participants wanted to be seen as caring and intelligent but they did not explicitly present these attributes"* (p.229) But above all they saw *"authenticity"* as necessary for *"authentic communication"*, echoing the views of Baynes's students mentioned earlier. The retreat of the idea of play identities that emerges here is perhaps less important, given that all identity projection can be understood as necessarily

incomplete and negotiated, than the essentialist appeal to authenticity, that seems to indicate a change in understandings among these users of how identity should work in digital contexts. It is however notable, as I mentioned earlier, that much of this work focuses on younger users, and also that the connection to literacy practices is not the explicit focus in these explorations of identity issues. As I have argued in Section 2.2.1 however the identity management activities are literacy practices.

These issues also introduce the need for critical understandings of identity in digitally mediated contexts. It is tempting to see the rise of social networking tools such as Facebook with their profiling tools as liberating; Zuckerberg himself describes the vision of Facebook as making the world *"more transparent and open"* (2012). However, critical views of the essentialist and simplistic view he espouses of identity also exist. Joinson and Paine (2007) refer to the idea of identity as *"currency"* in trust building, and Friesen (2010) argues that the key objective of social networks like Facebook is to connect users with advertisers. In this context, Featherstone's (1991) observation that consumption is a key characteristic of postmodern society and that it is a force to which all identities are subject, or Fairclough's (1995, p.140) comment that *"Self-promotion is becoming part and parcel of self-identity...in contemporary societies"* are apposite (both quoted in Benwell and Stokoe, 2006, pp.166 and 183). Singel (2010) observed that *"That was Facebook's real trick — convincing the world to identify themselves online"* (p. 1). Friesen goes on to argue that the business model of social networks defines their information design in ways that restrict individual control and use. The ways in which tools define and limit individual choices about what aspects of identity to project is an aspect that may or may not form part of individual understandings of their digitally mediated literacy practices, but is an area that requires examination. The lack of a "dislike" button on

Facebook is a case in point, it is only possible to 'like' things. As Pepe et al (2011, p.12) put it, *"constructing, tweaking, and curating one's online representation is of crucial importance. Facebook, however, allows its users a very limited range of identity manoeuvre. By encoding prescriptive or formulaic alternatives within its system … by slotting its users in pre-set geographical or associational networks, by enforcing the authenticity of user profiles... and by cloning everyone within the same spectrum of light blues and unadorned walls, Facebook regulates and limits its users' possibilities of representation."*

This article goes on to explore the ways in which the Facebook *"panopticon"* goes about the process of re-educating its users via its very own forms of *"symbolic violence"* (p.12), to use Bourdieu's terminology. The need for a critical stance would therefore seem important, and I discuss this further in the next section.

This review of the literature on identity has identified a range of aspects of identity, and their relations to literacy practices that have not been explored from the perspective of the understandings of ordinary users of digitally mediated literacies. Neither has the connection between identity and digitally mediated literacy practices been explicitly focused on from the perspective of the understandings of these users. It is possible that there may be a dissonance between the preoccupations of researchers and other perceptions. The identification of these academic areas of focus provided a useful initial agenda for the data analysis process (which I describe later in the methodology section).

2.3 LITERACY AND CRITICALITY

My research question in this area was as follows:

What commonalities can be identified, across culturally diverse groups, among advanced users

of digital technologies, in relation to their critical understandings of their literacy practices, the

contexts in which these take place, and the ways in which they structure and manage these

practices in order to make sense of the contexts they inhabit?

In this section, I explore the literature on criticality that relates particularly to this research

question in order to locate my work. I focus on critical awareness as part of literacy, on different

views of criticality, and on work that explores criticality in digitally mediated contexts.

2.3.1 The need for critical awareness

As mentioned previously, Garnett in Gillen and Barton's (2010) Digital Literacies briefing

enumerates a range of areas of relevance in relation to digital literacies. These are critical

thinking, media literacy and participatory culture, digital inclusion, and digital citizenship/

internet safety. It is notable that most of these have a "critical" element. In much of the

literature that explores the "discourse" and "multimodal" shifts (see Introduction chapter)

there is also an affirmation of the need for individuals to be critically aware in relation to their

literacy practices. The influence of Bakhtin's (1981) notions of language, in which language is

contested, interactive and negotiated, is important. Street (1997) describes the NLS

understanding of literacy as "ideological": literacy practices vary with social context, culture,

gender and identity and there is always a contest around the legitimacy of different literacy

practices and the predominance of some over others. Appropriateness to context becomes a

key issue and the implication is that power devolves to the individual and the local context. The

importance of the emerging range of websites and applications that are available to allow users

to manage their literacy practices, often described as Web 2.0, should not be underestimated.

However as Street points out it is necessary for learners *"to be able to discuss the basis of the*

choices being made in the kind of literacy they are learning" (1997, p.48), which indicates that (now as ever) there is an element of critical awareness involved in literacy.

In the new multimodal, digital context, this implies that understandings of literacy should extend beyond the ability to manipulate the technology; the user needs to be able to comprehend the *"rhetorical"* spaces of the web and maintain a certain critical distance (Burbules, 2002, p. 82). Lankshear and Knobel (2002) draw attention to de Certeau's notion of *"producers"* and *"consumers"*: to be a *"producer"* is ultimately to *"arrogate the right to shape how others will practise literacy and be literate" (p. 29)*. It is possible that the participatory behaviours afforded by Web 2.0 tools and social media, and for example the 'mash-up', in which users define their own combinations of spaces, may move beyond this dichotomy to a kind of third space in which users are neither producers or consumers. This has echoes of the defence of the subject mentioned by Warschauer (2002), and it seems possible that in some sense these kinds of Web 2.0 literacy practice may in themselves be 'critical'.

Snyder (2002) identifies certain characteristics of the material and cultural conditions that she sees as shaping our lives: fragmentation, superficiality, and the failure to engage with the present and insists that we need to find ways of living with the shift in *"the landscape of representation and communications"* (p. 179). To do this it is vital to be critically aware of the forces that underlie these changes. If this critical awareness is a part of literacy, then it is useful to explore whether this is the case in digitally mediated contexts. My research focuses on this issue.

2.3.2 Framing criticality

Before discussing my approach it is necessary to clarify what I mean by 'criticality', or being

'critical'. The idea is shared by a wide range of different fields of thought, ranging for example, from <u>critical</u> pedagogy through <u>critical</u> discourse analysis to <u>critical</u> management studies. In these fields, explicit connections are frequently made to the work of the Frankfurt school, where a key element of a 'critical' theory is that it is concerned with emancipation from domination *'to liberate human beings from the circumstances that enslave them'* (Horkheimer, 1982, p. 244). This is frequently related to a questioning self-reflexive attitude, as for example in Habermas's (1968) description of critical social theory as a form of self-reflective knowledge involving both understanding and theoretical explanation to reduce entrapment in systems of domination or dependence.

In addition to this focus on emancipation there is also frequently an explicit interest in social transformation. Freire (1996, p. 73) contrasts the critical thinker with the *"naive thinker"* for whom *"the important thing is accommodation to this normalized 'today'. For the critic, the important thing is the continuing transformation of reality"*. In a similar way Kellner (1998, p. 112), writing about critical media literacy, makes an explicit link to social transformation: *"Critical media literacy not only teaches students to learn from media, to resist media manipulation, and to empower themselves vis-a-vis the media, but it is concerned with developing skills that will empower citizens and that will make them more motivated and competent participants in social life…. Critical media literacy takes a comprehensive approach that teaches critical skills and how to use media as instruments of social change."*

A related element is the need to look beneath the 'surface' of things; Shor, (1982, p.129, cited in Tyner, 1998, p.164) writing about critical pedagogy describes it as *"Habits of thought, reading, writing, and speaking which go beneath surface meaning,… to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event,*

object, process, organization, experience, text, subject matter, policy, mass media, or discourse."

'Critical' then, in these contexts, involves a series of shared elements - a concern with emancipation and social transformation, self-reflection, and an interest in looking beyond surfaces - together with the importance of the skills that empower the individual to do so - that seem to link different 'critical' traditions. However, the breadth of scope of the term, which is principally a kind of lens though which to look at the world, makes it hard to limit the focus sufficiently to make it manageable. In my view criticality is subject to a wide range of inflections that need to be explored, rather than excluded by a narrow prior definition. My research questions were exploratory, and aimed to discover shared understandings of existing practices, rather than to propose a set of practices. However I felt it was useful to develop a preliminary idea of the areas in which critical attitudes and practices may be located in the narratives that the research generated.

In "The Practice of Everyday Life" (1984) Michel de Certeau distinguishes between two concepts he calls *strategy* and *tactics*. Strategies define spaces, and are linked to power structures and the institutions that control these spaces, while tactics are the skills used by individuals in order to navigate and comprehend these environments, and to carve out their own, albeit limited, spaces, within them. Within the domain of the 'critical', it is possible to distinguish between criticalities that are primarily tactical, in which to be critical is to be empowered, with skills and awareness, to inhabit the space, and criticalities whose final aim is to engage at a strategic level and transform the environment. Burbules and Berk (1999, p. 4), citing Paul (1983), identify a similar tension between two views of "criticality" which echoes Freire's critical thinker and naïve thinker, mentioned earlier in this section, and point to *"weak-*

sense" and *"strong-sense"* critical thinking: *"the 'weak-sense' means that one has learned the skills and can demonstrate them when asked to do so; the 'strong-sense' means that one has incorporated these skills into a way of living in which one's own assumptions are re-examined and questioned as well".* There is a temptation here to see these as some kind of scale, from less 'critical' to more so. To look at it in terms of a scale was to hypothesize that these different categories would perhaps be useful as scaffolding for the coding process; useful, but always provisional, entry points.

Burbules and Berk also discuss an alternative, which sees *"criticality as a practice — what is involved in actually thinking critically, what are the conditions that tend to foster such thinking, and so on" (p.15).* They explore a range of elements that they see as part of criticality as a practice; the role of skills, (and their limitations), the ability *"to think outside the framework of conventional understandings"* (p.16), the social nature of criticality, and of the idea of difference as a precondition of criticality and that tensions between un-reconciled views are in themselves valuable. The authors' focus on criticality as *"a mark of what we do, of who we are, and not only how we think"*(p.18)

This focus on the relation of criticality to practice, 'what we do', and 'understandings' relates closely to my research question. The different frameworks I have explored here provided useful starting points for the data analysis (discussed in the Methodology chapter).

2.3.3 Critical literacy in a digital context

The range of frameworks for criticality discussed in the previous section sets out a view of criticality as relating to the need to identify and be aware of power relations, in Gidden's (1984) terms, the "structures" that constrain or limit the individual's "agency". I have already explored

the need for a critical stance in relation to identity. I shall now examine a series of authors in which there is a certain positioning in relation to criticality and digitally mediated literacy practices in order to provide background to, and a further justification for, the focus of my work.

Like Pepe et al (2011), Land and Bayne (2005) also refer to the idea of the *"panopticon"* in relation to the surveillance that takes place in virtual learning environments in universities and the need for awareness of this. For a broader vision the work of Fabos (2008) in "The Price of Information" is also useful. Fabos explores the tension between the optimistic "Creative Commons" vision of the Net, in which access to information is open and democratic, and the powerful commercial interests that wish to control the Net for commercial and/or political gain. She provides a coherent history of the encroachment of private interests onto the Net, at the expense of educational interests and critically examines the response of educators to it, which was to develop and teach the set of skills known as information literacy[5]. She argues that this response is insufficient, and that a broader approach is necessary, stating for example the need to evaluate the Web as a whole rather than page by page, and focuses on critical literacy as defined by Lankshear and McLaren (1993, p. 36) who propose critical literacy as a way of using texts that enables the individual to examine the *"politics of daily life in contemporary society with a view to understanding what it means to locate contradictions within modes of life, theories and substantive intellectual positions and to actively seek out such contradictions"*.

The notion of critical literacy in the digital context is further examined by Luke (2012). He describes struggles over power as *"struggles over the control of information and*

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[5] For an example of the range of considerations involved in information literacy, Burbules and Callister (2000) is a representative example

interpretation"(p.3) and focuses on his (2004) description of critical literacy as *"use of the technologies of print and other media of communication to analyse, critique, and transform the norms, rule systems, and practices governing the social fields of everyday life."* (p.3). There is common ground with Fabos, and Luke defends the need for a critical stance coherently, referring explicitly to the idea that digital engagement does not of itself constitute a critical approach since *"digital culture sits within a complex, emergent political economic order that, for many learners and adults, is well beyond comprehension and critique. Who understands structures of debt?"* (p.7) Luke ends by describing critical literacies as *"utterly contingent"* and dependent on *"everyday relations of power".* (p.9)

Warschauer and Ware (2008) focus on the work of two authors in their development of an understanding of one of the discourses they identify around technology; the discourse of power. They focus on the work of Manuel Castells on the information age (1996/2000, 1997, 1998/2000) and his description of the role ICT plays in society and of a future in which the privileged *"interacting"* are able to select and create their circuits of communication, and the underprivileged *"interacted"* are limited to *"passive access to pre-packaged choices"* (p.228) There are echoes of de Certeau here. They then discuss the work of Cummins (1989, Brown, Cummins and Sayers 2007) who focus on the relations between ICT use and broader inequalities and literacy development in schools, and call for a *"transformative or critical"* pedagogical approach in which students make use of technology to analyse their own lives and social problems, develop and publish material that addresses social issues or positively promotes their identities, and collaborate with distant partners to (sic) further exploration of social or identity issues.

These authors provide a clear rationale for the need for a critical stance in relation to digitally

mediated literacy practices. The needs are clearly set out and comprehensible, even urgent, and the agenda seems clear. However a series of other voices give pause for thought. Wesch (2009) gives an interesting analysis of the use of the word 'Whatever' from a conclusive statement originally, to a way of opting out, to an expression of narcissism. Teurlings (2010), discussing contemporary television, questions the assumption of the liberating effects of access to increased knowledge through technology. He describes a situation in which the viewer is *"savvy"* rather than naïve, and sees through the text, but does not challenge it. He describes this position as *"critical apathy"* (p.1). Wesch might describe it as a *"whatever"* position. The position he describes does constitute a challenge in the sense that it suggests that, despite a degree of critical literacy, the individual is uninterested in altering his/her practices to adapt to this. Johnson and Vasudevan (2012, p.39) provide a possible avenue for addressing this issue. In their description of work with students on critical literacy practices, they make the observation that *"we situate our understandings about critical literacy within the discursive practices of youth themselves, which are not limited to prevailing definitions and images articulated by distant others—e.g., researchers, educators, curriculum writers, educational policymakers."* This idea points to a possible disconnect, such as that noted by Sonia Livingstone (2009), in relation to the limited extent to which the claims made by academics with regard to the educational potential of digital technologies have actually been realized. It also suggests the need to explore the nature of understandings of critical literacy practices in digital contexts among ordinary users.

The literature I have focussed on in this section shares the perception that there is a need for a deep understanding of the power relations at play in digitally mediated contexts. This comprehension requires a labour of interpretation of the texts we encounter, the 'meaning-

making' that as I have mentioned previously (Section 1.2.1) is part of literacy in my view. As individuals engage in digitally mediated literacy practices, then, they develop their own understandings of these power relations – a critical awareness. The work of these authors, and perhaps especially Teurlings (2010) – focused again on the young - points to the need to explore these understandings.

2.4 SUMMARY

In this Literature Review I have looked at relevant research that focuses on the areas covered by my research questions. In each case I have explored the background literature, work that provides justification for the focus of my questions, and located the work in the context of the literature on digitally mediated literacy practices, identifying absences that I have perceived which my research may help to fill.

In the Changing Practices section (2.1) I looked at changes in literacy practices that are taking place due to the emergence of digitally mediated contexts, and the challenges that the changes involve. I also looked at the extent to which policy is adapting to these changes and identified a sense that research in this area such as mine is necessary.

In the Identity section (2.2) I explored different notions of identity that could help to provide starting points for my data analysis, and the relation between these and literacy practices. I then focused on issues that relate particularly to identity in digitally mediated contexts. I especially noted the absence of a focus on ordinary users' understandings of identity in relation to digitally mediated literacy practices.

Lastly I looked at Criticality (Section 2.3), exploring first the role of critical awareness in literacy as described in the literature and then different frameworks for criticality that I saw as

potentially useful in the process of data analysis. This was followed by an exploration of the work on criticality in relation to digitally mediated literacy practices, identifying the need for research into critical understandings.

Throughout the exploration of the literature a common thread was the lack of work on the digitally mediated literacy practices of older users, and the lack of focus on the understandings of ordinary users in relation to their digitally mediated literacy practices. These two elements particularly justify the need for the overall focus of this research, and point to its potential to make a contribution to the field.

3. METHODOLOGY

3.1 RESEARCHING LITERACY PRACTICES

In this section I present the methodological approach I adopted in order to look for answers to my three research questions. Finding an appropriate approach to this research was a challenge. Snyder refers to *"on-the spot readjustment, perpetual experimentation, change devoid of consistent direction and incessant reincarnation"* as characteristic not only of *"web literacy practices but also of real life cultural and social practices"* (2002, p. 173). This shifting landscape of practices poses important questions for the researcher. We can no longer view ourselves as neutral observers; as Street (1997) points out, we are involved, as social beings ourselves, and this involvement makes it impossible to stand outside the situation, since each interaction we engage in, and our very presence, alters the situation.

In addition to the issue of non-neutrality, the impulse to speak of *"literacies"*, though seductive, as it initially appears to help to manage the plethora of practices, may be counter-productive. It may simply produce a menagerie of different compartmentalised literacies that postpones the challenge of achieving a broader perspective that might illuminate the changes taking place. As discussed in Section 1.4, there is also a broad tendency towards 'micro' approaches in much of the NLS literature, in which a compact manageable context is focused on, at the expense of a wider picture. This is perhaps due to the need to make research manageable, and as rigorous as possible. The range of different literacy practices with which it would be necessary to engage is likely to complicate attempts at generalization.

In the Introduction (Section 1.3) I located my own focus between the poles of macro and micro approaches, opting for a focus on the meanings we ascribe to our literacy practices. My aim

was to ground my research in the understandings of ordinary users of their practices. The next sections of this chapter describe the approach I adopted in order to do this.

3.2 GROUNDING THE RESEARCH

One of the key issues in defining the methodology was the word 'understandings'. The focus of my research questions was on how individuals understand their literacy practices and this implied a focus on how individuals talk about their practices. The data collection process therefore centred on how the participants in the study talk about the subject, the words they used, and the understandings they expressed. This implied the use of interviews or conversational techniques, through which underlying assumptions and attitudes might be revealed or elicited.

Furthermore, in this research it was likely that neither the practices nor the meanings ascribed to them by the participants might be easily accessible to the researcher due to the choice of ordinary users as participants. These individuals may not be accustomed to think in terms of "practices", and furthermore it is quite possible that they are embedded in an individual's life in such a way that the subject may not always be fully conscious of their meanings. This issue was however unavoidable given my choice of focus. An approach based on observation of behaviours or collection of statistical data about the frequency of this or that usage or habit was in my view likely to be insufficient to access the meanings individuals ascribe to their practices. It was also necessary to address the dynamic, evolving nature of practices over time, and delve into the ways that individuals understand themselves, their contexts and their practices and relationships within those contexts. To do this it was necessary to allow them to articulate this in their own words, so that these meanings could emerge.

Initially this seemed to imply some kind of ethnographic approach, given the importance ascribed in ethnographic approaches to *"social meanings and ordinary activities"* (Brewer, 2000, p.6) and in allowing meaning to emerge from within the context. However, Brewer points out that a key element in any ethnographic approach is that the researcher be *"participating directly in the setting"* (2000, p.6). In the context of literacy practices around digital technologies, this poses considerable problems, since the practices, though socially situated, largely involve individual (or very small group) activity in front of a screen, which precludes participant observation to a large extent. Indeed, in this context any kind of observation poses substantial methodological challenges, as Jacobs (2004) recognises in her discussion of her research on instant messaging. Furthermore, though it might be possible to identify a particular context and participate in it, my aim involved exploration <u>across</u> contexts. To participate meaningfully in a range of groups in the timeframe available was unlikely to be feasible, and it is questionable whether I could integrate into a range of social contexts sufficiently to make the participant researcher approach valid.

Another key aspect to consider in the choice of methodology was the idea of shared understandings. As my aim was to find out whether commonalities exist in individuals' understandings of their literacy practices across different populations, I needed to interview a variety of individuals. This posed a challenge. The larger the number of respondents, the greater the limits to the degree of detail that can be achieved with each particular respondent. The more closely one examines each particular 'tree' the harder it may be to see the way the 'wood' grows. It is clear, as can be seen from the examples given in sections 2.1.1. and 1.2.1., that ethnographic approaches based on field and 'virtual' observation and interaction, or case study approaches, have provided useful and important insights into emerging literacy

practices, but the level of detail involved in these approaches precludes the range of data from substantially heterogeneous sources that would allow the identification of shared understandings.

I therefore ruled out the possibility of an ethnographic approach. I settled upon an approach informed by the work on grounded theory of Glaser and Strauss, (1967) and Charmaz (2006). According to Charmaz, this consists of *"systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories 'grounded' in the data themselves"* (p.2). The key idea is that descriptions and conclusions emerge through the process of analysis of the words of those interviewed. There are two basic principles that informed my approach. The first is that it involved an iterative or cyclical process; *"insights emerge or are discovered in the data, those insights are then tested to see how they can make sense of other parts of the data…and so on"* (Hayes, 2000, p.184). The term "emerge" might be understood as underplaying the role of the researcher in the process, however my own understanding is that it gives emphasis to the fact that the insights come out of the data, and that the analysis is grounded in the data. Meanwhile the verb "discover" speaks of the labour involved in analysis. I see this as a fundamental characteristic of the research work that I have done, and both the data collection and the analysis have been informed by the idea of iteration, in a process of collection, coding and comparison, followed by further collection, coding and comparison, leading to insights. This approach provides a strong base for conclusions that are grounded in the data, and continually cross-checked.

The second basic principle was adaptability. While grounded approaches like those that inform mine may begin with a literature review, to give a map of the territory to be explored, and start out with a sample group or groups, and instruments to explore them, these are not seen as

fixed. Researchers start out with a set of research experiences and an understanding of what research entails, however their *"perspectives will direct their attention but not determine their research"* (Charmaz, 2008, p.160). They therefore aim to make their influences explicit. The analytical frameworks that derive from the researcher's literature review and conceptual understanding therefore function as a kind of scaffolding, rather than a blueprint. It is useful to start the work of coding, but which may or may not remain in place as the structure develops. This was the case with my approach. The 3 analytical frameworks I developed served to orient initial coding, but were superseded by emerging groups of codes as the process of analysis progressed. I shall discuss this further at the end of this chapter.

3.3 ISSUES IN RELATION TO "UNDERSTANDINGS"

Access to people's understandings is not simple. Two issues are particularly salient. The first is the possible unfamiliarity of the participants with the concepts involved in the research, which can cause confusion and distort responses. Sometimes this is because the vocabulary or the level of abstraction used by the researcher may not be understood, or because the ways in which the researcher conceptualises the area of research are unfamiliar to the participants. I have experienced bemusement from interviewees in previous research, for example, when using the term 'dialogue' and 'interaction'. Simplification of the concepts however carries the risk of superficial or over-simplistic responses.

The second, related, problem is the risk that the way the researcher conceptualises the research may define or condition responses. This is a particular risk in interviews; even a semi-structured interview can condition the content of the data due to the nature of the questions asked. Any question by its wording defines the field of inquiry and presupposes areas of

interest and even categories.

In order to mitigate these different risks, rather than aiming to talk directly about the concepts, I focused on using everyday language and questions that would facilitate the emergence of narratives. Narrative is familiar to all, we all tell stories, and our stories can be understood as ways of structuring our experience and understanding our lives and our contexts. As stated by Bruner *"we represent our lives (to ourselves and to others) in the form of narrative"* (1999, p.175). As a person tells their story, they are able to organise the experience in ways that are meaningful to them. I used a sequence of very open-ended prompts to elicit personal accounts of the interviewees' literacy practices, and through these narratives to access the ways in which they understand and describe these and their relation to them, as recommended for example by Charmaz (2006) and Richards (2009).

Another issue relating to access to understandings is that these may not be made explicit by the respondent during the interview. They emerge through the process of analysis, in what is essentially an interpretative process. This process begins during the interview, as the interviewer's interactions with the respondent are interpretative in the sense that choices are made about the next question to be asked, whether to pursue a particular line of conversation further or not, or whether a statement needs clarification. The process then continues in the process of coding, and the interpretation of the codes and their grouping for description purposes (I describe this in Section 4.3.3). However the process of analysis and interpretation is also influenced by the literature review and the development of the research questions, where the focus of the research is defined. That initial preparatory work colours the later questions that are asked and the process of coding, and though I attempted to reduce the degree of bias and allow the words of the respondents to drive the process, I was aware that

my interpretation would always be affected by my own concerns to some extent. What is important is to try to recognise this, and to try to correct for it, and I did this as far as possible.

3.4 THE METHODOLOGICAL APPROACH

Given my choice of an approach in which I would use an iterative, adaptive and interpretative process to derive insights from data centred around narrative conversations, I decided to choose the semi-structured interview as the principal instrument for data collection. This kind of interview is exploratory, involving close interaction with participants. The aim is to propose avenues for narration and then respond adaptively to the interviewees narratives in order to facilitate their descriptions; *"interviewers and interviewees, in concert, generate plausible accounts of the world"* (Silverman, 2000, p.122). This relates to what Charmaz (2006, p.10) says about the work of the grounded researcher; *"We are part of the world we study and the data we collect. We construct our grounded theories through our past and present involvements and our interactions with people, perspectives and research practices"*. This interaction with the participant is integral to the interview context, and though it is more complex, and perhaps 'messier', than other more 'distanced' methods of data collection, it was appropriate for this research since my involvement in constructing and interpreting, through interaction with the participants, an understanding of their perspectives was an integral part of the research process. The choice of the semi-structured interview allowed me to aim at a fruitful dialogue between my conceptualizations and the participants' understandings.

A key issue was the question of triangulation. In any qualitative research triangulation is a useful strategy, in order to reduce issues relating to bias, and to possible anomalies in the data due to effects that take place on the particular day of an interview, relating to mood, or life

events that affect the participants in some way, or to the way the interview itself progresses. The purpose of triangulation in this context relates especially to the need to enrich the data gathered in the interviews by providing a range of perspectives on the individuals' understandings of their practices. Identifying the most appropriate way of doing this proved a challenge. My first approach was to use 'think aloud protocols' (TAPS, Ericsson and Simon, 1993) to provide real time commentary by the respondents on their practices, but these proved unsatisfactory, since they drive the focus of the research too closely into the specifics and the mechanics of particular practices, and it was very hard to relate this data to wider reflections arising in the interviews.

Another possibility I entertained was the idea of asking participants for products of their literacy practices which might then be discussed, thus affording a different perspective, and an avenue to further discussion of their understandings. However several issues made me doubt the usefulness of doing this: one is the level of analysis, since this would have taken me to a micro level of specific behaviour; another was the question, already encountered with TAPs, of how to relate it to the "meso" level of the interview. A further issue was how to manage the multiplicity of products I was likely to be presented with, each with its own set of associated practices, which presented a risk that the process would devolve into a series of what might be termed "nano-ethnographic" studies, (see my earlier discussion of micro-ethnographic approaches in section 1.2.1). The complications involved led me to rule out this option.

I therefore looked for other ways of providing a rich variety of perspectives, and decided to introduce a second follow-up interview into the process. This was motivated by the idea that an interview is a window opened on the individual's perspectives, and part of the nature of that window relates to when it takes place. The considerations I mentioned above about the

ways in which the circumstances of the interview may affect participant responses may be mitigated by a second interview, in which the circumstances change. Furthermore, the initial analysis of the data (described in more detail in Chapter 4) raises questions and as Charmaz states, the researcher can *"ask key informants further, more specific questions"* (Charmaz, 2008, p. 162). I used the second interview to undertake in each case a re-examination of the content of the first, asking for clarification or going more deeply into some of the issues previously discussed. The time elapsed between the two conversations had also frequently involved some reflection by the participants, so that though it was in some senses a continuation of the first interview, since it covered similar ground, it also frequently shed new light on the participants' understandings.

Another way of achieving multiple perspectives is through the analysis of the data, which also involves a kind of 'triangulation'. In the same way as each interview provides a basis for a new look at the understandings of the participants in the research; each cycle of coding enables the emergence of new perspectives on the data. This iteration implies close interdependence between data collection and analysis, and analysis, coding and categorisation can be seen as forming part of the data collection process, since they allowed me to develop different perspectives in relation to the data. The second interview and the analysis process in this way provided a set of perspectives that was sufficiently varied to achieve triangulation.

3.5 ACCESS AND POSITIONING

Before describing the research process, it is necessary to discuss positioning. In this research I was an outsider in all the contexts I am interviewing in; although intermediaries introduced me to the people involved, I had no previous professional relationship with any of them. This made

the job of establishing rapport harder, but also made the process cleaner in the sense that it was free of the baggage of previous contact or power relationships due to professional activity. Of course the role as researcher and interviewer involves a potential power relationship, since the respondent may defer to the interviewer in some way, for example by giving the responses they perceive the interviewer as wanting to hear or simply by avoiding contradiction. I was aware of these issues and attempted to avoid them through the establishment of rapport at the start of the interview, through initial small talk and by explaining carefully the importance to me of hearing their views. As Richards points out, this development of rapport helps one *"get an idea of their interactional style"* (2009, p.189).

As noted above, I am also aware of the baggage I bring to an interview, of theory and my understandings, and however much I try to leave it at the door, it remains present. Furthermore, because it was necessary to establish a rapport and sometimes to illustrate the question, I did sometimes provide examples of my own as prompts. I attempted to correct for this within the interviews, particularly when I saw any of the elements I brought to the conversation repeated in the words of the participant, by rephrasing my questions, or for example, asking questions that permitted the participant to provide other alternatives, such as *"Is it always like that?"* This was not always possible at the time, and in the analysis process I took care to identify points where the participant appeared to be repeating elements I had brought in, and distinguish between what Wegerif refers to as *"report-talk"* and *"rapport-talk"* (2001, p.46). In these ways, the distorting effect of my intervention was mitigated.

3.6 ETHICAL ISSUES

My work does not pose substantial ethical challenges. The research conducted as part of this

study complies with the ethical guidelines published by the British Educational Research Association and the British Association of Applied Linguistics, and the Open University.

I asked for and received signed letters of consent, and explained to all participants (both in introductory letters and at the start of the interview) the nature of the process and the work it forms part of, and all the names of participants in my data were changed to pseudonyms and appropriately stored. The interviews were recorded on a small digital recorder and then transferred to a personal computer, destroying the copy on the recorder. Each name in the interview file titles and in the transcripts was then transposed to another and the relations between the two names are stored in a single password-protected Excel file in my possession, and this will be destroyed once the work is complete. Storage of recordings and transcripts is similarly secure on a password-protected hard disk drive. One safety copy of each file also exists on a separate hard drive.

No harm is anticipated by the respondents' voluntary participation in a conversation about themselves with an independent researcher with whom they have no personal or professional relationship. Indeed I see my methodological choices as guided by the principle of avoiding harm. I designed the research to be minimally invasive, and in my view this has been achieved. I have therefore not requested an ethical review.

3.7 THE ANALYTICAL FRAMEWORKS

As I discussed in Section 3.2., my understanding of the nature of my research had led me to the conclusion that the kind of exploration involved required an approach in which the codes would emerge from the data gathered. This open approach raised the issue however of dispersion. Without a clear focus other than the questions themselves, there was a risk of finding almost

everything interesting (as it undoubtedly would be) and getting lost in a sea of fascinating data. Given more time and resources, a more open process might be possible, but I felt that in this case it was necessary to create a set of initial frameworks which would serve as scaffolding for the first cycles of coding. This would ensure that the coding maintained a clear linkage back to the research questions and my exploration of the literature. At the same time however I was concerned that this scaffolding could also limit and condition the analysis. I therefore decided to develop a set of three loose analytical frameworks for use in relation to my research questions, and use them cautiously as the coding commenced. There is one analytical framework for each research question. These are described in the next three sections, 3.7.1, 3.7.2 and 3.7.3)

I describe the process of analysis of the data and the development of the codes in more detail in Chapter 4.

3.7.1 The analytical framework for understandings of identity

Earlier (Section 2.3.2) I explored various authors' writings on identity. As I argued there, Hecht (2001), Gee (2000), or Greenfield (2008) provide useful perspectives that I could have used as a starting point for my analysis. However, rather than opting for one in particular, I put together an amalgam of the different elements for the practical purpose of beginning the analysis process. The idea was to create a provisional structure for my exploration. The framework I put together contemplated six areas:

- The basic "factual" identity, enshrined in personal data and nature.

- Institutional identity, derived from the professional activity of the individual and its context.

- Interaction identity, which relates to recognition of the individual identity though interaction with others.

- Group identity, which relates to the identity as defined through belonging to groups with shared interests.

- Play identity, this relates to partial (even anonymous), or invented identities that the individual may adopt.

These areas constituted an amalgamation of the different perspectives on identity I had explored in the literature. I understood them, in the context of this research, as 'provisional' in the sense that the data collected might, or might not, fit the framework I had devised, but they constituted an appropriate starting point for exploring how identity is understood by ordinary users of digitally mediated literacies.

3.7.2 The analytical framework for understandings of criticality

In Sections 2.4.2 and 2.4.3 I explored issues relating to criticality and the need for a critical stance in relation to digitally mediated literacy practices. In my view an initial framework for analysing the data needed to anticipate the possibility of a range of understandings of critical literacy practices in digital contexts among non-academics. Several authors, such as de Certeau (1984), Burbules and Berk (1999), and Giddens (1984) provided useful "clines" of criticality. As I mentioned in 2.3.2, De Certeau distinguishes between *'strategy'* and *'tactics'*. To be tactical is to inhabit or navigate within an existing space, whereas at a strategic level the aim is transformation of the environment. Burbules and Berk (1999) distinguish between *'weak-sense'* and *'strong-sense'* critical thinking. Giddens distinguishes between the concepts of *'agency'* - the capacity of the individual to act freely - and *'structure'* - the social arrangements

and elements that may limit that freedom.

In each of these perspectives there is a polarity, between tactical and strategic practices between weak-sense and strong-sense thinking, and between agency and structure. I decided to take these three ideas together as three axes of criticality, along which to locate responses:

- The relation of individual to context and the degree to which the latter (structure) may limit the freedom to act (agency) of the former and the awareness of that.

- The extent to which the individual's practices constitute inhabitation (tactical) or transformation (strategic) of the environment.

- The degree to which the individual's thinking may be described as weak-sense or strong-sense.

These axes constituted a useful initial (though again provisional) framework for exploring understandings of critical literacy practices in digital contexts among ordinary users.

3.7.3 The analytical framework for understandings of changing practices

In Section 1.5.1 I described, on the basis of the prior outlining of the evolution in conceptions of literacy, four key elements. These were as follows:

- Literacy is plural, individuals engage in a range of sets of literacy practices

- Literacy is relational, it involves interaction between self and others

- Literacy is interpretational, literacy practices involve making sense of the world and one´s relation to it

- Literacy is multimodal, it involves a range of different kinds of "text"

I decided to use these elements as an initial framework for the analysis of the data emerging

in relation to my participants' understandings of how their literacy practices have changed, and continue to change, as a result of their engagement in digitally mediated activity.

3.7.4 Final considerations in relation to the analytical frameworks

As I have mentioned, I was ambivalent about the role of analytical frameworks. While useful as a starting point, any framework created previously may stifle emerging codes that do not fit, or condition interpretation. Charmaz points out that a grounded approach *"means studying data and developing an analysis from conceptualizing these data rather than imposing a theoretical framework on them"* (2008, p.163). The objective of the research was to attempt to identify shared understandings, rather than impose my own. Any research work, as I have discussed in this chapter, has to take into account the perspectives and concerns that the researcher brings, based on previous work and the literature. These analytical frameworks, rather than imposing a structure, helped me to identify and make explicit my own prior understandings during the process.

The analytical frameworks which I used, though they served as scaffolding in the initial stages, were not reflected clearly in the patterns that emerged in the process of coding and analysis. As the coding process progressed, it became clear that other groupings than those suggested by the analytical frameworks were more appropriate. As the Findings chapter will indicate, this is not to say that the elements involved in the framework are not relevant, as in each of the three analytical frameworks there are aspects that illuminate the findings.

In the framework for understandings of changing practices the four characteristics of literacy (plural, interpretational, social and multimodal) that I included are threads that run through the conversations and help to confirm my (and others) understanding of literacy as

characterised by these elements. However, as I mentioned earlier, in Section 3.2 interviewees do not always use the same terms as the researcher, and the language they used gave rise to a set of codes that was not structured in the same way as my analytical frameworks, centring more around practices, presence, communication and information, and given my focus on identifying their understandings I opted to avoid imposing my prior structure on the data. The code groupings that emerged are described in detail in Chapter 5: Analysis.

In the framework for understandings of identity, it is the elements that were absent in the conversations that are most illuminating; while the basic and interaction identities were present, and are represented in the codes (for example Presenting Oneself or Interacting with Others), the play identity was absent and group and institutional identities were not understood to be important by the participants, their understandings focused more on aspects relating to their understandings of themselves and of others as users, of how new practices change these understandings of how to present themselves, and their understandings of how to engage with others. Though elements of the analytical framework remained then (though renamed) I chose not to insist on including those that were not present.

In the framework for understandings of criticality the notion of tensions between polarities of criticality proved to be useful, but more at the higher level of abstraction set out in Chapter 6: Findings. As in the framework for understandings of changing practices, the way the interviewees talked about their critical understandings did not involve the same kind of vocabulary or the same degree of abstraction as the analytical framework. However the different code groupings, which I call 'patterns', as will be seen in the next chapter and chapter 5, do reflect tensions between strongly critical positions and more acritical positions, with focus on aspects of digitally mediated literacy practices, such as the interpretation of information,

the choice and use of tools and channels, or the critical management of online presence. In this sense though the overall sense of the analytical framework is present in the codes (and subsequently abstracted and discussed in the Findings chapter) it does not appear explicitly in the set of patterns that emerged. There is further discussion in relation to this aspect in sections 6.2.11, 6.3.9 and 6.4.7.

In the next chapter (4), I describe the research process as it played out, including the different groups of participants, the collection of data and the interview protocols I used and the analysis and coding process. In the following Analysis chapter (5) I describe the patterns, or groupings of codes that emerged from the process, and then discuss them in the Findings chapter (6).

4. THE RESEARCH PROCESS

4.1 THE PARTICIPANTS

Having described the methodological approach for my research questions, which as I have described, focuses on interviews, it is necessary to describe the participants in this interview process. As I have mentioned previously my focus is on the understandings of "advanced" users of digital technologies. Though the term advanced can be variously interpreted, I used this term to ensure that the participants would all be individuals who had been using the technologies for some time, in order to ensure that their understandings were relatively stable (though of course understandings are in continuous evolution), and not coloured by the novelty of recent discovery of the technology.

As I described in the introduction, my aim was to look for commonalties across very different contexts. Given this, the more different the contexts the better, and the key factor in deciding on the contexts was to ensure diversity across these contexts. There is a sense in which the greater the number of contexts the better, but it was necessary due to the circumstances of the research to strike a balance between diversity and practical issues. Practicalities also drove my selection of the specific contexts. I decided to try to work with contexts with which I had some familiarity, since this would facilitate the development of rapport in the interviews, with the interviewees and at the same time access to groups of potential participants. It was also important to ensure that language issues were taken into account. As I am Spanish-English bilingual I had a wide range of potential contexts to choose from, but I decided to focus on places where I have spent extensive periods of time. I was born and educated in South East England. I lived and worked for over 15 years in Valencia, Eastern Spain, and I have been

working for extended periods in México, Distrito Federal since 2005. I therefore selected these geographical environments in which to do the work. In my view they are quite culturally diverse. As regards age groups, it would have been possible to choose any age group in any of these areas, but I decided to allow professional experience to drive the selection, as I felt this would allow for a more neutral relationship than if I made use of personal contacts.

In each country, previous work in educational projects has allowed me to develop a range of professional contacts. In the case of the UK I had contact, from a previous project working with older learners, with an association of voluntary IT trainers who had worked with this group, or continued to do so, as peer tutors. My contact in this group put me in touch with a variety of these tutors, all advanced users of digital technologies, who volunteered their personal time, usually at their homes, for the interviews. I interviewed a total of 8 people. These people were all over 55 and retired or semi-retired. Those who were semi-retired were working for a voluntary organisation that helps other retired people to start to use digital technologies.

In the case of Spain I made contact through the principal of a school I had worked with previously. She put me in touch with the respondents who were pupils at the school. Interviews took place in free hours. I interviewed 8 altogether, but due to an initial misunderstanding, three of these were not advanced users, so in the end 5 participants entered the data set. All of these were aged 16 at the time.

In Mexico the first contact was in a government office of the Ministry of Education working in rural education with which I had collaborated, and the other was in the e-learning department of a TV station. I had worked with each of these contacts previously. They put me in touch with the interviewees and facilitated spaces at the work place for the interviews. I interviewed 8 people at the Ministry and 5 at the TV station. In total I interviewed 13 people in Mexico, all of

whom were adult professionals in full-time work in the fields of rural education and e-learning content production, and between the ages of 30 and 50.

In each context I had had minimal contact with the interviewees prior to the interviews and did not interview my direct contacts. This meant that in each case my positioning was as a researcher who was requesting a reasonably short period of interaction with them on a non-technical subject. The participants received, through the contacts, a description of the research and draft letter of consent prior to the first interview, and then at the start of the interview, as I have described earlier in Chapter 3, I explained the process to them and asked them to sign the letter of consent, which guaranteed them full anonymity and confidentiality, in my presence.

The total number of participants was 26 people, across the three very geographically different contexts. Details, suitably anonymised, are provided in Appendix A and B. As can be seen, the backgrounds and ages of the different participants differed substantially across the three groups. This meant that the set of participants suited my aims, since I was looking for commonalities across very diverse contexts, based on the idea that any commonalities identified across this heterogeneous set could be generalizable. This is an aspect that will be discussed further in the Conclusions Chapter (7).

4.2 DATA COLLECTION

The data collection process took place in the year 2010 and early 2011. The schedule of the interviews is provided in Appendix B. With each participant there was a face-to-face interview in their first language, which was recorded and later transcribed. I translated the quotes in

Spanish that I eventually used in this thesis myself[6]. In Mexico and Spain these face-to-face interviews were grouped into sessions of a few days when I was visiting the area, and in the UK a little more spread out over a few weeks. These interviews lasted between 30 minutes and 1 hour. The reasons for this are discussed below in section 4.2.3.

The process of analysis in each case began soon after the first interview. It is described in more detail in section 4.3.3. On the basis of my initial analysis I carried out a later follow-up interview, either online using Skype, or on the phone, though in two cases the second interview was face-to-face, as circumstances made it simpler to do it that way. These second interviews varied in length, between 15 minutes, and 40 minutes. Some were quite brief, and involved revisiting the themes of the first interview. Others were longer, the variation depended on the extent to which I considered it necessary to further explore, or to clarify, the comments made by the participant in the first interview.

I shall now describe the interview process in more detail.

4.2.1 The main interview

The objective of the interview process in this research was to elicit narrative descriptions of the participant´s literacy practices in order to explore their understandings, across the three perspectives of my research questions; changing practices, identity and criticality. This process of elicitation required a set of questions that would avoid leading the process as far as possible. The questions, perhaps better described as prompts, were designed to be open ended so as to allow the interviewees the freedom to tell their own stories, and provide a rich set of data for

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[6] I am English/Spanish bilingual and have awards for translation between these languages.

analysis.

In each interview, after a short introductory conversation, aimed at establishing a rapport and putting the interviewee at ease, the interview protocol begins with an introductory preamble in which the aim is to explain, or rather remind, the interviewee of the objectives of the research and the interview. The basic text, which in spoken versions was subject to minor variations[7] when participants asked for clarification, is as follows:

The idea of this interview is to find out how you communicate (primarily using digital technologies) and how you deal with information. The idea is to see how you "inhabit" this digital world. So I will ask you some fairly open questions and you can respond as you wish.

The text of this preamble does not specifically mention narratives. Though the narrative is a common form of talking about one's experience, I felt that to foreground the idea of narrative would be to create pressure on the interviewee and perhaps lead in a certain direction. Though we all tell stories we are not always conscious of doing so, and some may feel they are not skilled at telling stories and therefore feel uncertain or reserved. I therefore decided to use the questions to provide the possibility of narrative rather than explicitly requesting it beforehand. This had a certain element of risk; as Bruner observes *"it has always been tacitly assumed that narrative skill comes 'naturally', that it does not have to be taught. But a closer look shows this not to be true at all"*(1999, p.176) I hoped that these narratives would emerge through this series of questions but was aware that more scaffolding in the form of prompts might be needed in order to successfully elicit narratives, as advocated by McCracken (1988). This was

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[7]   For example, expanding the umbrella term "digital technologies" as computers, mobile phones, Internet etc. My intention was to allow the scope to be as wide as possible.

sometimes the case, and there was variation across the different contexts; older interviewees tended to move easily into a narrative mode, while the younger participants required more prompting; they sometimes gave monosyllabic responses so that I had to ask follow-up questions. For example in answer to Prompt 2 (see below) *"Has the way you use these technologies changed since you began to use them?"* I received the answer *"Yes"* from one participant, and so followed up by asking *"In what way?"*

The interview protocol was as follows:

Prompt 1 - *When did you start using digital technologies?*

This prompt was structured in such a way as to invite the interviewee to give a narrative description of how they began to use technologies. In all the prompts and follow-up prompts, I aimed to use natural language to allow the interview to have as far as possible a conversational atmosphere in which the participants would feel able to talk freely. This prompt focuses on the participant's first contact with digital technologies. Beginnings are important in that they often provide clues about the emergence of identities and practices. The way in which someone describes the start of a practice can provide ways of explaining and giving meaning to it. My hope was that out of this starting point a narrative of their changing practice could emerge, within which some of their perceptions and understandings of these changes might be included. The follow-up prompts were to be used only if necessary, to amplify the information provided.

Follow-up prompts:

What did you use them for at first?

How did you use them?

What made you start?

Prompt 2 - *Has the way you use these technologies changed since you began to use them?*

The second prompt was structured in such a way as to follow on from and extend the previous narrative. Focusing on changes in interviewee's practices promotes narrative description and is also likely to elicit descriptions and rationales for choices made. The question also connects the past, the origins, to the present. However I was aware that the question might not be necessary if interviewees were very forthcoming in their descriptions in the first question. The follow-up prompts again were optional and not in any particular order, for example the request for an episode was sometimes used as the first option, as the nature of the prompt and its focus on an episode is more likely to produce a free narrative. These first two prompts centre ostensibly on the research question about changing practice, however, this kind of narrative may also include other aspects relating to the other two questions, for example, descriptions of changing practices may include reflections on how the individual sees his or her own identity as changing, or changes may take place for reasons that relate to critical choices.

Follow-up prompts:

Can you tell me more about these changes?

Why did you decide to change?

Are there tools, or sites that you stopped using?

Why did you stop using them?

Can you describe a particular episode where your use changed noticeably?

Prompt 3 - *Can you describe an average day in your life, mentioning the different uses you make of Internet technologies during the day?*

This prompt focused on current practices, and moved away from specific requests for descriptions relating to tools or uses to a more open approach in which the interviewee was given the freedom to give emphasis to those practices that they might wish to foreground. The focus of the prompt – a "day in the life"- also provides the possibility of comments relating to identity, since what someone does in their day relates to how they see themselves and who they are. The follow-up prompts, which focus on variations, permit possible enrichment of the emerging account of the day to day activity of the participant.

Follow-up prompts:

Is it the same most days?

What variations are there?

Prompt 4 - *How does the use of these technologies fit into your life?*

Though, as I have mentioned, I hoped that the narrative descriptions generated by the first three prompts would produce interesting data relating to each of my research questions, there was the possibility that the responses would focus mostly on changes in practice (the first research question). I therefore decided to introduce two prompts that would permit the focus of the conversation to move towards the other research questions. This prompt aimed to elicit reflections around the interviewee's identity as a user of digital technologies, which could relate to wider understandings of self as 'literate'. This relates also to the ideas explored in Section 2.2 of the relation of identity to digitally mediated literacy practices. A more direct prompt might ask how the technologies fit with "who you are", however this wording is not very natural and could perhaps be construed as over intrusive, so I chose to make "your life" rather than "who are you" the focus of the prompt. The follow-up prompts allowed for further exploration where necessary.

Follow-up prompts:

How important are they to you?

How would your life be different without them?

Prompt 5 - *Does anything worry or concern you about digital technologies?*

The aim of this last main prompt focused on the third research question, on issues relating to criticality, and the extent to which a critical attitude may lead to actions of some kind that may constitute a strategic or tactical response (de Certeau, 1984). Though I expected these issues to arise previously, since there is scope for critical reflections to arise in responses to the other prompts, I felt that a question that gives the opportunity for the interviewee to raise issues relating to concerns about context might prove necessary, and for this reason the question was included as an option. In some cases, the prompt proved a little redundant as the issues had already emerged.

Follow-up prompts:

Can you give details of your concern?

Do you do anything about it?

4.2.2 The follow-up interview.

In the design of the methodology I saw the above group of prompts as sufficient to elicit sufficiently rich narrative descriptions of literacy practices, through which I could identify commonalities among the participants' understandings. However, as I explained in the Methodology section (3.4), I included the possibility of a second interview to provide the opportunity to further explore and amplify these descriptions where necessary, and to allow

for the possibility of changes in their responses, after a period of reflection.

In these follow-up interviews, for practical reasons, I used Skype to talk to the participants, either directly through Skype itself or using it to call their landline. In this way I was able to record the conversations using Call Graph. Prior to each I had listened again to the first interview, and noted any aspects that required further clarification. The structure of these second interviews involved recapping the responses that the interviewee had given, and asking for clarification or further detail where I felt it might be useful. This meant that the follow-up interviews varied in focus according to each case, and there is therefore no general protocol. For reasons of space I will not give details of each here, but an example is provided in Appendix G.

4.2.3 Issues involved in data collection

In general terms the interviews functioned well, and produced a rich set of data to work with. In Mexico in the first interview the interview context seemed familiar to most and the participants were very forthcoming and quite comfortable in the interview situation. I was able to establish an easy rapport and this carried over to the follow-up interviews. The questions were all clearly understood and coherent responses were given. However, sometimes, particularly in the first interviews, I found myself frequently speaking more than I wished to. This often took the form of offering interpretations and suggestions and asking them to comment on them, usually because I wished to elicit further comment. I felt that at times this came close to leading them, though I was often contradicted. It led me to reflect on other ways of eliciting responses, and I experimented with some of these, such as the use of metaphor, providing alternative metaphors to describe a behaviour or situation and asking them to

comment, and the use of little anecdotes, examples to compare and contrast. I also found that my body language could help, for example sitting forward, nodding or changing my facial expression to show interest also helped. This was not however the case for all. Another issue that arose was that some of the follow-up prompts, particularly those that begin with why, tend to elicit responses that move away from the individual to generalizations, which sometimes appeared to reflect received attitudes (expressions like *"people tend to... "*, or the use of the impersonal *"you"* do this..."). When answers were more descriptive and narrative based, as opposed to explanatory, the content was often more personal, focused on the participants own experience, and therefore, perhaps, more revealing.

In the case of the adolescents in Spain, the interview situation was less familiar, and the issue of consent needed careful explanation. There was more distance, perhaps because my age placed me, as an adult in a school context, into a role similar to that of administrator or teacher. One-to-one conversation with an unfamiliar adult is likely to be conditioned by the dynamics of other similar experiences. I found that a longer warm-up process was necessary, though after this it was possible to work towards a rapport, though in two cases it was very tentative and a distance remained. In these cases I had to use frequent prompts, and at times it was difficult to avoid leading. I found with the others that making an explicit request (*"tell me the story of..."*) for narrative helped. In general the questions were understood but the *"describe a day in your life"* question produced a surprised pause in some cases, though they quickly adapted. The follow-up interviews worked well, and I found that they were more open and forthcoming on the second occasion.

The older participants in the UK reacted best to the eliciting of narratives, and a rapport was easily achieved. Many of them showed considerable interest in the research and the sessions

were in several cases followed by long conversations about the issues involved. The questions were clearly understood and I had to use few follow-up prompts. These interviews were the ones that were longest, most lasted over 45 minutes. The follow-up interviews tended to be a continuation of the previous conversation in which I was able to explore the elements of interest that had arisen further.

As I have mentioned, the second interview was an opportunity for further contact, and was welcomed by most participants. I understand it as a way of giving something back to the participants who have given me the benefit of their time.

4.3 ANALYSIS

4.3.1 The data set

The interview process produced a total of 26 hours of recordings. These were transcribed, so that for each interview a sound file and corresponding transcription exists. The transcription was undertaken by two separate transcription services, one in the UK for English and the other in Buenos Aires for Spanish. On reception of the transcripts, I checked through each against the sound recordings to ensure accuracy. With relatively small data sets there is always a temptation to continue and collect more and more data, however the amount collected from these participants, posed considerable challenges due to the time required for transcription and coding, as well as the space to write about it, and these limiting factors therefore precluded undertaking further interviews.

4.3.2 Codes and patterns

Before describing the process of analysis it is necessary to describe the relationship between my research questions and the units of analysis that I used; the codes and the patterns. Codes can be described as the initial unit of analysis, a word or phrase assigned to a segment of data (see below for a more detailed definition), while patterns are groupings of codes, or categories, that allow the grouped data to be compared across the three populations. I understand this as a kind of cyclic relationship. I shall describe it first schematically, to indicate the connections between the different elements, and then in the next section the actual process I carried out in this work.

My research questions underlie the prompts I used in the interviews, and they inform the initial analytical frameworks which I have outlined in the Methodology chapter (Section 3.7). These prompts facilitated the interviews which produced the data set, which was then analysed. The initial analytical frameworks provided an initial provisional set of codes that were assigned to segments of the data. For example, within the initial framework relating to identity the idea of "factual identity" emerged initially as a code, and this derived from the presence of this element in the initial framework relating to identity. However, many of the codes emerged from the coding process itself, for example as a set of codes which related to perceptions of the identities of others, such as "peer pressure", "dependence" or "banal" which did not relate to the initial framework relating to identity. I discussed the divergence between the initial analytical frameworks and the codes and patterns that emerged in section 3.7.4, and it is further discussed in the Findings chapter, sections 6.2.11, 6.3.9 and 6.4.7.

Following Saldaña, a code is a *"word or short phrase that symbolically assigns a summative, salient, essence-capturing, and or evocative attribute"* (2011, p.3), for a portion of data. The assigning of codes, which can proceed through several iterations is a mixture of close

listening/reading and interpretation. The researcher aims to capture the essence of the portion of data through close attention, but the choice of code is an interpretative act. As the analysis proceeds, a cyclical process of interpretation takes place. As Saldaña puts it, this *"further manages, filters, highlights and focuses the salient features of the qualitative data record for generating categories, themes and concepts"* (2011, p. 8). As the process continues then, these categories, themes and concepts emerge. In my work the coding has centred on the understandings that I focus on in my research questions, and in my particular analysis this has involved a grouping of codes into patterns. The specific details of this are described in the next section.

4.3.3 The coding process

I began coding as soon as I had data. While the data collection process was going on, this coding supported it and provided initial indications about the potential of the data I was collecting, and fed back into the data collection process. Though I did not make changes to the basic interview protocol, the fact that I was already analysing the data, helped me to focus in the interviews on areas that seemed to relate to codes that were emerging. For example, this was the case in relation to the codes mentioned above in section 4.3.2 relating to the identities of others. These had not been anticipated in the initial framework relating to identity, but as these codes emerged early on, it became clear that the perceptions of the identities of others were important in relation both to the questions about identity and in relation to criticality issues, and I therefore gave some attention to them in conversations relating to Prompt 5 in the interviews (section 4.2.1), which was about concerns relating to digital technologies, and in the follow-up interviews. At this early stage I found it useful to continue to listen to the

conversations as I read the transcripts. This is because the intonation and pauses, the range of expressions, and even the laughter reminded me of the flow of the conversations and helped me with the interpretation. Diacritics may be able to reproduce much of this but there is no substitute for the recording, though it does take longer to work on. Later on, once familiar with each conversation I worked just with transcripts.

The initial stages of coding were perhaps the most challenging aspect of the process. In the follow-up it is necessary to gently explore those areas that appear to relate to the code (for example, *could you say a little more about...*) without ignoring other elements that may emerge in the participant's talk and without leading. At this early stage I listened at least twice to each recording, assigning codes. I did not at this point focus on a particular kind of code, preferring to focus more on what the data suggested. The types of code that emerged were of three kinds. . Some codes were gerunds; for example "changing behaviour" or "questioning assumptions", these can be termed Process codes since they generally refer to activities or processes. Others were codes that used a turn of phrase or word actually used by an interviewee, a verbatim quote; for example "blurring" (referring to the increased mixing of professional and private activity), or "joined at the hip" (referring to the degree of integration of technology use) these can be called In Vivo codes. Both Saldaña (2009, p.76) and Charmaz (2006, p.55) point to the usefulness of using the direct statements of interviewees as codes, since, as the latter explains, it helps the researcher to *"preserve the participant's meanings of their views and actions in the coding itself"*. The last type was codes that summarised or paraphrased a long portion of data, and these could be termed Structural codes. For example "transformation of relations" was a code that summarised segments where participants described changes in the way they interacted and kept in touch with family and friends online, or "culture of transparency" which

summarised segments where the respondents described the sense they had of the degree to which people are expected to be transparent online.

Arguably a more 'rigorous' observance of the tenets of grounded research might make this coding practice appear questionable, as some researchers work with just one kind of coding (for example In Vivo) but as Saldaña puts it (2009, p.79) *"Sometimes the participant says it best; sometimes the researcher does"*.. Similarly, I did not work with a fixed unit of analysis for the following reason. My focus was on the understandings that I saw emerging from the data that related to my research questions. This sometimes meant that a code linked to a word, sometimes a clause, sometimes a whole paragraph. In my view, this is a coherent and necessary approach to coding, if one is allowing the data to "speak" then the codes, initially at least, should not be limited by a prior choice of codes or coding style. I focused on the ideas I interpreted as emerging from the participant's words, rather than a fixed (and arbitrary) unit such as line length or sentence. As might be expected given this approach, only some of these codes related to the initial analytical frameworks. I have discussed the divergence of the coding from the initial frameworks in section 3.7.4 and it is discussed in further detail in sections 6.2.11, 6.3.9 and 6.4.7. Increasingly the codes emerging were independent, emerging from the data. To give a further example of this, in the table in Appendix D, most of the initial codes in column 1 (such as "signal to noise", "experimental testing", or "quality of information") do not fit the original framework of structure/agency, tactical/strategic behaviour, and weak-sense/strong-sense critical thinking. Indeed as I discuss in section 6.4.7, to a large degree these polarities did not emerge in the coding.

At the end of this first stage, when the data collection process had ended, I started to examine the codes. I did this by creating mind maps, which allowed me to explore the relations between

the codes visually. These maps (I have included an example in Appendix E) were complex and I went through several iterations of this process to reach an initial representation – my interpretation – of the relations between the different codes. In this process initial patterns emerged as clusters, and these became nodes within the maps. I also recorded these patterns separately in notes.

Up to now the process had been manual. But at this point I inputted the transcripts into an open source coding application. I decided to use Weft QDA, an open source application. The reasons for this choice were economic, the software is a free download, and the simplicity of use; it is a program that focuses exclusively on the management of coding. As I inputted the texts I reread them once more and re-examined the codes. I then used the software to group together all the instances of each code, and compare them with the mind maps I had created. This involved a process of focussing, or of consolidation of the codes, and can be classed as a form of Second Cycle coding. The process was perhaps closest to what Saldaña (2009, p.152) calls Pattern Coding, after Miles and Huberman (in Saldaña 2009, p.154), in that it involved a process of assembling similar codes together and *"analysing their commonality"* in order to create pattern codes. Due to the original aim of the research of looking for commonalities that might exist across culturally diverse groups, I focused on convergence, identifying patterns that were found in each of the three interview groups I had worked with. I did this process twice, using the mind mapping technique to identify further possible consolidations, and this allowed me to condense what were initially over 30 patterns into a more manageable 15 patterns. The process of consolidation can be seen in Appendix D, where "quality", "filters" and" selection", headings in the mind map, are consolidated into the pattern "Selection", and then subsequently the "Selection" and "Trust" patterns are further consolidated into the "Tool and

Channel Choice" pattern. The final sets of patterns, which I grouped under three headings changing practices, identity and criticality, that relate back to my research questions, were however quite heterogeneously named; for example "Tool and Channel Choice", "Culture of Transparency", or "Talk about Others". Since the focus of the work was on understandings I decided to unify the naming convention to gerund constructions, so that in these cases the new names were "Choosing channels and tools", "Being transparent" and "Observing others".

This process is summarised in the following table:

Cycle	Phase	Activity	Product	Examples
First cycle	1. Initial coding	1st interview Initial coding 2nd interview Further coding	Codes	quality of information, signal to noise, interaction
First cycle	2. Mind mapping	Visual organisation of codes	Mind maps	See Appendix E
Second cycle	3. Weft QDA	Input of data into Weft QDA, consolidation of codes	Consolidated code set	Selection, Trust
Second cycle	4. Pattern coding	Further analysis, definition of patterns	Initial pattern set	Tool and Channel Choice
Second cycle	5. Pattern consolidation	Renaming of pattern codes for clarity of presentation	Final pattern set	Choosing Channels and Tools

Table 1: The coding process

One of the challenges involved throughout the analysis, and indeed the whole research process, was the degree of granularity. It would be possible to go much deeper into the practices described and produce very detailed descriptions of specific instances of practices

and/or understandings. Given the space available however, this would be at the expense of a broader sweep and a clearer overview. The issue of space also precluded a focus on saturation. As I have mentioned, the range of codes and of the patterns I derived from them was originally, at the first stage of analysis, very wide and the amount of data likely to be needed for saturation would be impossible to process in a project of this scale. My focus therefore was on identifying a set of common patterns across this data set. To manage the range of codes I decided to condense them into a smaller group. This reduction in the number was partly because further analysis revealed similarities and clusters of patterns that could be grouped together, so that some became sub-patterns or variants of others, and partly for the purely practical reason of limited space.

As I have mentioned in 3.7.4 the 3 analytical frameworks, more than a structure for the coding, served as a tool for orienting the process, directing my attention rather than determining my research (Charmaz, 2008, p.160). It played various roles. The first of these was as a catalyst at the very start of the process. It provided some provisional codes to allow work to begin, and effectively did serve as a kind of initial scaffolding. Later on it served to provide a series of reference points that aided me in thinking about the codes and identifying patterns, sometimes through a kind of inverted process, where it was the limitations of the frameworks, and the fact that certain items simply didn't seem to bear any relation to it, that helped me to identify other patterns. For example, the fact that the polarities mentioned previously in the framework relating to criticality did not appear made me reflect on this absence, which led me to notice the tensions between almost self-consciously uncritical uses, as in CR3 Accentuating the positive, and more critical tendencies as seen in most of the other patterns relating to criticality, such as CR1 Evaluating risks, CR2 Choosing channels and tools or CR5 Being

transparent (See Section 5.4). The later reflection on these patterns led me to identify the tension between convenience and criticality described in Section 6.4.6.

The process of consolidation though a series of iterations, from initial codes through mind-maps to patterns, and then to the condensed set of patterns, is briefly illustrated to give an idea of the process (for the *Choosing Channels and Tools* pattern) in an example table in Appendix D. In order to provide further background, the appendices also contain examples of a section of coded text (C), a mind map (E), a first interview (F) and a second interview (G).

5. ANALYSIS

This chapter describes the patterns I identified through the analysis process I set out in the previous section. As I mentioned in Section 4.3.3 the 2nd cycle coding process generated a series of patterns. . This data in turn derived from the interview process described in Section 4.2.1 and links back to my research questions (first introduced in Section 1.4). The chapter is therefore structured, after an introductory section, on the basis of those three research questions into three main sections, the first focuses on patterns relating to changing practices, the second on patterns relating to identity, and the third to criticality. The chapter ends with some concluding remarks.

5.1 INTRODUCTION - THE RANGE OF PATTERNS

As I have mentioned, the analysis process produced a large number of codes related to understandings of changing practices, identity issues and others focused around the question of criticality. As I have described in Section 3.7, the analytical frameworks which I used, though they served as scaffolding in the initial stages are not reflected clearly in the patterns. As the coding process progressed, it became clear that other groupings than those suggested by the analytical frameworks were more appropriate. As the Findings chapter will indicate, this is not to say that the elements involved in the frameworks are not relevant, as in each of the three frameworks there are aspects that illuminate the findings. However, in the process of grouping of the codes into patterns, a different structure emerged that focused more on different categories of activity. I believe that these categorizations could even serve as a provisional structure for understanding literacy in a digital world, though I am of the view that much more work is necessary before it would be possible to make this kind of claim. In this work the

patterns are groupings of codes, or categories that have emerged in the cyclical process of analysis I described in Chapter 4. They provide a higher order view of the data that has allowed me to derive a series of commonalities that are shared across the three groups. In this chapter I describe and discuss the patterns, and in the following chapter I discuss the commonalities identified in more detail, before discussing the implications they have for pedagogical practice and educational policy in the final chapter.

It is important to re-emphasise at this point that my focus throughout the work has been on commonalities, which has meant that the analysis focused on convergent understandings. The patterns described here are groupings of codes that emerged in all the three sets of participants, and where exceptions to general tendencies are mentioned they are also common exceptions, in that they appear in each of the three groups. While divergent understandings particular to just one of the groups also emerged, they are not the focus of this work and indeed for reasons of space I cannot examine them here.

The process of analysis, described in Chapter 4 and in the example documentation in the Appendices produced a set of 15 shared patterns. These patterns (over 35 initially) were then further grouped together into a set of 14 overarching patterns. There are 4 in the set of changing practices patterns, 5 in the set of identity patterns, and 5 in the set of criticality patterns.

Categorization is always an on-going process, especially when an approach of this kind is used. It would be possible to continue interviewing indefinitely, but at some point a 'photograph' has to be taken and a certain artificial stability imposed for the purpose of reporting, though as I indicate in the final section on further work, my aim is to extend the work in future research. Though these patterns have a certain degree of stability at this point, the understandings of

users will evolve with time, experience, technological development, and greater integration of the technologies into lives and practices. Indeed, my informal observation of this very fast-moving field indicates that some changes are likely to have taken place in the time that has elapsed since I carried out the data collection process. With the introduction of new data from further interviews (after the EdD) the patterns are therefore bound to evolve. This analysis is therefore necessarily to be considered "permanently provisional".

5.2 PATTERNS RELATING TO CHANGING PRACTICES

A reminder of my first research question is useful at this point:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their understandings of how their literacy practices have changed, and continue to change, as a result of their engagement in digitally mediated activity?

Throughout the interviews, the participants spoke of different ways in which they had perceived changes in their practices, and the contexts in which these took place. Anne's observation that "we *can't turn the clock back*" was reflected in each of the contexts. Similarly there was a pattern of transformation of the respondents' interpretive frameworks. It underlies much of the range of different patterns that emerged, but is complex and rich enough in itself for codes relating to it to be grouped into a separate pattern, which I have called *Changing Practices*. This pattern was accompanied by three other patterns that also relate to the same question. One of these grouped codes that related to the participant's understandings of themselves as continuously present and connected which I termed *Being Online*. The next was a grouping of codes related to direct communication with others which I called *Interacting with Others*, and the fourth involved codes related to practices that involved communication at a

remove, or interaction with artefacts created by others. The term artefacts refers to information of some kind, or images or other kinds of "texts" in the broadest sense; the common factor here is that the interaction is with the artefact, rather than directly with the person who made it, and therefore the communication is indirect, through the artefact, with this person or persons. This pattern I called *Interacting with Artefacts*. These four patterns taken together relate to understandings of changes in the practices themselves, of presence, and of interaction with others and with the things others create. This first set of patterns relating to changing practice serves as an introduction to the whole set of patterns identified. In places the patterns relating to identity and criticality, as will be seen in the relevant sections (5.3 and 5.4), have some overlap with the broader sweep of this section but with a more narrow focus.

5.2.1 Pattern P1 – Changing practices

As I have mentioned in the introduction to this section, this pattern had to do with the contexts of the participants' changing practices. As Terry put it when asked if he could go back to just using e-mail: "*I don't think it would be a problem, though I have certainly made a change in that I am sort of like , I am basically online all the time. I mean, literally all the time and I think that is a good thing for me. I enjoy that.*" For Terry, many of his literacy practices were already digitally mediated. He continued. "*I know a lot of people as soon as they leave work turn the phone off and everything is off until next day sort of thing. No I'm quite happy to be online, if you like on, on a permanent basis.*" Even though others may avoid the digital space at certain times of day, Terry understood that a large part of their literacy practices, and his own, had become digitally mediated literacy practices. This change in the space in which certain literacy

practices take place was described in various ways. Anne focused on newspapers, which she was reading by then almost exclusively online, though she would occasionally buy the East Anglian, her local paper. Alfredo had moved away from paper too and in his case he saw the change as more profound: "*I find it much easier to read from the computer than to read from a book to find something. It is like little by little I have lost the capacity to find something easily in a book*". Ismael described the change in his information practices, especially due to hypertext, as profound: "*A world of cross references and bridges, and hypertexts, opened up for me. It was game-changing for me*".

Not all perceived the change so radically. Eduardo, who worked with rural communities, described a time when he had to visit a remote and politically radical indigenous community that had rejected any use of electricity: "*I had to manage for a week using a blackboard and chalk, when you're used to do almost anything using a PowerPoint presentation to talk to people. So to do a week long workshop without resources was well... because you say 'I have got everything on my machine. I'll switch it on. I remember that way'* ". Though this episode could be interpreted as an example of unhealthy dependence on technologies, Eduardo made it clear that he didn't understand it in this way. For him there was a quiet satisfaction that he had managed without the tools, and at the same time recognition that it would have been easier if they had been available. The episode was an anecdote that helped him to understand his literacy practices as digitally mediated when the choice was available, but not necessarily dependent on digital tools. The older practices continued to be available. It is possible to describe this as an expansion of the repertoire of possibilities, rather than a substitution.

The changes also involved, as well as the online spaces, the devices used to access them. Some of these changes were even understood as physical, Alfredo said of the computer: "*I also use*

it to write. At meetings … I prefer to take the laptop. Because my fingers hurt now when I write with a pencil". For most of the interviewees the change was seen as a cumulative process. As Paloma put it: *"it's not that you stop using things. Now it's more like… cumulative. So you keep using the same devices, but with new versions."* This process was also seen as a motor for the integration of digitally mediated literacy practices. Sara: *"at first I used the computer for Messenger and not much more. And I've learned to use it better because furthermore I got to know it. It's not just the Internet, but also using the computer because you have different programs. Then you have to learn to use PowerPoint and Word and do schoolwork and so on."* Irma didn't see a problem with new devices or programs: *"No, because once you get to know it, I think that's happens with a whole load of things. I mean, you do those things, you incorporate them into your life."*

Other changes in the nature of the context related to the people within that context. The degree of access to others particularly was changed. Alicia said *"I connect to the chat and I talk to people who I haven't seen even for years, and now I'm talking to them on the chat all the time"* or Irma: *"I have family members who live in the United States. So, when e-mail and Messenger appeared, I incorporated them into my daily life, and to me it's marvellous. Because I can communicate with them really rapidly".* Irma reflected on the degree to which this agility of text-based communication had become a central aspect of her literacy practices. *"But today, in day-to-day life, it has become indispensable".* She understood this as positive and empowering, though it brought with it the distress when the communication was cut off.

The nature of the communication was also affected. Alicia referred to the nature of the messages: *"I like this way of communicating because it doesn't demand a very formal style. It's just writing a mail to someone."* This reflects a different mode of communication somewhere

between the written text and the spoken word which is reminiscent of what Ong (1982) called secondary orality. She went on to say: *"In this way I can know more or less what the people I know are up to or involved in. And that has transformed my relationships."* There is an understanding across the groups of interviewees of a positive change that is located in greater degree of access these digitally mediated literacy practices to both information and other people.

This is not to say however that the transformations were not viewed as also problematic. Several common and inter-related elements that made up this pattern affected the interviewees' understandings of the nature of the change.

The first of these is a sense of indeterminacy. This was often expressed in relation to the perception and evaluation of risk involved in online participation. One of the codes I used early on was 'inchoate fears', since the risks involved, for example in making personal data available, were not clearly defined; though worrying, they were seen as nebulous. Paloma expressed concerns about the loss of what might be called traditional ways of doing things: *"For example, we stop appreciating other things, like nature or... I see many kids who are so focused on the computer all the games on the phone, video games, but they no longer go to parks, for example, they no longer do any sport."* Terry spoke about access: *"I do have concerns within the sense that sort of absolutely everything is available in times of certainly, I mean I'll give you an example..."* The example was about his daughter and a 13-year-old friend finding hard porn on the Internet, and he ended the anecdote saying: *"and I just thought, I don't think this is good that once people know how to do anything, they can just type anything into search".* Concerns about pornography and other objectionable content, or the unhealthiness of new indoor habits with video games and other screen-based activity are the stock-in-trade of critiques of the

Internet, but what is notable here is the uncertainty about how to deal with it. Behind these words there is perhaps an understanding that you can't put the genie back in the box. There is a link here to the first criticality pattern *Evaluating Risks*, but the focus here is on the understanding of changing practice as irreversible, and the reaction to that. This sense of uncertainty also was linked to the kinds of practice the respondents were willing to involve themselves in. Carol, for example, was embarrassed by the attention she got on Facebook: "*I didn't want to be available. I didn't want all these friends. I didn't have many friends but I didn't want any friends, you know. Anyone I never e-mailed in my life saying whether or not they'd be my friend I found embarrassing.*"

These concerns about the limits of access also extended to the ways in which technology can exclude some people from access to the benefits of digitally mediated literacy practices. Magali spoke about her mother's bemusement with her use of technologies and Basil focused on the right of people not to engage with technology: "*as a matter of principle I respect their right to decide not to have technology*" and he mentioned "*the way in which the technology does exclude people*" as a key concern, in addition to privacy issues.

Related to this was a sense of the digital environment as emergent and dynamic, which implied the need to be continuously updating one´s literacy practices and one´s knowledge of the tools and spaces; Basil described this as the "*continuous treadmill of learning*". Barry expressed annoyance with continuous and unnecessary, in his view, updates of technology, referring to Microsoft Word: "*they had to come up with a product to sell (sic) more money, so they created the new interface... you´ve got to relearn a whole set of rules and I find it very annoying*". Anne expressed worry about the need to adapt to changes in the work place. Talking about her daughters interest in going into journalism she said: "*I'm wondering whether she's actually like*

to have a job to go into, now so many people get their news off the web, don't they?". This caused a little conflict with her own news reading habits as mentioned earlier in this section. Across the groups there was a sense of a continuous need to adapt and manage the change, and that they understood that their literacy practices could no longer be viewed as a static set of skills.

The metaphor of the treadmill could also be applied to Carol's comments on the pressure to communicate continuously: *"It has made its own stress. People expected instant results, and you could have requests and a very huge in tray and it would never go down, because things would keep piling in. Why haven't you replied to my e-mail?"* Barry and Terry also referred to this issue, though each had developed strategies for dealing with the flow of communication. *"I do it on my timescale"* said Barry. Terry said *"quite often I don't tend to respond to it. If I get an e-mail and I look at it on the phone I may very well not respond to it straight away, unless it is something really important."* The nature of the environment gave rise to the need for continuous adaptation and negotiation of the channels to be used for communication, and the nature of the communication itself, as key elements of digitally mediated literacy practices and a central thread running through many of the interviews was the sense of provisionality, since the change is continuous. As Irma put it: *"Everything is now much more...ad hoc".*

5.2.2 Pattern P2 – Being online

The second pattern relating to the "changing practices" research question has to do with presence. For many this involved a sense of being *"always on"*, to use Baron´s title (2008). This has been touched on under the previous pattern as it is one of the central elements in the interviewees' understandings of the transformation. The descriptions some participants gave

of the start of their day illustrate this. Alfredo, for example: *"I wake up using the alarm on my mobile phone. I wash and I come to work. The first thing I do on arriving is to switch on the computer, check my mail, both institutional and personal mail. My life is practically lived in Word and Excel. And also making videos."* For Barry, it was similar: *"My mobile phone gets turned on first thing when I wake up … mobile phone and being online and Internet and e-mail"*. Ismael described his routine with a note of irony: *"I sadly switch off my computer, I get in my car, I get here, to the office. At the office I switch on the computer, and I don´t switch it off all day. It is always on"*. Eduardo noted with surprise that *"it is incredible when you have been looking at the computer for most of the day and you get home and you decide to watch a film, or to chat with someone or to read a book on the computer. Because that has also become a custom for me."* Irma described how the computer was always on at home, either for work and personal matters. Anne spoke of the strangeness of the situation when a power cut left her disconnected for 24 hours, though like Eduardo earlier she was unfazed by this. As Terry put it: *"I am quite happy to be online, if you like, on a permanent basis."*

As we have seen, the interviewees understood that the expansion of access, both to information and opportunities for interaction, had its downside in the distractions of continuous conversation and information overload. Though all saw themselves as connected, there was also a sense of the need to limit the degree of connection. The need for effective management of time was expressed by many as key to dealing with this. Though the need is not necessarily new in itself, there was a sense of a new set of practices that revolve around what could be termed the timeliness of literacy practices – when and to what extent can we or should we engage in and interpret our world - becomes another element of literacy. For some this was a question of selecting when to engage within a particular channel, others chose to

close the channel at times. Sara said she was clear that *"the priority is not the computer"* (though her phone was always with her, just in case people needed to contact her), while Barry spoke of ignoring emails when necessary and *"when I am in meetings I switch my phone off. I have no problem with that. I have problems with people who don't".*

There was also a sense of a need for the connection to be always available, and this related to spaces as well as time. Eduardo described his search, whenever he went on visits to rural areas for work, for a connection: *"Sure there'll be Internet in the hotel. Or maybe I can connect in a restaurant. You look for it, so as to be comfortable".* Jacqueline described reorganising her home, and moving her office upstairs: *"In fact, I wasn't going to move the computer upstairs. But now it's already up there...and as I have the Internet, which is the wireless one, there I go online, listen to music and I write."* There is a sense in which a space is not complete unless it has a connection. Barry said *"When I am not in my house I can't get my e-mail and I'm living with that."* The implication was that he viewed this lack of connection to email as a hardship to be borne.

In addition to these senses of being always connected, there was an understanding that this connection in some way was starting to unify contexts that had previously been separate. Most notably the work/personal life difference was for some starting to blur. Though the participants continued to maintain separate spaces for each, and understand them largely as separate, the tools and spaces used for literacy practices (messaging, e-mail, social media, search engines) and the practices described were in many cases similar, with work-focused practices taking place in personal times and spaces, and vice versa. In addition to some examples mentioned already under transformations, other explicit mentions of this were made. Carol said: *"On an average day I will check emails at least once if I am at home, just once. As I said it's sort of*

work". Terry spoke of working from home, checking the mail, preparing lessons looking up resources, typing things, printing things out and then *"usually while I'm working on the computer I've normally got something going on, I'll be listening to the radio via the computer or Spotify[8] or something"*. Different practices mix and blend. Barry describes something similar in his continuous attention to work even when theoretically not working *"if I've got 5 min and I am walking past my study and just going and just quickly see it is a message. Yes I'm online almost all the time."*

Digitally mediated literacy practices were perceived then as deeply integrated into the participants' collection of literacy practices, to an extent to which the digital tools used were seen by most, as necessarily ubiquitous (temporally and spatially), and were understood as facilitators of, and constitutive of their practices.

5.2.3 Pattern P3 – Interacting with others

The third pattern, relating to the first research question about "changing practices" focused on understandings of practices involved in communication with others. These were seen by almost all the interviewees as central, as Alfredo said, they are *"absolutely vital in order to maintain contact"*. For many, the potential for communication with other people had been a motor for integrating digitally mediated literacy practices into their lives. As Basil put it: *"So, when it was possible to communicate, you had e-mail, when you had access to the web, then it became worth having a computer at home."* For Irma this involved a focus on the potential for distance communication: *"I knew I could communicate with someone who was at a distance. And that*

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[8] An online music service, somewhat like a radio station, at www.spotify.com

was pretty attractive to me. And so I began to use e-mail". Magali saw chat as what had brought her fully online: *"What changed my view of the Internet was chats. Chats and ICQ and all those ways of communicating with people known or unknown."* For these and other participants in the interviews, their *"tipping point"*, the point where the Internet began to have meaning for them (Gladwell, 2000), and they began to engage in digitally mediated literacy practices, was when they saw the chance to communicate with others.

This communication initially, and for many almost entirely, took the form of an extension of offline practices into the online world. The family was particularly important and many mentioned specific instances where their communication practices with family members had been transformed. Ismael´s contact with his daughter in Europe, or Paloma and Irma´s contact with family members in the United States were cases in point. Virginia described how she had been able to rebuild her relationship with her cousins: *"we had become distanced due to a misunderstanding and so on..., the Internet is marvellous because thanks to that I was able to contact several of my cousins. And now we get together again, and sometimes we talk online".* Anne spoke of some older members of her family coming online: *"Actually I have two aunts who were well into their late 80s and one a wee bit older than that, whose children or friends have helped them with some setting up e-mail and they use it."* Basil noted that these online communication practices also help to bring generations together: *"...using new technologies where you are motivating the kids, putting the kids in touch with people from other generations".*

As with family, for many they saw these practices as increasing access to friends too. Jacqueline spoke of friends in Canada and Argentina, Terry spoke of friends who went online around the same time as he did and how they began to use that medium to communicate. Rosa described

the kind of creative, playful conversations she would have in the evenings with friends online and Irma described the dynamics of her online relations with friends: *"generally in the evening friends who are working or studying in the daytime, come online and then the chats are long. I've rediscovered friends who I've lost contact with over the years"*. For many the rediscovery of old friends was an important element and this was understood as positive. Existing groups of friends and family were reconstituted in different ways through the digital medium. Sometimes as Anne pointed out, this would arise as an extension of an offline activity after the event: *"they set up a Facebook group to keep in touch with people and to share photos, and all that sort of thing."*

For the most part they understood their online groups as close-knit and private, and very important to them. In some cases these groups involved new, online acquaintances who became friends. Magali's case has been mentioned, and Ismael ascribed considerable, even central importance to his online group on Flickr: *"it is very important to me; it is my interaction with other people."* For the most part however a common understanding emerges from the interviewees that the people one interacts with online also exist off-line, and of a sense of the connection between the two contexts, understanding them as two parts of one larger context. Virginia, through her interest in running, admitted to having met a range of people online, some of whom she described as *"crazy"*, but others were different: *"I am not going to deny that I have met people online that are not my family, and then met in person and they are excellent people. So I say how wonderful this medium is that allowed me to meet this person in this way"*.

There was also an understanding of the different way in which digitally mediated communications take place. Eduardo talked about learning how to communicate: *"at the beginning, even, you're not even sure what to talk about on the chat"*, and Alicia's reference to

the semi-formal style of communication in these media (mentioned earlier) also shows an understanding of the different nature of the practice. Ismael spoke of simultaneous practices where he used the chat functionality in Skype simultaneously with voice to spell out the names of books or songs or groups, in conversations with his daughter. However, for the most part these aspects were given less emphasis when relational practices were mentioned. In general there was an understanding of digitally mediated communication with friends, family and others as enriching their lives. As Jacqueline, speaking about the Internet put it: "*I don't think it dehumanises. No, in fact I think it contributes… it helps to bring human beings together. Though of course it depends how it is used.*"

5.2.4 Pattern P4 -Interacting with artefacts

The last pattern that related to the "changing practices" research question focuses on practices around artefacts. In the same way as the users understood their lives as enriched by interaction with others using digitally mediated literacy practices, they also understood that their relationship to 'texts' in the broadest sense, in other words information and artefacts (of whatever kind, photos, videos, articles, etc.) was different in the digital sphere and that the availability of digital tools gave rise to different literacy practices around these artefacts. One of the central ideas was the idea of greater autonomy. Alicia when asked what she would most miss if the Net disappeared said: "*the power to find something without having to do research that involves asking 1000 people or making phone calls, or trying to find some kind of guide to find something*".

The participants not also noted differences in the ease with which these practices could be carried out, such as Alfredo´s comments on the ease of finding information online as opposed

to in a book. It is worth noting, that as in other patterns, the offline practices, though less central, continued to play a role. Irma and Jacqueline, for example continued to make use of books within their searches.

However, the participants did not give importance to the idea of themselves as creators of texts of different kinds. Despite the fact that they were creators of a variety of texts, in the sense that they created and posted messages, uploaded photos and videos, and wrote extensively in their daily lives, they did not understand this as creative. Indeed only Ismael with his digital art on Flickr, Jacqueline, with her Reiki books and her journal, and, to a lesser extent, Magali with photos seemed to understand themselves as creators. Most described themselves more as users, albeit users with a certain sophistication and a degree of critical perspective.

5.2.5 Concluding remarks on patterns relating to changing practices

The patterns relating to changing literacy practices group the codes into four areas. The first, *Changing Practices*, can be seen as an overall view that groups codes that referred to how the general nature of the change is understood. The second, *Being Online,* groups codes relating to how changes in the nature of the individual's presence are understood. The third and fourth, *Interacting with Others* and *Interacting with Artefacts* group codes relating to understandings of changes in communication in the former and changes in the relationship with information in the latter case. From the analysis of these patterns I have identified a series of commonalities in these participants' understandings which, though they have received some mention in the flow of the discussion of the patterns, are examined in more detail in Chapter 6: Findings.

5.3 PATTERNS RELATING TO IDENTITY

First a reminder of the relevant research question:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their identity as "literate" individuals and how their literacy practices affect their identity, and the ways in which they structure and manage these practices in order to make sense of their own identities and those of others?

There were five patterns relating to the research question focusing on understandings of identity, and this section focuses on these. The central pattern, which I called *Integrating Practices* grouped the codes that related to ways in which users understand those literacy practices that are mediated in some way by new digital technologies as integrated into the full set of literacy practices they engage in. Related to this is a pattern that grouped codes relating to understandings of identity as becoming linked to usage of these technologies; the understanding of oneself as a "user" becomes part of how one understands one´s identity. This pattern I called *Understanding Oneself*. The next pattern grouped codes that related to how participants' understandings of their identity were related to the practices and contexts in which they manage and present themselves, in other words how they project their identity to themselves and others. This pattern I termed *Presenting Oneself*. The other patterns that emerged in relation to identity issues grouped codes relating to understandings of others, which I called *Observing Others*, and the other related to the ways in which they saw themselves as participants in groups, which I called *Participating*.

5.3.1 Pattern ID1 – Integrating practices

The first of the patterns that linked to the "identity" research question covered codes relating

to the interviewees' understandings of their relationship to digital technologies and the Internet, and particularly to what extent they saw their practices around digital technology as more or less integrated into their lives.

One thread present in all the groups was an understanding of digital technologies and the Internet as just another tool. Carol described it thus: *"our lives are in compartments, digitally and otherwise"*. Alfredo said: *"they are part of my life. But if you took them away I wouldn't have much trouble going back."* These examples however were frequently involved in mild contradictions. In another part of the interview, for example, Alfredo described digital tools as *"basic elements"* of his working and private life. There seemed to be elements of wishful thinking in some cases. Take for example, Anne: *"I think it's important to have some activities that are away from it. I mean, I do have quite a few activities which are not really to do with technology... but even thinking about those, slightly informed by... facilitated. Like these MP3s coming through the e-mail"* (in her choir activity). Sara said: *"I don't see these technologies as essential. Let's see, clearly if you have a mobile, if you use a computer and so on, you live better. You can say that. But I can be two weeks without connecting to Tuenti and nothing at all will happen."* These comments indicate an attitude of mild resistance to the idea of themselves as dependent on technology.

At the same time there was a common understanding in the three groups of the degree to which practices and technologies were becoming integrated into their lives. Terry for example said: *"it's almost part of the fabric of life now I think in many circumstances."* Virginia also identified this process of integration, which she described as dependency: *"I consider that part of my life. Sometimes you start to become dependent on the technology. I don't buy the newspaper more, it's better to read the news on the Internet."* Though the word dependent

was used, Virginia did not at that point elaborate on the idea. The fact that it had become part of her life was treated as neutral. Anne focused on the way a series of everyday literacy practices were now digitally mediated: *"I'm tending to do things online that are used to doing another way. I mean, and thinking about things like renewing the car tax..."*

These answers indicate that a range of literacy practices were becoming digitally mediated for these people and that this also involved changing understandings of the way they do literacy. At some points they described themselves as defined in terms of their status as users of the technologies. Irma: *"I can't imagine myself without the computer."* Or Jacqueline, with a slight tone of regret: *"in fact, I couldn't. It pains me to say it but I do need the Net... I don't have a television, I don't watch television. But if they take away the Internet, I don't know what I'll do. I have so many things there."* Others were more radical. Magali said: *"Internet occupies a large space in my life. These things are massively important. That's to say, I couldn't imagine my life without a mobile phone for example. If I didn't have e-mail, if I didn't have..."* Paloma: *"If they took it away, I would go crazy. It is a very important part of my life"* Rosa: *"I couldn't live anymore without my laptop".* Irma expressed almost total identification with her chosen tool: *"I am a Mac person".* A step further on was Barry who said that without his connection he would *"get the shakes. I feel exposed. I feel naked... it is a total integral part of me, yes".* Perhaps the calmest and clearest understanding of this kind of integration came from Ismael: *"I don't see any reason to turn the machine off in the whole day...I can't imagine my life without a computer, without Internet."*

While these comments may require a certain degree of interpretative license - there is after all a certain rhetorical flourish in the expression 'I couldn't live without it' - they do indicate an understanding of the use of the Net and the related technologies as part of life, something

deeply intertwined with everyday practices.

A related aspect was the sense that of the division between professional and personal uses as increasingly blurred. Though some, such as Paloma, saw a clear separation: *"When I am at work, I focus on that. But when, for example I am at home, it is all personal"* for many across the three groups the distinction between work (or school) use and personal use was harder to see. Anne for example, said: *"There is no major cut off between Monday to Friday and Saturdays and Sundays"*. Asked if she saw this as problematic she replied: *"I think it works both ways, I think it gives you flexibility. I have got a friend who lives up the coast... and she will sort of go on the website late at night and will email all her students at the end of the day and she likes that flexibility."* Rather than construing work as invading the personal space, the freedom to navigate in a more personally appropriate way between work and personal life is seen as positive. For Jacqueline it was the other way round, the personal moves in to the work space: *"I get to the office and switch on the computer and go online. The first thing I do is go online. Sometimes I organise my day first, but I don't always do. So, I go online and, generally, I start to look for things which interest me."* This is not simply avoiding work, since she also pointed out that she was thinking about getting the Office suite for her Mac computer *"so that it would be compatible at home with the office system."* Some personal practices took place in the physical work space and vice versa.

Those interviewed were advanced users of the Net who understood it as an integral or very important part of their personal and professional lives and practices. It is worth noting Ismael's description of his wife's view, he described her as an infrequent user and that while he saw no reason to switch off, she would say *"but I see no reason to turn it on, Ismael"*. This small vignette may be a microcosm of the digital divide between those individuals who have a virtual layer of

literacy practices integrated into their lives, and those for whom the digital remains a separate space. The implications of this will be discussed in Chapter 6.

5.3.2 Pattern ID2 – Understanding oneself

This next pattern within the section covering patterns relating to the "identity" question is closely related to the previous pattern. While the previous pattern is made up of codes that related to understandings of the degree of integration of the use of technology, this pattern groups codes relating to their understanding of the nature of their use of the technology. In other words, while the previous pattern focuses on the extent to which they see themselves as users, this pattern focuses on how they understand their identities as users.

Though at various points in the interviews, respondents expressed perplexities, confusion or mild resistance regarding different aspects of the digital. Despite this, one of the key elements in their descriptions of the nature of their use of these technologies was the idea of sophistication. As Alicia put it: *"I'm getting more and more sophisticated, even with the machines, and so on..."* She described a complex multitasking set of literacy practices: *"when I get to work the first thing I do is switch on the machine, connect to Internet, check my mail, both personal and work. Look at my to-do tasks. And while I'm doing some updates on my work, I'm also surfing, at the same time, on Internet checking software updates."* This is perhaps unsurprising, given that these were self-described advanced users of technology, and that is how they were selected for the interviews. There is however a common understanding of the progress they have made in integrating the digital into their lives. As Eduardo put it: *"you grow and soon you're using all the different stuff... So you made yourself reconstructed yourself and so it becomes something that has meaning"*. Eduardo also spoke with some pride of how other

workers would ask him for help. Many spoke of the time it had taken. Paloma spoke of her 20 years using these technologies, and Alicia spoke of the investment involved: *"I invest a lot of time in updating and on the hardware, because it is useful for my work too."* Or Ismael: *"and then, one fine day, I discovered Photoshop. And Photoshop changed my life completely, it was something I dedicated hundreds, maybe thousands, of hours of my life to at night."* The new identity as a user of these digitally mediated literacy practices is understood as valuable.

There is a sense of achievement in these accounts, accompanied by a sense of pleasure. Anne used the word *"geek"*, to describe herself and when asked about it (whether she saw herself as a computer buff) said *"I think the "buff" implies some expertise doesn't it... You know, I mean I think yes. I enjoy using it."* Barry talks of the fascination of computers and indeed of his initial resistance to the more user-friendly Internet interfaces when they came out *"I've got hairs on my chest, I use the heavy stuff, I don't need all this sissy stuff. I think it wasn't until Netscape came"*. The idea expressed was that to be a sophisticated Net user is to be in the vanguard of society. Though present in all the groups this notion was especially true for the Mexican participants, and more so among the workers in rural education. Rosa said for example: *"these are things that have arrived much later to México, though now they are fully present"*. As Barry put it *"You can't be turning back the clock"*. The change is seen as consolidated and permanent.

The sense of a history of use, of progress in learning about the tools and how to make the most of them was common to many. Barry's story went back furthest *"I used to travel the world with a little laptop and alligator clips. Go in hotel rooms, unscrew the telephone plug and use my alligator clips"*, and this pleasure in telling the story, in which his narrative indicates an understanding of himself as a sophisticated and experienced user is present in other accounts. Rosa described the first enormous PCs she saw: *"And yes, I saved up and bought mine. So that*

was since university. I am from the generation of 86...I graduated in 91 and already then I got my first precarious laptop." Her story was long and detailed, and clearly important to her sense of herself, personally and professionally.

The way in which the respondents understood themselves as sophisticated users for whom the digital, in different ways, is a clearly integrated part of their practice is perhaps best exemplified by Ismael and Virginia. Ismael described how over time he became a digital artist. *"I put together a series of images, which I didn't know were called digital art. And after about 10 years, I had about 10,000 images, I showed them, and somebody said to me, they're worth it, set up an exhibition. I chose 50 of those images, and I organised an exhibition. I sold all the work and it was really crazy!"* Virginia´s situation is perhaps less dramatic but perhaps more representative of the way in which digitally mediated literacy practices are becoming integrated into lives. She is a runner: *"...because as you know I like running. So that's where I get information about a whole load of things, both races and articles where they give advice about how to look after yourself, on what kind of shoe you should use, and all that kind of anything. So for me the Internet is a really really good tool. Because it allows me apart from investigating, and exploring the whole thing for learning, it's also like a market where you can socialise".*

These understandings of themselves as sophisticated users also have a connection to the critical understandings in relation to online social networking tools, mentioned in the ***Being Transparent*** pattern (Section 5.4.5). Rosa described herself as an *"observer"* of social networks, *"I participate but I can´t say I am a fan"*. Magali says in this context: *"I am excluded in the sense that my friends talk to me and they say 'Did you hear José, our friend from first-year secondary school, got put in jail?' 'No. How did you find out? Facebook. Everybody finds everything out on*

Facebook. And that excludes me a lot. But that's been my battle." But she sees herself as outside

that, as a different kind of user. For Eduardo it is similar: *"I started to explore them. But you find*

people are in an earlier period which you've already been through." A similar scepticism about

some more recently emerging tools is expressed by Gerald: *"He whistled out his iPhone … and*

he said 'Oh, here's the map of it, that's where it is.' Amazing but how often do you need it?"

These users understood themselves as placed at a certain distance from social media. As Basil

put it: *"the main thing I would think is I can't imagine anyone finding me at all interesting, but*

I would like to have the choice as to who I reveal even my most trivial facts about my life to".

And later: *"The first thing you get when you sign up is 'Do you want to become a part of us?".*

He positioned himself at a step beyond that kind of interaction, and was somewhat

unimpressed. This scepticism is discussed in more detail under Criticality patterns.

Three comments from different users help to sum up this pattern. The first comes from Alfredo

who said: *"these things don't form part of my style of using and surfing the net".* He was

referring to social media as well, but what is important in this comment are the words *"my*

style". These are particularly interesting, since they indicate an understanding that he had an

individual and personal way of integrating digitally mediated literacy practices into his life. This

way of doing literacy had become part of his "style". Irma made a similar observation when

talking about information on the Net: *"It's not trust in the net. It is trust in your own capacity*

to decide". This is a person who is confident in her own practices and her independence as a

user. The final comment comes from Carol and echoed again the idea of these users'

understandings of themselves as evolving users of the net: *"Websites are changing as my life*

changes, as my needs change, I guess." Though the self-description as tool-user was present,

the dominant understanding was of themselves as sophisticated people for whom digitally

mediated literacy practices formed an integral part of their collection of literacies, and of their idea of themselves.

5.3.3 Pattern ID3 - Presenting oneself

The next "identity" pattern groups codes that related to understandings of the ways the respondents saw themselves as active creators and managers of their identity, particularly in relation to their use of digital media. These practices relate to profile management, and the choices that the user makes with regard to the personal information they provide online. The respondents all expressed an understanding of themselves as cautious users who limit the ways in which they project their identity in digital contexts. I asked Gerald: "...*there is the increased accessibility, there is the increased communication. What is lost?*" The one word answer was "*Privacy*". Throughout the responses there was an understanding of themselves as people who valued their privacy.

I asked Eduardo "*So you maintain a very limited profile?*" The answer was: "*Yes. For identification, yes. I really don't put in all the data*". Similarly Alfredo said: "*No personal almost nothing. I have a couple of pictures of me, and I was thinking of taking them down. I haven't done it because I haven't had time.*" Barry: "*I am very careful about what I do and what I post and I don't really post pictures on Facebook*". Virginia also said: "*I try to be a little more reserved...Sometimes you see they ask you for your occupation, and I just say employee. I don't say if I do this or the other, just employee. For interests, I just say I like exercise. And that's all.*" These comments indicate a sense that part of their identity is better not disclosed, and an understanding of this social space as a public place where privacy must be guarded. However, Virginia did say her age, "*because those are the years I have lived and I am happy to show them*

off because I have lived them well." There is a sense that the truth of the data she provides is important and meaningful, but that it should be protected. The data provided, however limited is truthful data. None of the respondents mentioned the use of any kind of alternative or 'play' identities, however insignificant, in the interviews.

There is therefore an understanding of a need to limit the data, and non-disclosure was understood as the simplest and safest strategy, though at times this was tempered by the admission that time was the main obstacle to more extensive management of the online profile projected, as seen above with Alfredo, or in the case of Rosa. As Anne put it when asked if she consciously managed her identity, *"Only in the most basic way".*

In cases where the users were providing more information, a clear separation was made between the information that they provided about their interests (relating to their identities as members of different interest groups) and basic personal data. The attitude that *"my friends already know me"* expressed by Irma was in many cases the kind of justification provided. Others, such as Alicia, limited the identity they projected to questions of taste *"music, I don't worry about that, putting my favourite films there".* A pattern emerged in which the online identity projected served to provide sufficient information, but no more than that. The relevance of the online identity, and its correspondence to offline identity was limited.

Another important aspect was the differentiation made by many across the groups between the value of one's identity and the value of a profile in a social network, which for Alfredo in Mexico *"isn't part of the way I live on the Net",* or as Sara in Spain said: *"If you don't have it (the profile) you are out, but I don't get much out of it, it's not me".* Peer pressure was also mentioned by Alicia as the reason for providing information. However the idea of having a substantial presence online through a profile was commonly understood as *"not me",* and

where it was necessary, it was as Paloma put it: "*I am very careful about who I accept of my friends and who I don't. And also for information, it's the same. I use all the security applications. You just use them and no more. I don't put my phone number either, just basic things.*"

This understanding of the self as private was informed by a range of different reasons for caution. Several pointed out that they had nothing to hide. Alicia: "*I am not worried about the fact that someone might find out. I have nothing to hide*". But other comments covered many different possibilities. For Basil, there was a basic personal issue, related to his sense of himself as a private individual "*I am just not someone who goes around shouting about what I want*", or Sara's flat rejection: "*I don't upload photos of any kind. I just don't want to.*" which in itself was reserved due to the lack of explanation. For others there was a rejection of the assumption of the need for transparency (Barry: "*People expect transparency*") Irma said clearly "*I don't like that transparency*" and Eduardo: "*I don't want to be that public*" and made it clear that he didn't identify with some of the more transparent behaviour in social networks: "*...for example in hi5 they post pictures of themselves in the mirror. I do not see the point in that. I think those young people enjoy it a lot, but I see it is very hedonist.*" Magali focused on the value of face to face contact: "*...it is one of the things on Facebook that I don't like, that unsettles me. Like in future generations I don't know what will happen if there isn't that limit between the technological and the human.*" As seen earlier, and later in the section on criticality patterns, there is an understanding of a difference between being a user of digital technologies and being a user of social networking tools such as Facebook.

Another set of concerns related to the kind of people one might encounter. Rosa spoke of someone she had known at school who wanted to be a friend on Facebook but was now

interested in criminology and involved in *"the most sordid things...I have no interest in filling my life with or opening it up to that kind of people"*. She also focused on what could happen to one´s information *"a photo can circulate and they lose, shall we say control at some point of the information which in this system is exponential."*

The reservations also extended to unknown third parties, a group that includes governments and commercial organisations. Alicia: *"I feel that this information, finally, for someone in some place in the world who might have power, or whatever, it is valuable information"* or Gerald: *"and the other issue about online here of course is the marketing elements within Google, things like this, where you could be, if you show an interest in certain areas of retail or whatever, they could target you for advertising."* Barry described it as *"Big Brother"*: *"It´s phishing in a different sense. You know, phishing for your account number. They´re phishing for your address book and that´s pretty scary"*. However despite these critiques, there was a lack of urgency, the fears translate into the kind of limited action described above, which appears to be understood as more or less sufficient. Alicia on her use of the security settings says: *"I only do it when it is very necessary."* However, despite this, the understanding of a need for trust that may be lacking was mentioned by many. As Mabel puts it: *"How much trust do we have to put personal information there?"* These results indicate an understanding among these users of a distinction between their own digitally mediated literacy practices and those of users of social networks. They also clearly understood themselves as valuing their privacy and were cautious about disclosing too much online

5.3.4 Pattern ID4 – Observing others

The next pattern that relates to the "identity" research question groups codes relating to

understandings of the behaviour of others. As previously mentioned, these users, as well as thinking about their own activity, observed the activities of others, and their observations gave rise to a range of comments that were revealing of their own understandings of practices in a digital context. Rosa said: *"I very much enjoy exploring what my friends upload, games, things that are often very amusing."* Jacqueline described her initial exploration of Facebook: *"I found out about the lives of many people. I spent hours on the computer and to me it was a waste of time."* Rosa commented elsewhere on the issue of time spent doing this, and Sara also commented on her sister's use of Tuenti: *"'She spent hours chatting, looking at other people's pages that she didn't even know"* and commented that she didn't see the value in that. Jacqueline mentioned how a friend corroborated her view: *"In fact yesterday my roommate was very happy because she finally left Farmville. She even told me to congratulate her, because she'd wasted a lot of time."*

There were other observations about this kind of activity. Rosa noted that the information provided and its availability to others is arguably even greater than is possible in offline contexts. Her description of the *"double life"* of some her friends is a case of this, in which she described these friends as making the most of the possibilities to express their identities as gay people in ways that were unavailable to them in current offline Mexican society. However, she saw this, though potentially liberating, more as a concern: *"in my way of thinking, people I think go too far putting all their private information within the reach of others... And I have distrust of how people, at least here in México, expose themselves completely, they exhibit themselves on Facebook."* Though this might be seen as age-related, this perception was present in all the groups and there was a common understanding that gave rise to the projection of partial, or restricted identities. Sara: *"I would never reveal myself in that way"*. This was a common

concern. Eduardo spoke about narcissism: "*The me culture, now digital*", and Rosa even described it as neurotic: "*in the sense that they find a great release there. And on the one hand it seems incredible, and I have to respect that, it also seems very dangerous.*" Virginia talked about the crazy people you can find online, and expressed concern about this: "*you might be talking to someone and you find out it is a child. I bumped into two kids of nine years old online*". These concerns all have in common a sense of the difficulty of trust in activities in the digital sphere. Magali spoke of a friend who works as a psychoanalyst and charges for therapy in the virtual world Second Life: "*so I say to her: 'So you do psychoanalysis? What psychoanalysis can you do if you don't know the person who's on the other side is who they say they are?' and she says 'No, but there's a lot to analyse because the lie has a lot of content" and I say 'and they pay for that?' And to me that is something really distressing.*" Whether or not psychoanalysis can be carried out in a virtual world is a different debate, but what is interesting here is the importance Magali ascribes to the issue of trust, which she understands as central to online interactions.

The different concerns expressed were given a variety of explanations. Irma, for example, described her sister's use: "*my sister, who is an adolescent, no longer goes to books to find information when she is given homework, instead she goes to the Internet. And then it's like saying: 'That's not true. Or, that is, but that isn't', you need to have some kind of parameter in order to... and I don't think she does, and that's my worry.*" This vision of others as careless or unaware users was also expressed by Anne, speaking of privacy settings on Facebook: "*I think you have to be aware of that don't you? And I suspect a lot of people aren't aware.*" Rosa was of a similar view: "*Many people of 40 years and over, even though they are on Facebook, don't seem to notice that they're making public a whole load of things as if it were their desktop, and*

it's not their desktop."

Other people were also seen as affecting the respondent's own online presence. Peer pressure to be online was mentioned in all the groups. Sara for example said she started using Tuenti because her friends all insisted. Alicia spoke of the pressure to widen her circle of online friends. Ismael, who, though careful with his privacy, maintained a continuous presence in his online digital art groups, spoke of the group pressure on Flickr: *"There's a kind of community of popularity between the users. It's clear that if in a month you don't upload any photos, then you lose, shall we say, contact, with the rhythm that you'd maintained. It is not serious, but well, I try not to switch off the machine."* For other users the habits and understandings of others affected their own online practice. Basil spoke of wanting to use Skype: *"Skype is invaluable. I don't use Skype personally, but that reflects the family and the attitude of my family … I haven't yet managed to sell it to either my sisters or to my parents in law."* Anne also spoke of social relationships as mediated to different degrees by technology use: *"I use phone or email depending on the people and the speed with which they reply"* and Carol spoke of having three different email addresses for her different social groups (family, one set of friends and another set of friends) who she emphasised probably wouldn't particularly want to know each other. Despite their sense that others were less capable users, and their concerns about those uses, they understood themselves as affected to a degree by others' practices. And there was a sense among some of a lack of control in this respect. As Virginia put it, when asked how she distinguished between those who might be excellent people and the crazy ones: *"Well I think it's luck."* This awareness of the need for control was a thread that ran though many interviews. These users expressed their own need for control, particularly of the extent to which they disclosed aspects of their identity, and of a certain lack of control they perceived in

others

5.3.5. Pattern ID5 - Participating

The last pattern relating to the "identity" question, was made up of codes relating to how to participate in online literacy practices, particularly in social networks. As might be expected from the caution I have described previously, one common understanding was that it was better simply to avoid participation, and many felt very distanced from this kind of practice. Terry: *"I'm not really interested in that side of things actually"*. Irma: *"My friends say check it out. We're on Facebook. You've got to be there. I say no. I just can't."* and Magali was equally unwilling, despite a lot of peer pressure.

Others had dabbled, but as yet did not see themselves as comfortable; as Carol said: *"I joined Facebook but I came off it. I joined it to get access to the wedding photographs of our first son ... so I downloaded lots and then I promptly stopped, cancelled my Facebook membership because it was getting embarrassing."* Her embarrassment related to the large number of friend requests she had received. Others were thinking about it, Gerald said: *"I've been invited. On various occasions friends of ours...have invited me to join Facebook, things like that and I've not yet responded to any. I might say yes, but I have not been under Facebook at all, unless it's been coincidental looking at camera work when somebody has given an address on Facebook to look at photographs."*

Another variant found across the groups was to have a presence on the social networks but to limit it considerably, partly due to time constraints. Barry for example was one: *"So, I think people see me as a very rude user of that, because I get messages on Facebook and I don't answer them for ages and ages."* Rosa mentioned a similar issue: *"My friends complain. In fact,*

one friend I have says 'Why do you come on so rarely?' because for them two weeks can be a very long time. And they tell me off and everything. I don't have as much time to be coming on." In these cases there is an awareness of pressure from their social groups to be more present. The reason given was time, but other critiques made by these users indicated perhaps that a minimal presence might be a way of managing this, though they did not at heart see themselves as users of this kind of social network.

The third variant was a slightly more active presence, such as that of Paloma or Jacqueline, but again with reservations. Jacqueline said: *"I have Facebook, but I hardly go on and I don't upload... I have uploaded very few photos and I'm not in the few that I have uploaded, except for one very nice journey I did to the desert which I did want to share with people. And I just uploaded the photos there and that was it. But no, not me, generally I'm not on Facebook."* The more continuous use that might be seen as typical of these sites was not common.

There is therefore a pattern of participation across the three groups that is a little unexpected, given the apparent popularity of these networks. There is an understanding of the limitations and risks of social networking platforms and of oneself as not necessarily part of this boom, though all had their own social networks. Basil made some apposite comments in this regard. He described himself as *"not an enthusiastic networker...I was always one who had a few good friends and we tended to stay aloof from the gangs and that has gone on through life."* Perhaps understandably, given this understanding of himself and his interactions, Basil said: *"I have tried Facebook and other social networking tools. It's not something that I have got greatly into for my own use, but I do have quite a good social network which is based on sending jokes around by email with old friends sort of thing and that's the basis."*

5.3.6 Concluding remarks on patterns relating to identity

The patterns relating to identity issues group the codes into five areas. The first, **Integrating**

Practices, groups codes that referred to how digitally mediated literacy practices were

becoming or had already become part of the participant's collection for literacy practices. The

second, **Understanding Oneself**, groups codes that referred to the ways in which their

identities were understood as related to these practices. The codes in the third pattern

Presenting Oneself related to understandings of how best to project one's identity online. The

last two **Observing Others** and **Participating** grouped codes relating to understanding of the

individual's relations with others, in the former case contrasting the behaviour of others with

one's own and in the latter focussing on understandings of the issue of participating with others

in online contexts. From the analysis of these patterns I have identified a series of

commonalities in these participants' understandings which, though they have received some

mention in the discussion of the patterns, are examined in more detail in Chapter 6: Findings.

5.4 PATTERNS RELATING TO CRITICALITY

First a reminder of the relevant research question:

What commonalities can be identified, across culturally diverse groups, among advanced users

of digital technologies, in relation to their critical understandings of their literacy practices, the

contexts in which these take place, and the ways in which they structure and manage these

practices in order to make sense of the contexts they inhabit?

This section focuses on the patterns that emerged in relation to this research question, which

focused on criticality. Some of the issues involved related to awareness of risks, and the degree

to which this remained a passive awareness, or action was taken in some way, such as for

example in the choice of channels and tools. Codes that related to these issues were grouped into two patterns, the first of which I called *Evaluating Risks*, and the second *Choosing Channels and Tools*. Another pattern of codes related to contentment with the affordances of digital media, linked to comments that indicated a strong degree of optimism, though frequently tempered by a degree of self-criticism. I called this pattern *Accentuating the Positive*. This optimism contrasted with codes that referred to strongly critical understandings in relation to their sense of themselves as information literate, and their views in relation to the prevailing culture of transparency particularly in social media use and these were grouped into two patterns, one of which I called *Being Information Literate* and the other *Being Transparent.*

5.4.1 Pattern CR1 - Evaluating risks

The first "criticality" pattern grouped codes related to the idea that certain practices may constitute a risk either from a data security or a safety point of view. The practices that were particularly focused on in all the groups included banking online, and the posting of personal information in profiles in social media.

While all groups shared the overall sense of risk, a range of different kinds of risk were understood to be present, ranging from risks to personal safety to data security risks. At one extreme was the real physical danger mentioned by Rosa and Alfredo of personal information posted online being used to identify targets for kidnapping (this is a problem in Mexico, but cases of abuse of Facebook information, stalking and even murder in other countries were also mentioned). At the other was the risk of one's data being used to target spam, or other commercial uses of the information (Alicia, Virginia, Eduardo, Rosa). In other cases the fears

were less clearly identified. For example Mabel *"it makes me a little insecure to imagine someone can see what I am doing, or my plans...or I don't know"*, or Sara *"I don't really know what people could do with these data and so on"*.

This lack of definition, or clear awareness, of the risks was common to all the groups, and is perhaps best represented by this comment by Alicia *"I am worried about banking on the internet...the security of the transactions. I do it but it worries me"*. This could be described as 'distant concern' in which there is an awareness of a risk, but it is insufficient to affect the practice substantially. Magali said *"It has crossed my mind that it might be unsafe"*. There is a certain passive fatalism in this pattern of understanding, as Sara put it *" Internet has its dangers, let's say...but I think if you know how to use it right...because having an account and putting your photos on it I don't see anything bad in that. But then, I don't know."*

The sense of risk was understood to be best addressed, as seen earlier in relation to caution regarding online identities, by a mildly 'tactical' approach. Alfredo, speaking about the difficulties involved with privacy of data: *"It annoys me but I accept it. And I take precautions."* Most described precautions as part of their practice. However, Virginia's comment was apposite: *"It worries me but it don't do anything about it. I don't say -'Hey! Who gave you my address?"*

This was related to a sense of lack of control, and slight foreboding. For example Alicia: *"I feel monitored at times. I do feel as if anything I put up on the Net can be hacked, it can be put in a global database of something that might be used for other purposes. That danger I see is always there, latent, but up to now..."* Virginia described going onto sports sites and then receiving publicity from others and at first thinking *"how great to find out about that. But somebody misused my mail address....I have certain fears in that respect."* These fears, mostly

not clearly expressed, were often accompanied by an insistence on having nothing to hide, but at the same time, as Basil put it: *"the main thing I would think is I can't imagine anyone finding me at all interesting, but I would like to have the choice as to who I reveal even my, the most trivial facts about my life to."*

The comments often focused on the role of third parties in the encroachment on personal freedoms. In part this involved the commercial role of corporations, as previously mentioned. Eduardo commented on how the text space on the web is decreasing to make space for publicity, but others referred to more directly political concerns. Magali: *"The idea that the government can limit in some way what I can see seems very, very serious. I say we are living a lie. It is terrible."*, and there was a general sense of mistrust. For example Irma *"not all the information they present to you there is true"*, Eduardo *"I gave my data in a couple of places and now I get all kinds of messages. And that's why I don't use money, I don't do it and I don't intend to"*. It extended to friends of friends, leading for example to not trusting a group with private information, and even to the people one is talking to directly, as Virginia said *"Sometimes I think how true is what they are saying or how do I know what the person I am talking to is saying is true?"* The concern about third parties therefore was not simply related to the large concerns, but also simply to those individuals who were not part of what individuals understood as part of their circle of trust.

In response to this diffuse sense of lack of control and other unclearly defined risks, there was a range of understanding present in each group as to how best to deal with them. One was abstention, where users simply did not engage in practices they considered to be risky, and therefore did not for example use online banking services. Another common approach was to view the risks as manageable as long as care was taken. This often involved more explicit

evaluation of the degree of risk. Anne focused on the reliability of systems "*I think you've got to be aware and I used to have a spam filter called pop file which sort of codes your incoming emails by vocabulary and it was working fine and then it went wrong, so I've had to disable it and then since then I've had to sort of tweak the other filter on the email...It's just being aware isn't it?*"

Awareness of the risks is part of the issue, as Barry noted "*When you speak to the technologists they say, 'Well, you can put all these walls in to protect it,' but these people don't understand that. There are people who open the front door without putting the chain on the lock.*" However in addition to this (Barry again) "*Most of us are not very good at calculating the kinds of risk even with face to face contact.*" In addition to the idea of inappropriate evaluation of risks, this kind of comment is representative of a common understanding that others were at risk due to their practices. Rosa expressed concern at how some people's use of their Facebook profile is "*innocent*", or "*totally predictable*", and Mabel focused on children's similar risky use.

These common understandings involve a range of positions, from mature and aware practice in relation to risks, ranging to indeterminate fears and risky practices and this range was present across the three groups of respondents.

5.4.2 Pattern CR2 – Choosing channels and tools

The second "criticality" pattern contained codes related to the choices of channels and tools made by the users, and their understandings of their reasons for these choices. Tool and channel selection were generally described as conscious practices, and this selection was frequently described as preceded by a pattern involving the importance of habitual exploration of tools and channels with a view to their possible use, especially following the

recommendations of others. This had the consequent result that they might be registered users of a range of tools and channels without actually using them. Irma, for example, specifically mentioned unused accounts in three social networks she had explored, and this was a common occurrence among the respondents. There is a sense of continuous choices being made.

The range of tools and channels available for literacy use is clearly widening, and there was a pattern of usage of multiple tools and sources, none of which were seen as unavailable to any particular group. Indeed this was specifically mentioned by Basil: *"what we don't want to do is, if you like, imply that there's an oldies ghetto, the sort of sites specifically for the over 50s or for seniors and so forth and not something that I like particularly and so why shouldn't older people use Facebook?"*

This usage of a range of tools was also frequently part of a pattern of choice of channel and tool that depended on interlocutors. Basil described a specific group of friends who use email to stay in touch, principally by sharing jokes, and found no use for example for Facebook because *"none of the people that I network with use it themselves. So, it's not an obvious channel to interact with these people".* Magali's resistance to Facebook was a part of a pattern others described, in which the risks perceived, as described earlier, affect channel choices. The non-use of online banking or Terry or Basil's non-use of Facebook were critical choices that fitted a tactical approach. They did not attempt to navigate the use of a particular channel to avoid risk, but abstained.

Another common practice that emerged in contrast to the use of multiple channels was a tendency to look to simplify matters by centralizing one's online practices into one tool or channel as much as possible. This was in tension with the contrasting pattern of continuous choice. Rosa, for example: *"in my email I bring together my whole personal space, all my studies*

and some of my work. In the end these are the indispensable things from my point of view" This in some cases went further into a pattern of identification. Paloma focused her activity on her Facebook account *"I only have my account on Face, in Twitter I am just a kind of...well, now I am (a user) of that channel exclusively. But I had to register on Twitter to see how it worked."* Irma, as mentioned under **Integrating Practices**, said *"I am a Mac person"*. This close identification with the tool, or maker of it, also related to identity issues.

The tendency for simplification was frequently present across the groups in relation to channel and tool choice. Though some choices reflect risk-related concerns, others relate to the type of information being explored (further discussed in relation to the information literacy patterns later) and others were affected by relationships, perhaps the key question was ease of use. Alfredo preferred Hi5 because it was *"easier"* than Facebook. Zacarias didn't use the company messaging tool because in his view, if he needed an answer he could just go and ask the person, or if they were in another state, he could phone them. Basil also pointed to the problem of updates as a reason why he stuck with a particular tool: *"I think one problem with a lot of technology, well with a lot of applications...a lot of websites is that they are constantly changing and therefore you've got a constant effort to keep up with them. So, unless you've got a big motivation to do that you'll say, 'Blow it, why bother."* In relation to this Anne pointed out that *"There are things that I've used in the past that I felt were a bit clunky and I haven't persevered with them."* Within this statement, and others relating to the pattern of selecting easy tools and channels, as in the discussion of risk, there was a recurring tension between convenience and critical positions that appears in the next pattern as well.

5.4.3 Pattern CR3 – Accentuating the positive

Within the group of patterns related to the "criticality" question, there was a set of codes that involved highly positive understandings. In this pattern there is almost an active rejection of any kind of critical standpoint, such as Barry's *"I know there's a lot of resistance to Google saying Google's taken over my life, but I've reached the stage I don't care. They've got me sussed, they've got what I need"*. This statement is almost a belligerent defence of the right not to worry. There was often a refusal of this kind, Anne: *"Anyone can take advantage of me. I'm sure they have all my life, but it hasn't killed me yet and I don't see people coming and I'm certainly not going to be aware of all the dangers and if I worried about that sort of thing, I wouldn't get up in the morning".* Gerald said *"if I had diabetes for the sake of argument, which I don't, but the fact that Fred somewhere else might find out I've got diabetes, I wouldn't be necessarily bothered about that."*

The pattern ranges from a focus on convenience, such as Basil speaking about online practices: *"So, that sort of thing makes life a lot easier. The transaction side, yes, it is far better to be able to go onto a website and renew your car licence or whatever."* to more profound benefits of the integration of digitally mediated literacy practices into the user's lives. Carol for example noted that *"The internet is a boon to these loners or strange people who can't form relationships otherwise"* and *"A lot of people have generated income for themselves through the internet and a lot of people generate a life for themselves, especially-, all the widows, people my age".* Others exhibited similar enthusiasm, Magali for example: *"I am in love with my laptop, I take it everywhere. I bought a little one that fits in my bag, and it is sensational to have it"* or Rosa *"Or all of a sudden you come across something, a site that totally seduces you"* There was a strong sense of the excitement of exploration. Paloma. *"I love the technology, and learning new things,*

in other words investigating what is new, it is great!"

A comment made by Gerald illustrated an important element of this pattern: *"Well, so far, because I haven't had any bad experiences, I'm prepared to trust."* There is a sense in which this very positive and enthusiastic pattern of understanding of the new literacy practices that they participate in seemed to allow these users to justify to themselves their capacity to simply ignore to a large extent the risks. However at the same time these risks for many seemed somewhat abstract, and the degree of integration into their literacy practices of these technologies is evident in the many comments in which the different nature of the digital is played down. They frequently saw themselves as used to the digital sphere, and therefore, like adults, able to cope with the risks. As Terry put it: *"...personally I've been doing banking and buying things online really since the word go and I mean I've never had any problems at all. I think it's more dangerous going to a cashpoint and taking out cash than it is doing stuff online. So, I kind of look at it in those terms",* and for him, as for others, the benefits far outweighed the risks: *"It's almost part of the fabric of life now I think in many instances. I think because I do enjoy it I get a lot out of it. If it all sort of ceased to exist, I think I would not exactly be unhappy, but I like the sort of digital world."*

However, accompanying this there were explicit critique of different aspects of online practices. These were sometimes self–criticisms, such as Anne's feeling that Facebook might be *"useful if she just put more life into it."* or Gerald's awareness that he shouldn't really use Amazon because *"my son used to work for Waterstones so we're supposed to have some sort of loyalty. Also I have friends in Bedford who work in Waterstones and things like that and actually we're quite conscious of the need of local business".* Or, for others a feeling that they might be too absorbed at times. Ismael said *"my use may be excessive perhaps, but I don't*

know how to measure what is excessive" and Rosa *"I spend a long time looking at the messages and stuff that people send. And I´d be a liar if I told you that it is just to analyse it. It draws you in. A Facebook profile is seductive."*

More frequently there was a questioning of assumptions relating to the online context. Barry: *"You can imagine them all sitting out there in the chocolate factory and saying, 'Oh man, won't this be cool, won't it be great, we'd love to do that,' and not realize that there are millions of people out there who do not think like that."* Another (Ismael) addressed the idea of "digital" literacy; *"I don´t see such a big difference between illiteracy on paper and illiteracy online"* giving the example of a student who was unable to use a dictionary. These understandings, both of their own practices, those of others and the digital context indicated a capacity for reflection about their practice that can perhaps be said to characterise these advanced users.

5.4.4 Pattern CR4 - Being information literate

The next "criticality" pattern grouped codes relating to the respondents´ understandings of their relationship with information, both in terms of the sources they used, and the degree to which they considered themselves sophisticated in their information search behaviours. The idea of information literacy covers the range of skills involved in finding and filtering information and its interpretation, and the set of codes that made up this pattern focussed on the comments made in relation to awareness of these issues and the degree to which they considered themselves conscious and critical users.

A key element was the idea of the Net as the central source for information; *"an inexhaustible source"* (Eduardo). As Basil put it, it *"is certainly the place I would go for information. I wouldn´t use a library. It is an awfully long time since I have been in a library, despite the fact that that*

is my background, because the information is there on the web". Ismael understood his relationship to information to be changed due to the potential of digital sources: *"from a young age I mostly read magazines more or less, and some books. And this, well, it opened up a whole world of cross-references and bridges, and hypertexts. It really changed things"*. The Net was felt to be the natural first place to go for information; Eduardo: *"So suddenly my Mum says 'Hey I would like to know more about the Mayan prophecies'. And so then I am downloading videos of Mayan prophecies... I have helped out my Mum a lot in this way. But sometimes you put 'Saint Mathew'. And you download that. I now put three options almost always because two are pornographic. And they say Saint Mathew"*. There was an understanding here of himself as a skilled tactical user, capable of avoiding the pitfalls involved and capable of identifying the right information for his mother. This confidence in a personal capacity to deal with information tactically appeared in many cases, not just in information search but also in its use. Gerald expressed a certain quiet pride in his capacity to search and compare in order to make purchases on the Net. *"Purchases, yes, because I use eBay, I even bought a cooker off eBay last year"* and for protection of information; Irma described her habit of fragmenting personal information, for example when sending data for a bank deposit to her sister, across several emails to avoid its interception.

This understanding of their relationship with information as tactical was common to all the groups, though more frequent among adult respondents. Filtering as part of the search process was common. Irma described her initial scepticism and how for some time she had stuck to libraries and how that had become an awareness, over time, of the need to filter and select: *"So, how do you work out how to distinguish? You have to do an analysis of what you find in Internet. "* She described this as a *"more assertive use of the information you find on the Net"*.

Barry too emphasised his awareness of the need to *"dig deeper. You can't trust it is going to be in there... if it is something that I really want to know deeply then I've got to spend time on it."*

This assertive attitude, an understanding of the Internet as source rather than solution, was however contrasted by other attitudes. Carol said *"I am learning quite quickly to sieve through things that are relevant or not. I get impatient. I want it done quickly."* While she sees herself as a filterer of information, there is a sense here of rapid fixes. Though common to all this was a little more prevalent among the younger respondents, where in some cases, such as Patricio, the Net was seen as a quick solution. *"I use Google...you put the name ...and then you write it on a piece of paper and hand it in".* This uncritical attitude in relation to the information found was commented on in all the groups as one that was perceived as especially prevalent among younger users. Ismael told an illustrative story of a boy who used Google well but had no idea how to use a conventional dictionary. The criticism was not limited just to older users, others from the younger group, such as Sara, made pertinent comments about the way information found in Internet is dealt with in schoolwork. *"The thing is, really, there isn't much point to it. Because people practically copy... I don't know. They asked us to do blogs. And so they copy the blogs. They copy and paste it from internet".* While the kind of information search activity proposed in the classroom is perhaps at fault here, (and the behaviour is tactical insofar as it is a pragmatic response to a task set by the teacher) the lack of a critical attitude to this kind of work was understood as problematic.

Within the different understandings expressed in relation to this there is a tension between an understanding of the Net as a source of information which may need further processing, and the Net as the direct provider of information solutions. Understandings of the nature of the Net in this respect also varied while some referred exclusively to Google, others had a set of

trusted sources they used frequently, a kind of permanent filter, which they understood as appropriate to them. Virginia, describing her selection of sources said of those she did not select *"There is no chemistry between that site and me"*. This way of looking at the issue points to the idea that trusted sites have a relation to how this user saw herself. This has links to self-perception as a certain kind of user, and a critical attitude to different sites that, though related to other aspects too, such as risk and the degree of trustworthiness of the information source, also links back to the user's understanding of herself as a sophisticated user.

The critical attitude to sites on the Net also extended to the Net itself as the place to go. Irma's initial preference for libraries is an example, and others also had found the Net incomplete. Jacqueline in her study of Reiki had found the Net limited when she looked for more complex material. When she was writing her first Reiki Manual she had found it useful but then *"it hasn't worked as well."* Terry felt that much of the information on the Net could be questionable; *"obviously anybody can put something on the Internet at virtually no cost. Whereas if you are going to write a book and have it published, it takes a bit more, it takes a bit longer and a bit more involved."*

Another aspect that related to information literacy was the creation of information. As mentioned earlier in the Changing Practices section, though some referred to information search in relation to the creation of articles they did not focus on this and did not seem to understand themselves as creators. For the majority of those interviewed their understanding of themselves was as users of information, some with a good degree of critical awareness, others less so.

5.4.5 Pattern CR5 – Being transparent

The penultimate "criticality" pattern grouped codes that related to understandings of practices relating to social media. Most of the participants in the interviews described themselves as familiar with social media. Most had accounts on sites like Facebook, hi5, or Tuenti. However they did not see themselves as avid users of these sites and a variety of questions were raised about the social web and its implications. Given the apparent ubiquity of social media on the web this might seem surprising, however one of the most salient attitudes among the respondents was the sense that they did not share the assumptions about the need to be fully engaged with social media that are currently common currency in society. As Alicia put it: *"I've had to accept people with whom I don't want contact because it is politically correct"*. Barry was also critical about the expectations of others regarding engagement with social media: *"People expect that, yes. You know, they're suddenly in your living room. It's like 'you were never in my living room when I knew you, so now 30 years have gone by, so why should I now?"* Anne was critical of the idea expressed by a Google executive, when Buzz was launched, that if you don't want to be transparent you have probably got something to hide, describing it as *"arrogant."* Sara, talking about her mother: *"she always says 'show me your Tuenti page' and I don't show it. But really, I don't have anything on my Tuenti page that could compromise me or anything like that. I don't upload photos of any kind. I just don't want to."* Exploring this further, she made the comment that *"privacy is not about hiding things"*, which indicates a more complex understanding of the nature of privacy than a simple question of self-disclosure or not.

Many comments across the groups relating to critical understandings of transparency and social media were about the behaviour of others. Basil, speaking about his reservations, said:

"*well, not just privacy but rather the ease with which you can find yourself looking at information about people that you might find embarrassing*". Rosa talked about "*a dangerous exhibitionism*", and Eduardo talked about the "*culture of me*". Irma questioned the assumption that all my friends should have the same degree of information: "*why should my friends know my situation with other friends?*" and mentioned a case of online stalking she had suffered. However for many the attitude to the transparency of others was mild perplexity or amusement. Carol was "*aware of a conversation between my daughter-in-law and my son-in-law. It was very funny. My daughter-in-law bleating on Facebook*", and a sense of understanding themselves as more reserved. Virginia said: "*maybe there are some who prefer to manage their social relations in that way but some are too honest... And you can take the risk of saying to yourself 'well, I will add him, I'll treat him as a crazy friend'*". Magali talked about her brother who she felt had got "*so far in to new technologies that I think he's lost his own individuality a bit*" and in relation to this said she felt "*they get too much into your private life. And I feel there is no limit.*"

Despite this critical understanding of the movement towards transparency as something that they did not value or feel part of, most participants understood themselves as capable of managing this aspect of their lives and discussed how they limited the degree to which they shared information in these spaces. Magali said "*where I am cautious is in the part where people are talking about me as Magali who works in that place and who has her boyfriend and lives in Mexico City. I really don´t like that. But I do like going to blogs, for example, where you can share music, or writing. That kind of thing. So I do share to a certain extent.*" Irma discussed her management of the network, and how she kept control of the groups of friends: "*I have friends who are friends of friends of friends. In other words we don't have anything to do with*

the friend who originally presented us" and pointed out that she does not share because her understanding is that *"those who are my friends know what I like".* Alicia understood her friendships as necessarily offline first and online second: *"There are people I knew years ago, perhaps, and I don´t accept them. I no longer have physical contact with them, and so I say no.... I don´t socialise with people I don´t also know offline."*

In many interviews a common element was the respondents' understanding of the communication on social media as banal. Carol described it as *"Tittle tattle".* Sara talked about people who *"have it open to everybody, and everybody can see the photos, everybody can see their commentaries and maybe there are people who are so bored that they do that... I don't know. I don't understand that."* Alfredo's comment: *"I'll use them... I only open to, well to... when I have got nothing better to do"* illustrated an understanding of himself as a peripheral user of social media, which Rosa described as *"I live it because I have for example a Facebook page, but I live it from the sidelines. I am not so involved".* Magali similarly didn't use them much because *"I would waste a lot of time".* Sara also saw herself as less committed than others: *"So I ended up getting a Tuenti page due to social pressure, I admit".* Eduardo: *"I began to explore them. But you find people are in a period I have already gone through...the people you find on social networks are younger, and they have a different idea of use of technology which basically is no more than publishing photos of themselves".* These interviews focused on advanced users of the technologies within an extensive degree of integration of technologies in their lives that can be described as mature. Their critical understandings of the limited value of social media for them as advanced and as we have seen, sophisticated, users and the selective nature of their use of it contrasts quite strongly with other visions of the digital world based on data about the numbers of people using Facebook. Perhaps the most radical

understanding was expressed by Ismael: *"this same illiteracy is there on screen in the maelstrom of scrap e-mails, Facebook and the thousands of supposedly social networks or banal social networks"*. Ismael implies that literacy in a digital world is more than mere use of the technology, the nature of the use is important, and this use should have a critical element. This is a challenging understanding that will be discussed further in the Conclusions section.

5.4.6 Concluding remarks on patterns relating to criticality

The patterns relating to criticality issues group the codes into five areas. The first, *Evaluating Risks*, brings together codes relating to interpretation of the digital environment and the risks it may pose. The second, *Choosing Channels and Tools*, groups codes referring to the ways in which the critical understandings of the risk affected their understandings of which tools and channels to use to navigate and communicate within the digital context. The codes in the third pattern *Accentuating the Positive* related to less critical and even optimistic understandings. In the penultimate pattern, *Being Information Literate* the focus of the codes was on understandings of the relation to information and interpretation, of information and its sources, and these had a strong relation with the understandings about the self as sophisticated mentioned under identity. The final pattern, *Being Transparent,* also had strong linkage to understandings around identity, as the codes related to critical understandings around the culture of transparency. Throughout these patterns there were coexisting commonalities across the groups that can be seen as contradictory and these tensions will be explored in Chapter 6: Findings, along with the other commonalities identified.

6. FINDINGS

6.1 INTRODUCTION

As described in Chapter 4.3.3, the analysis of the data collected generated a series of patterns which I have described in Chapter 5. These patterns are present in all the three contexts in which I collected data. As I have emphasised, the focus of the work was on understandings that are shared by all three groups. Though differences also emerged these were not explored or analysed. Though they would of course constitute interesting subject matter for a wider study, they fall outside the scope of this particular research.

The patterns described in Chapter 5 are, as I mentioned in Chapter 4, second cycle groupings of the codes, which I have described as *"patterns"* after Saldaña (2009, p.152), who also uses the term *"commonality"*. Given that the aim of this work was to identify commonalities in understandings across the three groups, these patterns are in themselves of interest, and, in my view constitute a possible framework for further exploration of understandings of literacy in a digital world. I intend to explore the possibility of developing this framework and using it as the basis for further work. However, emerging from my analysis of the set of patterns, as can perhaps be seen from the discussion in the previous chapter, there is a range of important insights about changing understandings of literacy in a digitally mediated world that constitute answers to my research questions (see Section 1.4, page 30). These insights can be understood as higher level principles that derive from a process of reflection and interpretation of the data, and the patterns, or "commonalities", that emerge from it, when examined in the light of the research questions and the understanding of literacy that I set out in Section 1.2.1. They cut transversally across the data set, emerging in each case in several patterns. Though the scale

of the research precludes substantial theoretical claims, this set of principles is susceptible to further testing, against not only the literature but also other data sets, and in this sense, in addition to the fact that some of the principles are not present in the literature, it makes an original contribution to the field. In this chapter I will extract these findings and discuss them. Though in some cases, such as the sense of continuous presence (discussed below in 6.2.5) or the understanding that change is substantial (6.2.2) and continuous (6.2.4), the findings may seem unsurprising, since they may be seen as instances of tendencies that have already been identified elsewhere, their presence in this work serves to confirm those tendencies, and in many cases extend their relevance as in this work they are commonalities that are present across a range of respondent groups. In other cases, the findings may be seen as original insights that contribute to a fuller understanding of literacy in a digital world. I will discuss the implications of the findings for educational policy and pedagogical practice in Chapter 7. In this Chapter I set them out for consideration.

The chapter is therefore structured, in a similar way to the previous chapter. This introductory section is followed by three sections that focus on the areas covered by my three research questions: practices, identity, and criticality, outlining and discussing the key findings. The chapter ends with some concluding remarks.

6.2 FINDINGS RELATING TO CHANGING PRACTICES

A reminder of my first research question is useful at this point:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their understandings of how their literacy practices have changed, and continue to change, as a result of their engagement in digitally mediated activity?

The analysis of the data relating to changing literacy practices, across the three contexts, allowed me to identify several commonalities that it is important to highlight. Before doing so it is important to note that the literature review relating to this research question in Section 2.1 presented a picture of rapid change and emergent practices. I noted however that much of the research focused on young people. It is important to note that the findings I discuss here are derived from three groups; people of retirement age, adults and young people. In this sense, though some of the commonalities described are present in the literature, they serve not only to confirm those findings but also to extend their reach to a wider range of cultural backgrounds and age groups, consolidating the commonality of understandings.

6.2.1 The high degree of integration of the "digital"

The data is pervaded by the participants' strong sense of the integration of digital-mediated activity, including digitally mediated literacy practices, with their other activity, and they saw themselves as inhabiting a world of practices in which for better or worse, literacy is increasingly digitally mediated. This idea was present in several patterns, such as P1 Changing practices, P2 Being online and ID1 Integrating practices, and it is a common understanding that is perhaps unsurprising, but no less important for that. It indicates that, for these participants at least, to view digital literacy as a world apart was no longer really an option. This throws light on earlier discussions such as for example the view, in Section 2.1.1, of digital literacy as separate and the insight from Beetham et al. (2009, p11) that *digital literacies cannot simply be bolted on learners' existing practices* . This high degree of integration of the "digital" has implications for the way literacy and digital literacy should be approached in policy and pedagogical practice which I shall discuss in Chapter 7.

6.2.2 The change is viewed as substantial and irreversible

A common thread throughout the interviews, in all the contexts, was the idea of a transformation in their practices, and the contexts in which these took place. The social and cultural communication that I identified earlier (referring to Carter, 2006, Hamilton, 2002, Scribner and Cole, 1981) as central to the concept of literacy was commonly viewed as substantially and irreversibly changed. As Barry said: *"You can't be turning back the clock"*.

Though there was a range of perceptions, with different participants giving more or less emphasis to the degree of change, particularly in relation to the metaphors used (from 'tool' to 'joined at the hip') this range was present in each of the contexts and in several of the patterns such as P1 Changing practices, P2 Being online, ID1 Integrating practices and ID2 Understanding oneself. Furthermore, there were different degrees of enthusiasm expressed about the change, from mild resistance to a confident acceptance. This relates to the findings in relation to critical understandings, which I will discuss in section 6.4.

6.2.3 The change is an extension rather than a substitution

Though both the nature of the practices the participants engaged in and the contexts of these practices were viewed as changed, an important common idea particularly present in patterns ID1 Integrating practices, and CR2 Choosing channels and tools, was that older practices continued to be available. The common understanding was of an expansion of the repertoire of possibilities rather than a substitution. These users understood the process of transformation as a gradual cumulative process of familiarisation and incorporation of digitally mediated literacy practices into the set of literacy practices they use. Goodfellow (2011, p.3) refers to the *"reconceptualization of literacy due to its harnessing to digital communication"* in higher education. This process appears to be taking place here in other contexts.

6.2.4 The change is continuous

Another common understanding that emerged in a number of patterns, such as for example CR2 Choosing channels and tools, CR4 Being information literate, CR1 Evaluating risks, ID3 Presenting oneself, P4 Interacting with artefacts, and P3 Interacting with others, was of the digital environment as emergent and dynamic, which implied the need to be continuously updating one's practices and knowledge of the tools and spaces. There was a sense of a continuous need to adapt and manage the change, and a sense that due to this continuous change their literacy practices could no longer be viewed as a static set of skills. There was also a common understanding relating to the need for continuous adaptation and negotiation of the channels to be used for communication, and the nature of this communication, as key elements of digitally mediated literacy practices. A central thread running through many of the interviews was a sense of provisionality, since the change is continuous, related to the transformation. As Irma put it: *"Everything is now much more...ad hoc".*

6.2.5 The sense of continuous presence

Another finding is the common understanding expressed by the participants of understandings of themselves as continuously present and connected. This was present in patterns such as P2 Being online, and P1 Changing practices. Though the nature of this presence varied and was not viewed uniformly positively it was a central element in their understandings. The interviewees understood that the expansion of access, both to information and opportunities for interaction, had its downside in the distractions of continuous conversation and information overload. The need for effective management of time was understood by many as key to appropriate literacy practices in the digital environment. The practices involved, though the need is not necessarily new in itself, were seen as a new set of practices centred on what could

be termed the timeliness of literacy practices – <u>when and to what extent can we or should we engage in and interpret our world becomes another element of literacy</u>. For many this involved a sense of being *"always on"*, to use Baron's title (2008). The sense of being online continuously, or always on, was not limited to younger users, which is an important finding, given the focus in much of the literature on that group (as mentioned in section 2.1.1).

This temporal sense was also expressed as a sense of a need for the connection to be always available, and this related to spaces as well as time. Digitally mediated literacy practices were perceived then, as I mentioned in the earlier finding on integration, as deeply integrated into the participants' literacy practices, to an extent to which the digital tools used were viewed by most, with the exception of a few who made attempts to limit their connection time, as necessarily ubiquitous (temporally and spatially), and were understood as facilitators of, and constitutive of their practices.

6.2.6 The sense of unification of spaces

This sense of continuous connection links to the understanding that this connection in some way was starting to unify contexts that had previously been separate. Most notably the work/personal life difference was for some starting to blur. Though the participants continued to maintain separate spaces for each, and understand them largely as separate, the tools and spaces used (messaging, e-mail, social media, search engines) and the practices described were in many cases similar, with work practices taking place in personal times and spaces, and vice versa. This idea was present in patterns such as P1 Changing practices and P2 Being online. Rather than construing work as invading the personal space, the <u>freedom to navigate in a more personally appropriate way between work and personal life was seen as positive</u> across the different contexts.

6.2.7 Communication as central and enriching

Across the contexts where I did the interviews, participants emphasised <u>the central role of communication using digital tools</u>, and much of this was text-based communication of different kinds. This echoes Bigum's (2002) observation that the most important change afforded by new technologies is a change in relationships, rather than information provision. Indeed, for many, the possibility of using these tools for digitally mediated communication with other people had been a motor for integrating digitally mediated literacy practices into their lives, their *"tipping point"*, the point where the Internet began to have meaning for them (Gladwell, 2000), was when they saw the chance to engage in digitally mediated communication. This was present in patterns such as for example P3 Interacting with others, ID4 Observing others and CR2 Choosing channels and tools. In general there was an understanding of digitally mediated literacy activity with friends, family and others as enriching their lives. This finding is important, especially in relation to understandings of literacy in the wider society. Despite the consolidation in the literature of the idea of literacy as social (Hamilton, 2002, Street, 2003, Lankshear and Knobel, 2003, Scribner and Cole, 1981) it is less clear that this has percolated fully into public or political discourse, where literacy (presented as distinct from 'digital literacy' as mentioned in section 2.1.2) continues to be characterised in many cases as a question of reading and writing. The understanding also that <u>being online is social, and especially about interacting with others, is important</u>. This reflects and extends the scope of the insights of Sefton-Green (discussed in Section 2.1.1). As mentioned earlier in more general terms, this social communication involved an extension rather than a substitution, since the majority of those they interacted with online were people they also interacted with offline and there was a strong sense of connection between the two contexts, even understanding them as two parts

of one larger context. This communication initially, and for many almost entirely, took the form of an extension of offline practices into the online world. This particularly related to the enrichment of their communication practices with family members, and friends. The groups of friends and family that had existed in a different way off line were reconstituted in different ways through the digital medium, for example bringing generations together, and they understood their online groups as close-knit and private, and very important to them. Interestingly, though in some cases these groups involved new, online acquaintances who had become friends, less importance was given to purely online groups of friends, though there were a few cases.

6.2.8 Changes in the nature of communication

The participants also understood their communication through digital media as different. This understanding was present in several patterns such as ID3 Presenting oneself, P3 Interacting with others, ID4 Observing others and ID5 Participating. I have mentioned the prevalence of text-based communication, and the sense of continuous connection, and in relation to communication, in each context many participants in the different contexts referred to this, giving a sense of what could be called a continuous conversation. This has implications for the way we think about literacy "events" that are outside the scope of this work, since to explore this aspect more fully would be the subject of a separate study. They also understood this to be a different mode of communication, somewhere between the formality of a written text and informality of the spoken word which is reminiscent perhaps of what Ong (1982) called secondary orality, and the details of this also require further study. The understanding that emerges is of a literacy practice that is still emergent, and which does not fit easily into conventional categorizations, but which usefully extends the range of available practices.

6.2.9 Greater autonomy with respect to information

Another commonality that emerged was the understanding of changes in their relationship to 'texts' in the broadest sense, which was present in patterns such as CR4 Being information literate, and P4 Interacting with artefacts. As I argued earlier in section 1.2.2 the word 'text' can be used to refer to artefacts that codify a message of some kind, and literacy involves interpretation of these codes. There was a sense that the availability of digital tools gave rise to different practices around these artefacts, and one of the central ideas was the idea of greater autonomy, in the sense that they felt that <u>digital tools increased the ease with which they could locate and explore texts independently, without the mediation of gatekeepers</u>. This finding has links to the understanding of themselves as 'sophisticated users' which will be discussed in 6.3 under Identity, and to their critical understandings (discussed in 6.4). As mentioned earlier in this section, the incorporation of digital tools into these literacy practices was seen as an extension of the repertoire, since offline practices, though less central, continued to play a role. Similarly the concomitant increased potential for interaction with texts was understood as useful, and part and parcel of digitally mediated literacy practices, though less central than the contact with other people. This corroborates and extends Sefton-Green's (1998) insight that an *"interactive dynamic is at the heart of the new literacies"*

6.2.10 Non-creation of digital artefacts

In section 2.1.1 I discussed the literature on Web 2.0 tools, which speaks of the potential for the user to become a creator. An interesting, and perhaps surprising finding in this work is that in each context the majority, with a few notable exceptions, did not give a strong degree of emphasis to the creation of artefacts of different kinds. This was most present in pattern P4 Interacting with artefacts, and ID5 Participating. Though many, as part of their day to day

professional lives were creators of 'texts', this was not focused on by many except in passing. Despite the emphasis in the literature on this aspect, such as Mills (2010) review of research on the *'digital turn'*, and despite the fact that from a theoretical point of view most were creators, in the sense that they created and posted messages, uploaded photos and videos, and wrote extensively, <u>they did not understand themselves as creators of digital artefacts</u>. It is possible that the optimism in this regard in the literature may need to be tempered, but it is also possible that understandings of what creativity entails may differ. This has implications for educational policy and pedagogical practice. The word creativity is currently used with some frequency in educational circles, but there may be a lack of connection between understandings among different groups of stakeholders. This will be further discussed in Chapter 7.

6.2.11 Conclusions on changing practices

As I described in the Literature Review chapter (Section 2.1.1) the focus of the literature on digital practices has been largely on the practices of the young. The fact that these understandings extend across the different contexts interviewed is noteworthy. Some aspects are in a sense confirmation of aspects mentioned in the literature, such as the degree of transformation (Kist, 2005), and the profound changes in the interviewees' practices, reflected in Beetham et al. (2009) or Mills, 2010). This confirmation is useful, especially in relation to the older participants, and the degree of awareness and reflexivity they showed. Other findings, such as the lack of a view of themselves as creators, the centrality of social literacy practices and their sense of autonomy with respect to information access have implications for educational policy and pedagogical practice, which I will discuss in Chapter7.

In relation to the analytical framework for understandings of changing practices, the

categorizations were to a large extent subsumed into the pattern codes over the course of the process. The categorization was perhaps over-theoretical, and the patterns that finally emerged are more useful and more directly derived from the data and the words the participants used. However, stepping back a moment, and taking an overview, it is possible to see that the key elements in the framework are present, the participants spoke of 'plural' sets of practices involving a range of different types of 'texts' in different contexts; their literacy activity in the digital sphere was profoundly relational, indeed in many cases driven by relationships, and interpretive. Though the analytical framework I devised for understandings of changing practices did not prove appropriate, it is interesting to see the view of literacy it espouses corroborated here.

6.3 FINDINGS RELATING TO IDENTITY

First a reminder of the relevant research question:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their understandings of their identity as "literate" individuals and how their literacy practices affect their identity, and the ways in which they structure and manage these practices in order to make sense of their own identities and those of others?

In the literature review relating to this research question (Section 2.2) I explored different frameworks for understanding identity and the idea of identities as constructed though interaction (Birr Moje, 2008, Wortham, 2009). I also looked at the tension described in the literature between essentialist views of identity and views of identity as multiple, and at

literature that described how identity is projected online in some groups. As I mentioned there was little literature about the perceptions of ordinary users, like my interviewees, relating to identity in digitally mediated contexts. My analysis of the patterns that emerged in this research has produced some interesting findings relating to the research question that are common to the three contexts, which I describe in this section.

6.3.1 The self as sophisticated user

Perhaps the central finding in relation to identity is the participants' understanding of themselves as users of the technology; there is a sense of their identity as becoming linked to usage of these technologies. This was particularly present in the patterns ID3 Presenting oneself and ID2 Understanding oneself, as well as P1 Changing practices and ID1 Integrating practices. A common element was for them to describe themselves in terms of their status as users of the technologies. This relates to the earlier findings regarding integration, an understanding of the use of the Net and the related technologies as part of life, something deeply intertwined with everyday practices and one of the key elements involved in their descriptions of the nature of their use of these technologies was the idea of sophistication. They saw themselves as engaging in a variety of digitally mediated literacy practices in which they navigated and explored different spaces, located and interpreted different kinds of 'texts' and interacted fluently with others. In this sense, their understanding of themselves as sophisticated is close to an understanding of themselves as literate. There was both a sense of achievement in these accounts, and a sense of pleasure. Though at some points they described themselves as tool users, for the most part the participants in the interviews saw themselves as sophisticated people for whom <u>digitally mediated literacy practices formed an integral part of their collection of literacies, and of their idea of themselves</u>. These descriptions of

themselves included clear awareness of the development of their practices, and a sense of a history of use, and of progress in learning about the tools and how to make the most of them was common to many in each of the contexts.

This self-perception as a certain kind of user, also involved a critical attitude to different sites that related to other aspects too, such as risk and the degree of trustworthiness of the information source, and critical understandings in relation to online social networking tools. The sophistication was understood as awareness of these critical aspects and self-differentiation from those less aware. This will be discussed further later in this section. These understandings of themselves as sophisticated users are perhaps unsurprising, given that these were self-described advanced users of technology, and that is how they were selected for the interviews. However, this conscious identity as a user of these digitally mediated literacy practices is understood as valuable by these participants. This has important implications which will be discussed in the conclusions chapter (7).

6.3.2 Cautious identity projection

The sense of sophistication, and their awareness of risks (described in the next section), related to a common understanding with respect to the way the identity is done online. This was present in several of the patterns relating to criticality such as CR1 Evaluating risks, and CR5 Being transparent, as well as in patterns ID2 Understanding oneself, ID3 Presenting oneself and ID4 Observing others. The participants spoke of the practices and contexts in which they manage and present themselves, in other words how they project their identity, for themselves and others. For these users identity contains some elements the individual sees as fixed, and others that may be shifted or recast to some extent according to context and interlocutor. The fluidity and overlapping categorisations of Birr Moje (2009) or Benwell and Stokoe (2006) (see

Section 2.2.2) come to mind. The respondents saw themselves as active creators and managers of their identity, particularly in relation to their use of digital media. The practices involved related to profile management, and the choices that the user makes with regard to the personal information they provide in different texts and contexts online. There are also echoes here of Lewis and Fabos (2005) on multi-voiced identities, and Hagood (2008) on active identity management, but it is important to note that the general tenor was of caution. There was a common understanding of themselves as cautious users who limit the ways in which they project their identity in digital contexts, and this measured control was related to the previously mentioned understanding of themselves as sophisticated users.

6.3.3 Nonalignment with culture of transparency

This cautious management of the identity projected points to an important understanding of the self as private and the need to protect this privacy, not just in relation to people they know but also from unknown third parties, a group that includes governments and commercial organisations. Throughout the responses there was an understanding of themselves as people who valued their privacy, and they saw their sophistication as including selective and very tactical non-disclosure as a practice where necessary. This was especially present in patterns such as CR5 Being transparent, ID3 Presenting oneself and ID5 Participating. There is an understanding of this social space as a public place where privacy must be guarded, and non-disclosure was understood as the simplest and safest strategy, though at times this was tempered by the admission that time was the main obstacle to more extensive management of the online profile projected. As in other areas there was variation within the overall sense of caution, and where users were providing more information, a clear separation was made between the information that they provided about their interests (relating to their identities

as members of different interest groups) and basic personal data, which recalls the *"tweaking and curating"* of online identity mentioned by Pepe et al. (2011). The online identity projected served to provide sufficient information, but no more than that. The relevance of the online identity, and its correspondence to offline identity was limited, and there was a <u>strong rejection of the assumption of the need for transparency</u> defended by Zuckerberg (2012). Despite this understanding of the movement towards transparency as something that they did not value or feel part of, most participants understood themselves as capable of managing this aspect of their lives and discuss how they limited the degree to which they shared information in these spaces.

6.3.4 Non alignment with social networks

This general tenor of caution relates to the understanding, common across the contexts, of the difference between the value of one's identity and the value of a profile in a social network. There is an understanding of a difference between being a user of digital technologies and being a user of social networking tools such as Facebook. Most of the participants in the interviews described themselves as familiar with these tools but did not see themselves as avid users and many raised questions about the social web and its implications. Given the apparent ubiquity of social media on the web this might seem surprising, however one of the most salient attitudes among the respondents was the sense that they did not share the assumptions about the need to be fully engaged with social media that are currently common currency in society. This idea has a strong relation with their nonalignment with the culture of transparency, and emerges to a large extent in the same patterns, such as CR5 Being transparent, ID3 Presenting oneself and ID5 Participating. In many interviews a common element was the respondents' understanding of the communication on social media as banal.

These interviews focused on advanced users of the technologies within an extensive degree of integration technologies in the lives that can be described as mature, and who see themselves as sophisticated users, but <u>sophistication does not involve extensive activity on proprietary social networking platforms</u>, though each referred as we have seen in the findings relating to communication to their own social network. Their critical understandings of the limited value of social media for them as advanced users and the selective nature of their use of it contrasts quite strongly with other visions of the digital world based on data for example about the numbers of people using Facebook. The low level of interest in participation across the three groups is a little unexpected, given the apparent popularity of these networks. But there is an understanding of the limitations and risks of social networks, and of oneself as not necessarily part of this boom. The reserve with which these tools are treated by these users, calls into question the degree of focus they receive in the literature (Walsh 2009, Vossen and Hagemann 2007, Haythornthwaite, 2006).

6.3.5 The identity as truthful

An important finding in relation to this is the absence of any understanding of the value of or need for what authors such as Bruckmann (1993) or Turkle (1995) refer to as alternative or *"play"* identities. The date provided, however limited, is truthful data. While there was a clear sense that different contexts may require the projection of different facets, this is accompanied by the idea that these are facets of a "true" identity. This was particularly present in patterns ID2 Understanding oneself, and ID3 Presenting oneself. The attitudes of Chester and Bretherton's (2007) group of university students, described in section 2.2.3, are replicated here. In other words, <u>what data is projected is important and meaningful as part of the identity and indeed for this reason should be protected</u>. This finding relates to the issue of trust which

will be discussed in the next section (6.4)

6.3.6 Others as vulnerable

As previously mentioned, these users, as well as discussing their own activity, observed the activities of others, and their observations gave rise to a range of comments about others that were revealing of their own understandings of their practices in a digital context. Given their scepticism about revealing themselves in these media, it is perhaps understandable that many of their comments were about the behaviour of others. Reflection on patterns ID4 Observing others and ID5 Participating especially indicated a common understanding that <u>other users were often less cautious and that they engaged in practices that made them vulnerable.</u>

6.3.7 Others as influential

Given the importance of communication, it is understandable that the pressure of others to engage in the same practices as they do has a part to play. Despite their sense that others were less capable users, and their concerns about those uses, they understood themselves as affected to a degree by others' practices. This understanding was reflected in patterns P3 Interacting with others, ID4 Observing others and ID5 Participating. There was a sense among some of a lack of control in this respect, and an awareness of the need for control was a thread that ran though many interviews. These users expressed their own need for control, particularly of the extent to which they disclosed aspects of their identity, and of a certain lack of control they perceived in others. The need to interact with and adapt to the needs of others related to this sense of control. There was <u>a tension between their perceptions and those of others, that was sometimes expressed in terms of this lack of control , and at others as positive in the sense that others were also sources of recommendations and information, for example in the selection of tools.</u> This and other tensions will be discussed at the end of the next section

(6.4).

6.3.8 The relative unimportance of group identities

The issue of peer pressure relates to understandings of how to participate in online literacy practices, particularly in social networks. As might be expected from the understandings described previously, many simply didn´t participate and saw themselves as outside this kind of practice, while others opted for a minimal presence, though they did not at heart see themselves as users of this kind of social network. Patterns ID2 Understanding oneself, ID5 Participating, CR1 Evaluating risks and CR5 Being transparent particularly reflected this. It was notable that these understandings in relation to identity issues did not fit the original framework for understandings of identity I started out with. To recap, that framework included a series of categories, derived from authors such as Gee (2000), Hecht (2002) Joseph (2004 and Greenfield (2008): the basic "factual" identity, the given or institutionally constrained identity, the group identity, the interaction identity, and the play or creative identity. In particular, institutional identities were almost completely (and play identities totally) absent from the conversations. Group identities, as membership of a group with shared interests were present but were not common. There was a greater tendency to see themselves as observers. Rather than joining online groups <u>these users understood themselves as participants within their own</u> <u>largely self-organised networks of family and friends, and colleagues in their professional</u> <u>contexts.</u> The tendency was to talk of a private identity with a range of different facets, arguably multiple identities though not generally expressed as such, and its relation to others through interaction. Groups were not centred around shared interests so much as kinship and friendships (as opposed to affinities). The aspects of the framework which did not emerge are clearly interesting from an academic and social perspective, but it appears that from the

perspective of the individual, which was the focus of these interviews, they are of lesser importance.

6.3.9 Conclusions on identity

These findings on identity identify a series of common understandings across the groups of themselves as literate individuals who manage their online identities cautiously. These users saw their practices as sophisticated and selective, using the plethora of channels in which one can be present in carefully considered ways, with some degree of critical understanding. This involved some conscious management of the identity, such as that described by Chesterton and Bretherton (2007), located in tactical strategies. In many cases these were based on non-disclosure of details, and avoidance of, rather than engagement with certain spaces and practices. The range of spaces (work, institutions, interest groups, friends) in which literacy practices take place was navigated adroitly. There is a sense of the individual identity as separate and indeed more explicitly defined, which echoes the idea of the 'true self', discussed in 2.2.2 in relation to the work of McKenna (2007). It is understood particularly as something outside the current social networking context, though not without other social contexts, such as groups of friends who exchange e-mails, for example, and there is a non-alignment with the culture of transparency. There are aspects (institutional, group and play identities) of the initial analytical framework for understandings of identity I used which are largely absent. This will be commented on in the Conclusions chapter, where the lack of connection of these "lay" understandings with the "academic" literature on identity explored in the literature review section will also be discussed.

6.4 FINDINGS RELATING TO CRITICALITY

The research question relating to criticality was as follows:

What commonalities can be identified, across culturally diverse groups, among advanced users of digital technologies, in relation to their critical understandings of their literacy practices, the contexts in which these take place, and the ways in which they structure and manage these practices in order to make sense of the contexts they inhabit?

In the literature review I focused on the importance of critical awareness as a necessary element of literacy, as for example Burbules (2002) indicates. Criticality involves a capacity for looking beneath the *"surface of things"* (Shor, 1982, p.129), a focus on emancipation and self-reflection. A central focus of my exploration was to identify common critical understandings across the groups. From my reflection on the patterns that emerged I derived a series of findings in relation to this question which I shall discuss and describe in this section.

6.4.1 The user as critical

Throughout the contexts in which I did the interviews, the participants exhibited critical understandings of the contexts they inhabit online, and indeed of their own literacy practices in these contexts. These were reflected especially in several of the patterns relating to criticality, such as CR1 Evaluating risks, CR2 Choosing channels and tools and CR5 Being transparent, as well as in ID5 Participating. The critical reservations relating to online power relationships and surveillance, discussed in Section 2.3.3, of authors such as Pepe et al (2011), Land and Bayne (2005) or Fabos (2008) were reflected in the responses, and throughout the interviews the participants questioned a series of assumptions that recur in the media and appear to be 'given'. These included, as mentioned previously, the assumption of the inherent value of social networking platforms, the assumption that the fact that everything is online is

<u>universally positive, and the assumption of the value of transparency</u>. There was evidence of some strong-sense criticality in this questioning and in their descriptions of alternative practices and understandings to those that accompany these assumptions such as those relating to identity management. Despite the asseverations of Kist (2005) or the predictions of Luke (1997) regarding the foundational nature of the change taking place (see 2.1.1), these users exercised a certain measure, even scepticism, in their response to and understandings of the changes. For example, the value of small, well-knit groups of friends using email to communicate was located in opposition to the *'friending'* syndrome so prevalent on sites like Facebook, and the importance of diversity and the right not to opt-in was defended against the assumption that one has to be online, however quixotic that may appear. The fact that these assumptions are questioned, across a range of cultures and contexts, is significant.

6.4.2 The difficulty of trust

Despite this critical awareness however, there was a common understanding of the limits to the extent to which the individual can address or control the risks, or change the aspects they critique. There was a common understanding of indeterminacy that related to the sense of continuous provisionality mentioned earlier in relation to understandings of changing practices. It was present in P1 Changing practices, and ID1 Integrating practices , ID2 Understanding oneself and ID4 Observing others, as well as in CR1 Evaluating risks and CR2 Choosing channels and tools. This contributed to <u>a recurring sense of lack of definition, or clear awareness, of emerging risks and a consequent sense of a lack of control</u>. This played out in comments about the role of third parties in the encroachment on personal freedoms, the commercial role of corporations, and more directly political concerns, but also simply to those individuals who were not part of what the individuals understood as their circle of trust, which

as we have seen, tended to be understood as largely made up of family and friends. Beyond this circle, the general tenor was of mistrust. This issue was understood by most to be problematic and <u>an understanding of the difficulty of trust in activities in the digital sphere was a commonality across the groups</u>.

6.4.3 Tactical responses

A commonality across the groups interviewed was the understanding that abstention is a reasonable and logical response to this difficulty, particularly where there is a strong sense of lack of control, such as online banking services. In other cases, careful and cautious evaluation of the risks involved and cautious engagement were understood to be appropriate, as in the case of identity management. This was also the case in relation to new tools and channels where habitual exploration of tools and channels with a view to their possible use, especially following the recommendations of others, was understood as a normal and necessary practice, which relates to the sense of autonomy in relation to information access already discussed. These elements were present in patterns such as CR1 Evaluating risks, CR2 Choosing channels and tools, CR3 Accentuating the positive and in ID5 Participating. There was an understanding spread across the three groups of respondents that <u>tactical critical responses, where they were possible, were legitimate and necessary</u>.

6.4.4 Relaxed attitude to risks

However, coexisting with these critical attitudes and the related tactical responses, there was also a strong understanding of the positive value of the affordances of digital media, linked to comments that indicated a strong degree of optimism. This aspect was especially present in CR3 Accentuating the positive and CR4 Being information literate. Though the degree of optimism varied it was present throughout the groups, ranging from almost an active rejection

of any kind of critical standpoint, to a sense that the benefits outweigh the risks. There is a sense in which this very positive and enthusiastic pattern of understanding of the new literacy practices that they participate in seemed to allow these users to justify to themselves their capacity to simply ignore to a large extent the risks. This was accompanied by the sense that the risks were somewhat abstract, and beyond control anyway. The degree of integration into their literacy practices of these technologies is evident in the many comments in which the different nature of the digital is played down. They frequently saw themselves as used to the digital sphere, and therefore, like adults, able to cope with the risks.

6.4.5 The user as self-critical

This optimism was however frequently tempered by self-criticism. An understanding that they should probably do more to address the issues they identified in relation to risk regarding data security or safety more was common to all the groups. This was present in ID2 Understanding oneself, and in CR3 Accentuating the positive, as well as CR5 Being transparent and CR1 Evaluating risks. There are echoes of Teurlings' "critical apathy", mentioned in Section 2.3.3, insofar as they exhibit awareness of the issues, but to a large extent do not act to transform the situation. The capacity for reflection about their own practices, those of others and the digital context can be said to characterise these advanced users, and constitutes further evidence of critical understandings, though these do not always translate into actions.

6.4.6 Convenience versus criticality

There is a tension between these understandings that is not easily resolved, and was present in all of the patterns relating to criticality. There are connections to the idea of convenience. There was a common understanding for example that it is appropriate to centralize one's online practices into one tool or channel as much as possible as far as possible and though some of

the choices described in this regard reflected risk-related concerns, and others related to the type of information being explored, or relationships, such as peer pressure to use a particular tool, the key question was ease of use. This focus on convenience was also present in the discussions around information search, in which the need for a critical stance in which information is carefully selected and filtered by the user is placed in contrast to the use of Internet for quick solutions, generally presented as something other users do, but admitted to be present in their own practices at times. The critical awareness they showed at times contrasted with a pragmatic sense of the need for simple solutions at times, and though ease of use might be considered an acritical response, there is a sense in which it is also a tactical response in the sense that it is a way of managing one's practices appropriately to context, a pragmatic approach. This has some relation to the question, mentioned earlier of the timeliness of practices, and calls into question the idea of simple polarities in this regard. The <u>positions of convenience and criticality coexisted in tension, and the respondents did not express great degrees of discomfort with regard to this tension</u>, despite, or perhaps aided by, their capacity for self-criticism. This understanding in relation to their own critical literacies, and the tensions involved is interesting, and will be discussed further in the next section.

6.4.7 Conclusions on criticality

The framework for understandings of criticality that I originally described situated criticality along an axis between what could be summarised as greater independence and autonomy at one extreme, and a lack of awareness and hence dependence at the other. The three axes included tactical and strategic behaviour (as described by de Certeau, 1984), weak and strong sense critical thinking (Burbules and Berk, 1999) and Giddens's (1984) tension between agency and structure. Though these dichotomies shed light on the data and were useful in the initial

stages of the process of coding and analysis, it is worth noting that many of the conversations call into question the polarities I adopted in the analytical framework. In the digital world individuals, to some extent, are able to define and alter their environment through the choices they make regarding tools and the practices in which they engage, and though this cannot be understood as the radical kind of social transformation envisaged at the more critical pole of each of the dichotomies mentioned in the analytical framework for understandings of criticality, there is an understanding that they are capable of changing and directing their personal environment. In this sense to speak of either tactics or strategies may be too cut and dried, and the same considerations may apply to agency and structure, or strong-sense and weak-sense critical thinking. This understanding of the personal environment as a locus of control has important implications for educational policy and pedagogical practice that will be further discussed in the next chapter.

The results of the conversations imply more complex relationships between the concepts than mere polarities. What emerges are a series of unresolved tensions between positions that for these respondents played out in different ways at different times. Of particular interest were the tensions between convenience and critical positions, participation and tactical non-disclosure, critical opinions and tactical behaviours, abstention and presence, positive and negative understandings of the influence of others and awareness and apathy. The individuals did not position themselves clearly at a point somewhere between weaker and stronger critical poles, rather they navigate the space between them the poles, inhabiting a range of positions and even sometimes finding themselves in two positions at the same time. The Net, for example, could be a *"boon"* one moment and a source of stressful overload the next. This is an aspect that requires further exploration, due to its complexity, and its implications will be

further discussed in the next section.

6.5 FINAL REMARKS

This set of findings provides a series of answers to my research questions that constitute a collection of common understandings that appear across the three groups explored. As we have seen in this chapter, some of these confirm existing understandings in the literature, while others extend the understandings to other groups than those usually covered, such as young people and university students. Others provoke reflection about our understandings of notions such as privacy, trust or transparency and even the term 'digital literacy'. As a group these understandings provide a useful overview of the way these advanced users of the Net understood their digitally mediated literacy practices, and there are implications for educational policy and pedagogical practice that will be discussed in the final chapter.

7. CONCLUSIONS

7.1 LITERACY

The title of this research project "Literacy in a Digital World: Searching for Common Understandings" reflects an attempt to address the tensions between what Collins and Blot (2003) call "*literacy and literacies*" or Street's (2003) contrast between the 'autonomous' or universalist view of literacy and the '*ideological*' view in the NLS. I have attempted to look for shared understandings across contexts that could enrich understandings of literacy in a digital world.

My approach has attempted to go direct to source and listen, identifying these commonalities through exploration of the explanations and descriptions provided by the people I interviewed. I worked with three very different groups of people, at different stages of life: school, work and retirement. To ensure a further degree of difference, three completely different socio-cultural contexts were used; Mexico City, Eastern Spain, and Southern England.

As I have mentioned my focus was on shared understandings, the "commonalities" of the title. This is not to claim that divergence does not exist, simply that my research has focused on what convergence may exist. In all the conversations, in coexistence with the commonalities that were my focus, there was evidence of a variety of different specific literacies not only across the groups, but also within the groups where different individuals engaged in different kinds of literacy practices for different purposes. It would perhaps be interesting in other research to explore these, though it is possible that the total number of literacies or literacy practices involved might approximate to the number of respondents. That said, it is useful to speak of different kinds of literacy, be they health literacy, financial literacy or football literacy. At the

same time however these literacies will always be approximations, and within each given literacy there will be "sub literacies" with their own sets of practices. The issue of speciation however - deciding when exactly a specific group of literacy practices becomes a different literacy - only becomes a problem when we insist on deciding between plural and singular. I spoke earlier (section 1.2.1) of my own understanding of literacy as "semi-plural"; the experience of this research, though I focused on common understandings, seems to bear this out. While we can clearly identify, explore and discuss "literacies", the common understandings that have emerged from this research indicate that it is possible to speak of "literacy", and of the characteristics of this literacy, and that in a digitally mediated world, this "literacy" is of a different nature to previous understandings of the term.

It is also useful to be able to speak of "literacy". While the nature of specific practices will shift endlessly Wilber's (2010) observation about the deictic nature of 'new' literacy practices, which I mentioned in the Introduction chapter (section 1.1) is pertinent here. A frequent critique made of the NLS is their tendency to micro-focused ethnographic studies that are difficult to generalise from. As Mills (2010) points out, in recent years, work has been done to identify common ground. The common understandings that I have identified within a universe of multi-literacies or *new literacies* can be understood as a starting point for a broad understanding of literacy that could be identified for educational purposes, and learned in tandem with specific sets of literacies. The commonalities permit tentative attempts at generalisation and recommendations for pedagogical practice, and for policy.

The search for common ground has given rise to several attempts to categorise individuals into different kinds of user, such as Prensky's (2001) concept of the digital native, or other more recent versions such as White and Le Cornu's (2010) distinctions between visitors and

residents. Many of my respondents could be viewed simultaneously and severally as visitors and residents in the sense that in some areas of their practice they saw themselves as sophisticated users of the technology, whereas in others (such as use of commercial social media networks) they saw themselves as distanced. They viewed themselves as more or less permanently online, and their practices incorporated the digital seamlessly in many cases, but despite this presence and their high degree of activity and motivation they still frequently characterised themselves as sophisticated users rather than Net residents. Furthermore, off-line and online were not understood as especially useful distinctions. As a student put it in a different research activity I am undertaking at present *"What is the difference if I am always connected?"* The observations I made in Section 1.4 about technology adoption are pertinent here. The findings of this work indicate that for many more advanced users these new technologies are becoming 'part of the furniture', and as this process develops the nature and locus of literacy practices is altering. Of particular importance is the sense of enhanced engagement with others in personal networks, and from the responses it emerged that, for many, the motor for the adoption of a new channel for literacy practices is this communication with others, more than access to information or specific tools.

The focus of this research was on advanced users, due to my understanding of their potential as forerunners of understandings that are likely to become more widely extended as the use of technology becomes more and more widespread. Though many more users, such as Ismael's wife (5.3.1) are not advanced users, the advanced users perhaps indicate the likely direction of development as more and more lives become digitally mediated. Their understandings provide possible indicators of how literacy is evolving, and allow us to derive conclusions and possible recommendations for educational policy and pedagogical practice, which can be notoriously

slow to change. In this sense, though less advanced users were not the focus of this research, it is possible that they may indirectly benefit from these findings.

Increasingly in professional and private lives the digital (digitally mediated communication, digitally mediated access to information, and digitally mediated meaning-making, 1.2.1) is part of literacy. In any context in which literacy practices are employed, and especially in digitally mediated ones, the specifics of the context - the mechanics of the use of the technology employed, the languages used to communicate, the kinds of artefacts that form the substrate of interaction - are important, and indeed have been the focus of much research. However there are a series of commonalities that derive from this research, related in particular to issues relating to identity and power, self and others, that may form the basis for a new and more complete understanding of literacy and literacy practices - a kind of 'meta-literacy,' or literacy about literacy - that would be of use to educators, and individuals. In particular, this new understanding would be enriched by awareness of the tensions between different positions involved in digitally mediated literacy practice that I discussed at the end of the Findings chapter. Though it is digital tools that bring the change, the findings of this research appear to me to point to the need for a focus on the human context of practice, rather than the technology, and a focus in education policy and practice on this 'meta-literacy' would, in my view, improve education, by supporting the development of more mature and aware literacies, in which individuals are more capable of taking autonomous, informed decisions regarding their own literacy practices in their own contexts.

7.2 COMMONALITIES

Through this research I have identified a range of commonalities. Among these is a shared

understanding across the groups of digital technologies as integral to the participants' literacy practices and even their lives and a sense of the ubiquity (temporal and spatial) of the technology in lives and literacy practices. Though abstention remains an option that was understood as valid and coherent, the degree of integration of the technologies implies the need to consider literacy practices as increasingly digitally mediated, rather than viewing digital literacy as a world apart. This supports the reflections I made about this issue in section 1.1, in relation to the work of Snyder (2002) and Wilber (2010), and the observation of Beetham et al. (2009), that digital literacies imply a reconfiguration of understandings of literacy and cannot simply be *"bolted on"* to existing understandings. It also poses a challenge to the current state of policy as described in Section 2.1.2, which generally views 'digital literacy' as separate from literacy, though the Horizon Communique (2012) mentioned there points toward a greater degree of integration of the two concepts. These three very different groups of advanced users all understood themselves and their literacies as increasingly digitally mediated, to the extent that for most the digital aspect of their lives had reached the point where technology becomes invisible as it integrates seamlessly into their use of literacies. This may seem unsurprising, perhaps especially from the perspective of 2013 since the degree of penetration of the digital has increased since I collected the data. However the importance of this work relates to the ways in which these people understand their literacy practices, for three main reasons.

Firstly, these participants' perceptions of their digitally mediated literacies provide a counterpoint to some of the more extreme accounts of the digital world we live in (see for example Kist's *"staggering changes"* (2005, p.3) or Zuckerberg´s *"lack of integrity"* (quoted in Pepe et al., 2011, p .1). As I pointed out in the Literature Review chapter (Section 2.1.1) there is a tendency to focus to a great extent on younger users, and the wider range of participants

may provide insights into how the changes are playing out among the wider society. Some of the threads that run through these findings, such as the participants' perceptions of the provisional nature of the practices due to constant change, or their understandings of notions like privacy, transparency and trust, and their understandings of identity may provide clues to phenomena such as the relatively slow speed of uptake of new technologies in education in many areas.

Secondly, these patterns of understanding are important because they provide a picture of the understandings of advanced users in three very different contexts. Despite the small sample size, I would suggest that some of these understandings, which are shared across the groups, may be generalizable, and this may be of use in the definition of education and IT policy, not to mention in the design of newer new technologies. Though larger scale follow-up work would be necessary, there is a sense in which the work contributes another perspective to tendencies described in existing work, for example those described in Mills' review (2010) or Gillen and Barton (2010). Furthermore these voices may provide clues as to the possible perceptions of other users as they become more advanced, and clues as to how to approach their education. The inclusion of voices other than just those of youth may also provide insights for the development of lifelong learning.

Lastly, these understandings are important because of the frequently equivocal positioning of the understandings. Though the participants saw their practices as complex and sophisticated, different shades of understanding co-existed across the groups and the findings provide a picture of a complex and shifting set of understandings of their literacies. The sense of a continually evolving landscape of practices and contexts was common to all the groups, leading to the idea that <u>literacy cannot be viewed, or treated by educational policy, or in pedagogical</u>

<u>practice, as a static set of skills to be taught at a particular educational level and then ignored</u>. If one of the purposes of education is to prepare the individual for participation in society, then this evolving nature of literacy requires a different approach that understands literacy as a matter that requires continuous attention and development throughout the lifespan. One of the underlying challenges involved in this research is the familiarity of the subject area, for most people are online and therefore have their own experience of the subject. This can lead to simplistic messages, and received assumptions, particularly in the media, and often in political thinking. The patterns identified among these users indicate a degree of reflexivity, a generally critical stance, which involved awareness of the issues involved, and out of the conversations a series of shifting tensions, rather than polar opposites, emerged. These tensions are not easily resolved. The challenge for literacy education involves addressing how to navigate them and they possibly suggest a need for a more nuanced way of thinking that would be useful in educating people for literacy in a digital world. I see this as implying a need for clearer understandings of the tensions, which would help individuals to develop their own practices, as opposed to a focus on appropriate behaviours without clear understandings, that would leave the individual with less autonomy and less capacity to adapt to what will continue to be an expanding universe of literacies. This implies that in addition to continuous literacy development there is a need to develop 'meta-literacy' or understandings of what literacy and literacies involve, and their importance.

With these considerations in mind, I would like now to make a set of recommendations to pedagogical practice and policy. Obviously with the rider that this is a set of understandings derived from a small though diverse set of individuals and that evidently "more research is required".

7.3 EDUCATIONAL POLICY IMPLICATIONS

In Section 2.1.2 I explored a series of general policy responses and proposals that address to some extent the need for changes in education that need to be implemented due to the progressive integration of digital technologies into all walks of life. Most of these set out detailed lists of recommended sets of practices, and actions and address the need for understandings of education and literacy to change. However the continuing prevalence in society of universalist assumptions about learning, knowledge and the mind, sometimes termed *'folk pedagogy'* (Bruner, 1996, p.44) make the degree to which they may be implemented questionable.

There is a need for a wider debate about the purposes of literacy, not within academia, but in society. This is of course a substantial challenge. Despite the recent interest in the field of educational technology raised by a similar kind of debate about the purpose of education (Belshaw, 2011), policy resists the kind of fundamental change required. It is perhaps not the place in this document to discuss strategy, but a series of recommendations may be made, albeit with the awareness that they are unlikely to achieve an impact without carrying out a considerable amount of the kind of work that is not directly research activity, such as dissemination to the wider society, engagement with policy-makers and the promotion of curricular reform. These recommendations are underpinned by the findings I have set out in Chapter 6.

An overarching conclusion relates to the notion of digital literacy. As discussed in section 1.1 an important element in discussion of the role of the digital focuses on the notion of

'cyberspace' as a separate space. The term 'digital literacy' derives from an understanding of the digitally mediated as a world apart. This assumption is questionable; my interviewees spoke of a range of different digitally mediated spaces with different sets of practices, and of ways of managing them. The idea of a single digital sphere, or even a single set of practices within a given online space is an approximation that is only partially helpful. Moreover purely online groups form just a subset of the range of groups individuals are involved in, many more are blended. As discussed in section 5.2.1 one of the most common online groups mentioned by my interviewees was that of their immediate family. It is therefore likely that literacy education should address the need to identify and understand the practices of each group, whether online, offline or as is common, both, rather than teach a common set of purely "digital" strategies. <u>The notion of digital literacy as separate from literacy should probably be abandoned.</u> Literacy practices incorporate, but go beyond, specific technologies.

The following list of recommendations, derived from the findings in Chapter 6, focuses on policy issues:

1. The findings indicated a shared understanding of the substantial degree of integration of digitally mediated literacy practices into their literacies among these users. Furthermore the common understanding of this process as profound and irreversible implies that these practices are unlikely to disappear. Other evidence such as the penetration of Internet worldwide supports this view. This integration of the digital should be reflected in the educational context, and <u>educational policy should contemplate, facilitate and involve the use of digital technologies</u>. (It should not even be necessary to state this, but my own experience indicates that there are still many educational contexts where a fully integrated use of digital technologies has not yet

been achieved). This requires rethinking of aspects such as technology budgets, how educational content is provided, teacher training, and how relationships between all stakeholders - teachers, learners, parents, administrators, assessment bodies, and policy makers – are articulated. In addition to this, the sense these advanced users had of being "always on", and of living with a "virtual layer" to their literacies is something that policy makers should take into account in curriculum design. If the digital sphere is part of life then it needs to be part of the classroom. While there are indications that this is starting to be understood, for example the recent NMC communiqué (2012), it is valuable to reinforce it.

2. A corollary of the previous recommendation is the need for appropriate tasks to be set in education. Merely providing technology is no guarantee of appropriate use if the activities that are enshrined in the curriculum as appropriate do not adapt to the potential of the technologies themselves and the educational potentials afforded by the learner's emerging literacy practices. The commonalities identified in this research, such as the centrality of communication and interaction, and the greater autonomy with respect to information should be recognised and supported in curriculum design, and the corresponding assessment procedures. Additionally, <u>educational policy should contemplate the need for educational activity to model appropriate literacy practices across the curriculum, including critical literacy practices, both through their design and the ways they are assessed</u>. Though there are many instances of successful innovation in education that could be considered to be in line with this recommendation, there is much more that could be done at policy level to support and develop them across educational systems.

3. The notion of the continuously evolving nature of the digital environment that emerged in the interviews, confirming wider perceptions in the literature, and the fact that individuals at different stages of life across the groups of interviewees shared this understanding, gives further impetus to the idea that <u>policy should understand literacy learning as a lifelong undertaking</u>, and take into account the need for it to adapt continuously. Though the question of the relative lack of importance ascribed to lifelong learning processes in educational systems is not new, this finding adds a further argument in favour of increased policy attention to this area, and corroborates the need for a lifelong approach to literacy learning. This requires a considerable degree of change however, and evidence like that found in this research needs to be replicated, multiplied and disseminated at policy and grassroots levels.

4. In addition to the lifelong aspect is what is sometime termed the 'lifewide' aspect. The blurring of work and personal boundaries, which the interviewees understood as part and parcel of their digitally mediated literacy practices, has implications for the way the closed space of the school is understood (and for that matter the workplace). Given the fact that one of the commonalities discovered was a sense of continuous connection, and the diversity of the digital landscape, which includes a wide variety of interaction spaces, some work-related, some school-related, some play-related, some involving other leisure interests, education should prepare the individual to be able to navigate between and within these spaces, which as the findings show were seen across the groups as increasingly interconnected. This implies <u>re-examination of the "spaces" in which educational policy is implemented, and how the term "school" is understood in policy</u>, commonly as a separate space where learning happens. This implies

reassessment of the physical layout of schools and the locations and times at which learning is understood to take place. The role and nature of homework, timetabling and the school year, school design and organisation, the nature of school cohorts and the places and procedures involved in assessment may also require rethinking, and consequent changes in what policy and the curriculum permit and support.

5. The commonalities identified in this work paint a picture of advanced users of digital technologies who see themselves as sophisticated, autonomous individuals who define and manage, through their choices of tools and channels and the practices they engage in, their own digital environment and networks. Educational hierarchies tend to organise education into a series of levels, from Ministry to Department to Regional and then Local authority, ending up at the school, within which is the class, and last of all the individual learner. Policy tends to be handed down through this chain, and though the degree of manoeuvre a school or teacher has within the received curriculum varies from country to country, the autonomy of the learner tends to be limited. The commonalities identified have echoes in the idea of the Personal Learning Environment (see for example Attwell, 2007). Though the concept of the Personal Learning Environment is evolving and hence understood in a variety of ways, a central idea is that it is *"the collection of tools, information sources, connections and activities that the individual uses to learn"* (Adell y Castañeda, 2010). It is possible that to centre the objectives of the curriculum in relation to literacy development should echo the focus on the individual's `practice that is present in the notion of the Personal Learning Environment, and that <u>policy approaches to literacy might benefit from the development of a similar concept which might be termed the Personal Literacy</u>

Ecosystem. The advanced users in this research often expressed pride in their degree of sophistication and their capacity to control their practice contexts. It certainly seems legitimate to ask whether the understanding of the need for autonomy and independence this implies, and its possible relation to critical apathy, may have implications for the ways in which literacy learning is approached. This connects to the previous recommendations, especially in relation to the lifelong and 'lifewide' aspects.

6. As discussed in Chapter 2, in Literacy and Literacies, Collins and Blot (2003) examining the final part of Heath´s (1983) Ways with Words, focus on her comment that *"school is not a neutral objective arena"*, rather it is a space which promotes for the Townspeople (the privileged class in Heath´s account): *"an ideology in which all that they do makes sense to their social identity."* (p.108). They link this to the writings of Bourdieu and Passeron (1977) about the vital influence of 'habitus' and socio-linguistic capital as opposed to natural 'intelligence' on schooling outcomes. In a digital world in which assumptions about transparency and privacy have been strongly influenced by the views of the creators of social media such as Mark Zuckerberg (2012), who said in his letter written on the launch of Facebook as a listed company that it was built to *"make the world more open and connected"*, this is an important issue. As Luke (1997, p.13) points out: *"technologies always emerge as products of specific cultural practices, literate traditions, and the interests and desires of those groups who design and name them"*. The reluctance of many of the people I interviewed to be transparent or *"that available"* as Carol put it, may point to a non-aligned position that is ignored in new approaches to the teaching of literacy. Care needs to be taken to take into account differing understandings of identity, collaboration, participation, privacy and trust in

any transformed focus on language, literacy and learning and for <u>policy to facilitate</u> <u>these varying understandings, rather than opting for a single universal approach to</u> <u>literacy learning</u>. Like the people of Roadville or Trackton (Heath, 1983) the value of the learner's existing literacy practices and critical understandings should not be underestimated.

7. The findings support the idea of 'literate' advanced users as generally self-aware, sophisticated and critical managers of their identities and their interactions through their literacy practices. The understanding that emerges from this work, of literacy in a digital world as in continuous evolution rather than a static set of skills, indicates the need for policy to adapt to support the development of this literacy and to do so throughout the educational career of an individual and indeed the whole lifespan. I discussed 'meta-literacy' in section 6.2. as a characteristic of the critical understandings of the sophisticated literate users I spoke to. This is an aspect policy should also engage with, and it is possible that the individual's need to continuously address and understand emerging practices, especially identity management and critical issues is a necessary part of education, and something policy should take into account, considering <u>the possibility that Literacy and Literacies should be introduced as a</u> <u>curricular subject, and that it should include an explicit 'meta-literacy' perspective</u>.

In the next section I discuss the implications of the findings for pedagogical practice.

7.4 IMPLICATIONS FOR PEDAGOGICAL PRACTICE

In the Literature Review chapter (Section 2.1.1) I explored the range of existing research into uses of digital technologies in education. The picture created was of a range of interesting

experimentation and exploration of the potential of digital technologies and emerging literacy practices, which include the possibility of greater autonomy and critical understanding and the importance of interaction and relationships in these digitally mediated literacy practices. Equally however the picture was of irregularly distributed uptake and a lack of a common perspective. The insights from my research indicate a series of recommendations for pedagogical practice, as follows.

1. As I mentioned in relation to policy, <u>pedagogical practice should take into account the degree of integration of technologies into learners' lives</u>. The extent to which the users in this research understood their practices as changed, and the substantial shifts involved in these practices point to the need to incorporate technologies so that the educational environment and practices are more closely aligned with the learner's everyday literacy practices outside the specific educational context. The potential of these practices constitutes an important opportunity for the enrichment of learning experiences, though the threat of demotivation due to the anomalous nature of those schools and other environments that do not integrate technology is also pertinent. A range of initiatives already exist, and many schools and universities are now integrating technology more completely. A key issue is perhaps analogous to the need mentioned in Chapter 1 to avoid new literacies being "bolted on" to existing literacies. The integration should be as seamless as possible, the understandings expressed in this research indicated that some digital technologies were close to becoming "part of the furniture" in people's lives. A common example is the attitude to mobile phones in many schools, where the focus has been up to now on the degree to which the device distracts the learner, leading to the prohibition of their use in the

classroom, rather than attempting to look for ways of integrating their benefits into the classroom context, at the same time educating for appropriate use. Pedagogical practice in relation to technologies should reflect and engage with the realities of technology use in the lives of the learners rather than ignoring them[9].

2. The key to successful integration is how the technology is used. The commonalities I have identified comprise a set of shared understandings about the digitally mediated literacy practices in which a literate user engages. It is important that pedagogical practice makes the most of the potential of the practices in which the learners are already engaging, and helps to develop those that the learners have not yet adopted. This can be done by modelling and rehearsing these practices within pedagogical practices. To give an example, the common practice among large numbers of adolescents is to use Wikipedia as the starting point (and often unfortunately the end point as well) for homework tasks. This use can and should be incorporated into school work, teaching learners appropriate and positive uses of the tool, and at the same time pointing to its limitations. In particular, the understanding of the centrality of communication and interaction should inform pedagogical practice. Pedagogical activity could promote peer interaction within and beyond the cohort as part of learning processes which leverage everyday digitally mediated literacy practices, such

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[9] Initiatives such as Bring Your Own Device, see for example *byod.hanoverpublic.org*, or Domain of One's Own, see for example *http://umwdomains.com* constitute interesting paths for exploration of the possibilities, though outside the scope of this work.

as for example text chat, with which many learners are already comfortable. For example, the degree of comfort with online interaction of many adolescents constitutes a pedagogical opportunity, extending the classroom space well beyond its walls to permit interaction and project work with learners and experts in other contexts. This is being done in a range of projects across Europe, but remains a novelty in many schools contexts. It should become the norm. Through this kind of process, at the same time, appropriate versions of digitally mediated literacy practices can be modelled as part of the pedagogical process, and related 'meta-literacy' aspects introduced and discussed to develop understandings of identity issues, the difference between social networking platforms and one's own network, or the nature of the communication that takes place in these practices, and the registers involved. Similarly the understandings related to the blurring of spaces can also inform pedagogical practice, both in relation to aspects relating to homework and the spaces in which learning activities are organised. Though both out-of-school and out-of-school-hours activities, though they already exist have the potential to be enhanced by the incorporation of digitally mediated literacy practices and as mentioned earlier the alignment of pedagogical practices with the existing literacy practices of the learners is also likely to involve motivational benefits due to an increased sense of relevance for the learner. Aspects such as the timeliness of literacy practices, particularly in a context of continuous connection, mentioned in the findings as part of being a sophisticated user can be covered as part of the 'meta-literacy' perspective. Similar considerations relate to the informational content involved in pedagogical practice. The greater autonomy with respect to information identified by these advanced users as a characteristic of their practices constitutes an opportunity for

pedagogical practice in the sense that, with appropriate modelling of the digitally mediated literacy practices and understandings in relation to information of advanced users learners can become the locators and providers of pedagogical content that is authentic and relevant to their interests. While the integration of this kind of activity with the received curriculum is a challenge, existing initiatives indicate that it is possible, especially where policy and pedagogical practice are aligned appropriately[10]. The 'meta-literacy' perspective can also be introduced in this context with pedagogical practice focusing on developing critical understandings. One of the findings, relating to non-creation of digital artefacts, creates a slightly greater challenge to pedagogical practice. In recent years, the role of creative activities in education and the potential of digitally mediated literacy practices involving the creation of digital artefacts have been widely discussed. Robinson's (2008) much cited TED Talk on creativity is a case in point. However, the perception of the participants in this research was that they were not creators, despite evidence to the contrary. It is possible, as Robinson suggests that the current educational system kills creativity and even expectations of creativity for many learners and this may explain this perception. The implication for pedagogical practice may be that the nature and role of creativity needs to be explored with learners, as part of the 'meta-literacy' perspective.

3. I have mentioned the 'meta-literacy' perspective several times. Many of the shared understandings, especially those focusing on identity and criticality, involved self-

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[10] Though there are a variety of initiatives, an especially interesting example, due to the extent and ambition of the curricular change involved is Quest to Learn, a publicly funded school in New York City. http://q2l.org/about

awareness of one's practices and how they were used to manage and interpret relations with one self, others and the wider society, which has echoes of Freire's (1987) *"reading the world"* which I mentioned in 1.2.1. It is necessary for <u>pedagogical practice to foreground these understandings, in order to help learners develop them</u>. As I have mentioned earlier in this section, this implies engaging with and integrating technology use into classroom activity. An understanding of the value of tactical responses such as that described by the participants, should be developed and, as several of the authors mentioned in the Literature Review (Section 2.3.3) point out, critical literacy practices particularly need to be foregrounded. Luke's (2012) observation that digital engagement does not of itself constitute a critical approach is important in this regard. The way critical literacy is approached requires reflection. As seen in Chapter 6 the analysis of the interviews in this research revealed that a thread of tension between convenience positions and critical stances that frequently exhibited positions that could be characterised as *"critical apathy"* (Teurlings, 2010, quoted in 2.3.3) The evidence is that this is not limited to young people and thought needs to be given to addressing this. It is possible that received notions of critical literacy need to be abandoned and that critical literacy practices need to be built out of the lived experience of the individual. The value of reflection and awareness of the tensions involved is an aspect that was common to most of the research interviews. Pedagogical practice should incorporate this as something that needs to be modelled, through debate about concepts such as trust, privacy friendship and transparency, and exploration of the tensions involved, foregrounding understandings that promote autonomy rather than the teaching of specific behaviours without understanding of the reasons for them. These understandings should include especially the endlessly

provisional or ad-hoc nature of literacies in a digitally mediated world, and the challenge of managing the uncertainty or indeterminacy that produces.

4. In the policy recommendations I mentioned the need for education to prepare the individual to be able to navigate between and within the different spaces they occupy. This implies that <u>pedagogical practice should involve exploration both of specific, exemplary sets of literacy practices, and the active participatory derivation, by learners, of patterns of literacy practices and understandings that are applicable across spaces</u>, bearing in mind the need for the adaptation of generic practices to specific loci, and emergent or evolving loci. Loci may be read as communities where necessary. This implies substantial changes in the ways pedagogical practice in different educational contexts is organised, and the ways in which teaching/learning processes are articulated in each subject area. In the policy section I discussed the relation of the notion of the Personal Learning Environment, and those considerations apply equally to pedagogical practice, which should aim to facilitate the development of the learner's collection of digitally mediated and other literacy practices so that it conforms what I have tentatively termed a 'Personal Literacy Ecosystem'. This ecosystem rather than a specific technology, can be understood as the collection (digital and non-digital) of tools, sources, connections and practices that a learner uses to learn. <u>A central pedagogical task in any educational context in a digital world should involve helping learners to comprehend, organise and extend this collection to improve their learning</u>, and their autonomy in relation to learning throughout the lifespan. (The old adage about giving someone a fish and they'll eat for a day, but teach them how to fish and they'll eat forever is apposite). This would include a focus

on meta-literacy – made up of understandings of literacy and specific domain-related literacies - as well as the practices themselves.

As can be seen there is an overlap between the policy recommendations and those relating to pedagogical practice. This is not the place, for reasons of space to explore the degree of connection between policy and pedagogical practice in different educational contexts. Furthermore, few of the recommendations I make deal with the specifics of change in practice or policy, due to the scope of this work and its focus on understandings in this research, as opposed to specific practices. I therefore have not explored in detail how these recommendations should be implemented. The central idea that there is a need to consider the commonalities in our view of literacy is perhaps less common currency, and a useful baseline from which to explore the possibilities for the adaptation of educational policy and pedagogical practice to a digitally mediated world. This will be discussed further in the final section on Further Work/Research and Implementation, but first it is necessary to discuss the limitations of this work.

7.5 LIMITATIONS

While I believe that the findings of this research and the recommendations I make to educational policy and pedagogical practice are valuable and make an important contribution to understandings of literacy in a digital world, it is necessary to recognise that this work has certain limitations. Apart from the considerations relating to data collection issues, which I covered in section 4.2.3, there are some aspects that limit the work. I will discuss these in this section.

A central limitation derives from the nature of the subject area and its continuous and rapid

evolution. The speed of technological change is now a commonplace observation in work relating to education and digital technologies, and it is an aspect that poses considerable challenges to researchers. The problem is that the logical research response to continuous evolution would be continuous observation, but this is rarely feasible within the scope of most research projects, which have limited funding and limited timescales. This is also the case with this research and, as I discussed in section 4.3.1, it is an issue that means that at some point data collection has to stop. However there is no logical cut-off point at which to do this. This means that what is presented is a photograph taken at a particular moment in time, with a limited perspective. Ideally this kind of research needs to be on-going and a key limitation of this particular research project is that the data collected is almost certainly in need of updating as I write. This is an aspect that needs to be taken into account when interpreting the findings and conclusions of the work.

Another limitation derives from the nature of this particular research project, which is work directed towards achieving a doctorate in education. This produces a series of limitations in the scope of the work, not least of which is a need for the work to be done by one individual, the author. Though the nature of the research questions, as I argued in chapter 3, requires a qualitative approach, qualitative research is always subject to the risk of interpretive bias on the part of the researcher. Although I made efforts to reduce these effects, a key mechanism for doing this, teamwork, was not available to me due to the nature of the doctoral process. Ideally a research project of this kind would be enriched by teamwork, especially in the process of analysis of the data, where the application of the interpretations of different individual researchers to the data would provide an extra degree of solidity that an individual researcher cannot achieve. Though teams of researchers also run the risk of 'groupthink', the multiple

views of different researchers would provide a triangulation that was not available in this particular case, and which would strengthen the validity of the findings and conclusions.

Another issue to bear in mind is the question of sample size. Though many educational research projects of this nature are based on quite small samples, the issue of the generalizability of results remains a challenge. Though the design of this research, searching for commonalities across three very different groups, was aimed to address this challenge, this sample size still constitutes a limitation, even though achieving a sample size that could be construed as fully representative would be way beyond the possible scope of a project of this nature. Obviously with more resources, more time, a greater number of different groups and more respondents it would be easier to claim generalizability, though it must be remembered that this is an issue in any qualitative research that aims at identifying human understandings of their contexts, as opposed to deriving numerical indicators of behaviours.

Another limitation relates to the scope of the research. As I discussed in section 1.3 my focus was what I called the 'meso' level, located between the micro levels of specific practices and the macro level of policy, which was an area that in my view particularly merits exploration, due to the fact that it allows for the perspectives and understandings of the ordinary user to be included in discussions about literacy. However, this focus on understandings, as opposed to more concrete examination, for example of behaviours, artefacts or policy documents, runs the risk of existing in a vacuum without any point of reference other than the subjective perceptions of the participants. Though I addressed this by focusing the interviews on personal narratives that grounded the descriptions in events and practices, the work would have been enriched by the inclusion, for example, of observations of literacy practices and events. This would however have been considerably more ambitious, notwithstanding the difficulties of

observing digitally mediated literacy practices that I mentioned in section 3.2, and would have involved such a widening of the scope of the work as to make it unfeasible.

The final limitation, and perhaps the most important, is the question of Ismael's wife. In section 5.3.1 I mentioned a small vignette provided by Ismael relating to his wife's profound resistance to the adoption of digital technologies. This can be viewed as a microcosm of the divide between advanced users and those who have not integrated digitally mediated literacy practices into their lives. Again the limitations of this kind of research in a doctoral study made it impossible for me to extend the research to less advanced users but in my view the fact that this kind of user could not be included is a limitation of the work.

This range of limitations obviously affects the reader's interpretation of the results of this work. However, in my view the work has generated a series of useful insights that do contribute to a fuller understanding of literacy in a digital world, and the very limitations of the work point the way to further projects and extensions of the work I have done here. I will describe these in the final section.

7.6 FURTHER WORK/RESEARCH AND IMPLEMENTATION

The analysis process has permitted me to identify a series of shared understandings that are common to advanced users of digital technologies in three very different cultural contexts and thus answer my research questions. From these I have derived a series of recommendations for educational policy, and pedagogical practice. It is clear that much more could be done to enrich and extend the work beyond and after the EdD itself. I see two principal avenues.

The first is implementation. Research work in education needs to translate into policy. My intention is to raise these issues in a range of fora, especially in those spaces where I am able,

due to my work, to interact with policy makers[11], in order to try to put the recommendations into practice. I also intend to look for opportunities to put them into practice in educational innovation projects.

The other avenue is further research. The set of commonalities that emerged here is a useful starting point but no more than that. The work should continue in order to amplify and diversify both the group of interviewees and the commonalities. Several aspects suggest other projects, such as for example, exploration of the nature of the communication in relation to Ong´s (1982) secondary orality, the possibility of developing the set of patterns as a matrix for exploring and developing literacy, the understandings of users who are less advanced, mapping their development or the notion of the literacy 'event' in a context of continuous connection. Wilber (2010) observes that we must *"research and understand new literacies as they are happening, as users adopt new technologies and make them part of their lives"* (p.2). This implies longitudinal research. Ideally there should be an observatory of new literacies that does this, or it could be a one person project. The scale depends on funding, and that depends on the reception of this work, but my intention is to continue.

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[11] Largely in the European Commission where I contribute as an external expert to some policy processes.

8. REFERENCES

Abbott, C. (2002) 'Writing the Visual: the use of graphic symbols in onscreen texts', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Adell, J. and Castañeda, L. (2010) "Los Entornos Personales de Aprendizaje (PLEs): una nueva manera de entender el aprendizaje". In Roig Vila, R. y Fiorucci, M. (Eds.) *Claves para la investigación en innovación y calidad educativas. La integración de las Tecnologías de la Información y la Comunicación y la Interculturalidad en las aulas. Stumenti di ricerca per l'innovaziones e la qualità in ámbito educativo. La Tecnologie dell'informazione e della Comunicaziones e l'interculturalità nella scuola.* Alcoy: Marfil – Roma TRE Universita degli studi.

Amichai-Hamburger, Y. (2007) 'Personality, individual differences and Internet use', in Joinson, A., McKenna, K., Postmes, T. and Reips, U.D. (eds) *The Oxford Handbook of Internet Psychology.* Oxford, UK, OUP.

Andersen, S.M. and Chen, S. (2002) 'The relational self: an interpersonal socio-cognitive theory', *Psychological Review* vol.*109*, pp. 619-645.

Attwell, G. (2007) 'Personal Learning Environments - the future of eLearning?', *eLearning Papers,* vol. 2 no. 1 [Online], Available at http://tinyurl.com/5jjl4a (Accessed 29/09/2012).

Bakhtin, M. (1981) *The Dialogic Imagination: Four Essays,* Holquist, M. (ed) Austin, US, University of Texas Press.

Baldwin, M.W. (1997) 'Relational schemas a source of if-then self-inference procedures', *Review of General Psychology,* vol.1, pp.326-355.

Baumann, Z. (2000) *Liquid Modernity,* Cambridge, UK, Polity Press.

Baumann, Z., and Vecchi, B. (2004) *Identity: Conversations with Benedetto Vecchi,* Cambridge, UK, Polity Press.

Baron, N.S. (2008) *Always On: Language in an Online and Mobile World,* Oxford, UK, OUP.

Barton, D. and Hamilton, M. (1998) *Local Literacies: A Study of Reading and Writing in One Community,* London, UK, Routledge.

Bayne, S. (2005) 'Deceit, desire and control: the identities of learners and teachers in cyberspace', in Land, R. and Bayne, S. (eds) *Education in Cyberspace,* Abingdon, UK, Routledge Falmer.

Beavis, C. (2002) 'Reading, Writing and Role-playing games', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Beetham, H., McGill, L. and Littlejohn, A. (2009) *Thriving in the 21st Century: Final report of Learning Literacies for the Digital Age (LLiDA) project,* [Online], Available at http://tinyurl.com/98jhpbc (Accessed 09/05/2012).

Belshaw, D. and Stewart, A. (2011) *purpose/ed* [Online], Available at http://purposed.org.uk (Accessed 09/05/2012).

Benwell, B. and Stokoe, E. (2006) *Discourse and Identity,* Edinburgh, UK, Edinburgh University Press.

Bigum, C. (2002) 'Design sensibilities: schools, and the new computing and communication technologies', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Birkerts, S. (2006) *The Gutenberg Elegies: the Fate of Reading in an Electronic Age,* New York,

US, Faber and Faber

Birr Moje, E., Luke, A., Davies, B., and Street, B. 'Literacy and Identity: Examining the Metaphors in History and Contemporary Research', *Reading Research Quarterly* vol. 44, no.4, pp.415-437.

Bitz, M. (2009) *Manga High: Literacy, identity, and coming of age in an urban high school,* Massachusetts, US, Harvard Education Press.

Bounegru, L. (2008) "Secondary Orality and Microblogging", [Online], blog post at http://tinyurl.com/olr957b (Accessed 25/7/13)

Bourdieu, P. and Passeron J-C. (1977) *Reproduction in Education, Society and Culture,* Beverly Hills, US, Sage.

Brandt, D., & Clinton, K. (2002) 'Limits of the local: Expanding perspectives on literacy as a social practice', *Journal of Literacy Research,* vol.34, no.3, pp.337–356.

Brewer, B.M. (1991) 'The social self: on being the same and different at the same time', *Personality and Social Psychology Bulletin* vol.17, pp.475-482.

Brewer, J.D. (2000) *Ethnography,* Buckingham, UK, Open University Press.

Brown, K. R., Cummins, J., and Sayers, D. (2007) *Literacy, technology and diversity: Teaching for success in changing times,* Boston, US, Allyn and Bacon.

Bruckmann, A. (1993) *Genderswapping on the Internet,* [Online], Available at http://tinyurl.com/8hv2o3g (Accessed 09/05/2012).

Bruner, J. (1999) 'Culture, mind and education', in Moon, B. and Murphy, P. (eds) *Curriculum in Context* London, UK, Sage.

Bruner, J. (1996) *The Culture of Education,* London, UK, Harvard University Press.

Burbules, N.C. and Berk, R. (1999) 'Critical Thinking and Critical Pedagogy' in Popkewitz, T. and Fendler, L. (eds) *Critical Theories in Education.* New York, US, Routledge. [Online], Available at http://tinyurl.com/8ud8akc (Accessed 26/12/2009).

Burbules, N. and Callister, T.A. (2000) *Watch IT: The risks and promises of new information technologies for education,* Oxford, UK, Westview Press.

Burbules, N. (2002) 'The Web as a rhetorical place', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Burnett, R. (2002) 'Technology, learning and visual culture', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Caldas-Coulthard, C.R. and Iedema, R. (eds) (2008) *Identity Trouble: Critical Discourse and Contested Identities,* Basingstoke, UK, Palgrave Macmillan.

Carter, S.P. (2006) '"She would have still made that face expression". The uses of multiple literacies by two African American young women', *Theory into Practice,* vol.45, no.4, pp. 352-358.

Castells, M. (1996/2000) *The rise of the network society*, 2nd edition, Malden, MA, US, Blackwell.

Castells, M. (1997) *The power of identity,* 2nd edition, Malden, MA, US, Blackwell.

Castells, M. (1998/2000) *End of millennium*, 2nd edition, Malden, MA, US, Blackwell.

de Certeau, M. (1984) *The Practice of Everyday Life*, (trans. S. Rendall), University of California Press, Berkeley.

Charmaz, K. (2006) *Constructing Grounded Theory: A practical guide through qualitative analysis,* London, UK, Sage.

Charmaz, K. (2008) 'Grounded Theory as an Emergent Method', in Hesse-Biber, S.N, and Leavy, P. (eds) *Handbook of Emergent Methods* New York, US, The Guilford Press.

Chester, A. and Bretherton, D. (2007) 'Impression management and identity online', in Joinson, A., McKenna, K., Postmes, T. and Reips, U.D. (eds) *The Oxford Handbook of Internet Psychology.* Oxford, UK, OUP.

Clarke, A. E. (2005) *Situational analysis: Grounded theory after the postmodern turn,* Thousand Oaks, CA, US, Sage.

Coiro et al. (2008) 'Central issues in new literacies and new literacies research', in J. Coiro, M. Knobel, C. Lankshear, D. Leu (Eds). *Handbook of Research on New Literacies* (pp. 1-21). Mahwah, NJ, US, Lawrence Erlbaum Publishers.

Collins, J. and Blot, R.K. (2003) *Literacy and Literacies: Texts, Power and Identity,* Cambridge, UK, Cambridge University Press.

Cooley, C.H. (1902) *Human nature and the social order*, New York, US, Scribners.

Cummins, J. (1989) *Empowering minority students,* Sacramento, CA, US, California Association for Bilingual Education.

Davies, B. (1989) *Frogs and snails and feminist tales: Pre-school children and gender*, Boston, MA, US, Allen and Unwin.

Davies, J. (2012) 'Facework on Facebook as a new literacy practice', *Computers & Education,* vol. 59, pp. 19–29.

Downes, S. (2009) *Speaking in Lolcats: What Literacy Means in teh Digital Era,* [Online],

Available at http://www.downes.ca/presentation/232 (Accessed 09/05/2012).

Downes, S. (2012) *Stephen's Web,* [Online], Available at www.downes.ca (Accessed 03/09/2012).

Edwards, P.N. (2002) "Infrastructure and Modernity: Force, Time, and Social Organization in the History of Sociotechnical Systems" in Brey, P., Rip, A., and Feenberg, A. (eds.), *Technology and Modernity: The Empirical Turn,* Cambridge, MA, US, MIT Press.

Ericsson, K.A: and Simon, H.A. (1993) *Protocol Analysis: Verbal reports as Data,* Cambridge, MA, US, The MIT Press.

Erstad, O., Gilje, Ø., Sefton-Green, J. and Vasbø, K. (2009) 'Exploring 'learning lives': community, identity, literacy and meaning', *Literacy,* vol.43, no.2.

Eshet-Alkalai, Y., and Chajut, E. (2009) 'Changes over time in digital literacy', *Cyberpsychology and Behaviour,* vol.12, no.6.

European Commission (2010) *A Digital Agenda for Europe,* [Online], Available at http://tinyurl.com/9v6st2s (Accessed 03/09/2012)

Fabos, B. (2008) 'The Price of Information: Critical literacy, Education and Today's Internet', in J. Coiro, M. Knobel, C. Lankshear, D. Leu (Eds). *Handbook of Research on New Literacies,* Mahwah, NJ, US, Lawrence Erlbaum Publishers.

Fairclough, N. (1995) *Critical Discourse Analysis,* London, UK, Longman.

Featherstone, M. (1991) 'The body in consumer culture', in Featherstone, M., Hepworth, M. and Turner, B. (eds) *The Body: Social Processes and Cultural Theory,* London, UK, Sage.

Freire, P. (1996) *Pedagogy of the Oppressed,* (trans. M. Bergman Ramos), London, UK, Penguin.

Freire, P. and Macedo, D. (1987) *Literacy: Reading the Word and the World,* Westport, US, Bergin and Garvey.

Friesen, N. (2010) 'Education and the Social web: Connective learning and the commercial imperative', *First Monday,* vol.15, no.12 [Online], Available at http://tinyurl.com/98stss3 (Accessed 09/05/2012).

Fryer, W. (2012) *Moving at the Speed of Creativity,* [Online], Available at www.speedofcreativity.org (Accessed 03/09/2012).

Gee, J. P. (1990) *Social Linguistics and Literacies: Ideology in Discourses*, Basingstoke, UK, Falmer Press.

Gee, J. P. (2000) 'Identity as an Analytic Lens for Research in Education', *Review of Research in Education*, vol.25, no.1, pp.99 -125.

Giddens, A. (1984) *The Constitution of Society: Outline of the Theory of Structuration,* Cambridge, UK, Polity Press.

Gillen, J and Barton, D. (2010) *Digital Literacies, Enhanced Learning phase of the Teaching and Learning Research Programme,* London, UK, London Knowledge Lab.

Gladwell, M. (2000) *The Tipping Point: How Little Things Can Make a Big Difference,* Boston, US, Little and Brown.

Glaser, B. (1992) *Basics of grounded theory analysis: emergence vs. forcing,* Mill Valley, CA, US, Sociology Press.

Glaser, B.G and Strauss, A.L. (1967) *The discovery of grounded theory: strategies for qualitative research,* Chicago, US, Aldine.

Goffmann, E. (1959) *The Presentation of Self in Everyday Life,* New York, US, Anchor Books.

Goodfellow, R. (2011) Literacy, literacies, and the digital in higher education. Teaching in Higher Education, 16(1), pp. 131–144.

Gormley, I. (2009) *Us Now*. Banyak films. [Online], Available at http://watch.usnowfilm.com (Accessed 14/09/2009).

Graff, H.J. (ed) (1995) *The labyrinths of literacy: reflections on literacy past and present* Pittsburgh, PA, US, University of Pittsburgh Press.

Gregory, E., & Williams, A. (2003) 'Investigating family literacy histories and children's reading practices in London, UK's East End', in S. Goodman, T. Lillis, J. Maybin, & N. Mercer (eds), *Language, Literacy and Education: A Reader*, Stoke on Trent, UK, Trentham Books Limited/Open University Press.

Greenfield, S. (2008) *Identity: The quest for meaning in the 21st century,* London, UK, Sceptre.

Habermas, J. (1968) *Knowledge and Human Interests*, London, UK, Heinemann.

Hagood, M. (2008) 'Intersections of popular culture, identities and new literacies research', in J. Coiro, M. Knobel, C. Lankshear, D. Leu (Eds). *Handbook of Research on New Literacies,* Mahwah, NJ, US, Lawrence Erlbaum Publishers.

Halliday, M.A.K (2005) 'On matter and meaning: the two realms of human experience', *Linguistics and the Human Sciences* vol.1, no.1.

Hamilton, M. (2002) 'Sustainable literacies and the ecology of lifelong learning' in Harrison, R., Reeve, F., Hanson, A. and Clarke, J. (eds) *Supporting Lifelong Learning: Volume 1 Perspectives on learning,* London, UK, Routledge Falmer in association with The Open University.

Haythornthwaite, C. (2006) 'Learning and knowledge networks in interdisciplinary collaborations', *JASIST - Journal of the American Society for Information Science and Technology*, 57 (8) pp. 1079-1092.

Haythornthwaite, C. and Richard Andrews, R. (2011) *E-learning Theory and Practice,* London, UK, Sage.

Hayes, N. (2000) *Doing Psychological Research: Gathering and Analysing Data,* Buckingham, UK, Open University Press

Heath, S. B. (1983) *Ways with words: Language, life, and work in communities and classrooms,* Cambridge, UK, Cambridge University Press

Hecht, M. I. (1993) '2002: a Research Odyssey toward the Development of a Communication Theory of Identity', *Communication Monographs* vol.60, pp.76-82.

Hicks, D. (2003) 'Discourse, teaching and learning', in S. Goodman, T. Lillis, J. Maybin, & N. Mercer (eds), *Language, Literacy and Education: A Reader.* Stoke on Trent, UK, Trentham Books Limited/Open University Press.

Horkheimer, M. (1982) *Critical Theory,* New York, US, Seabury Press.

Horney, K. (1946) *Our inner conflicts: a constructive theory of neurosis,* London, UK, Routledge and Kegan Paul.

Hughes, G. and Oliver, M. (2010) 'Being online: a critical view of identity and subjectivity in new virtual learning spaces', *London Review of Education,* vol.8, no.1, pp.1-4.

Jacobs, G.E. (2004) 'Complicating Contexts: Issues of Methodology in Researching the Language and Literacies of Instant Messaging', *Reading Research Quarterly*, Vol. 39, No. 4, pp. 394-406.

Jenkins, H. C., Clinton, K., Puroshotma, R., Robison, A.J. and Weigel, M. (2006) *White paper — Confronting the Challenges of Participatory culture: Media Education for the 21st century.* Chicago, US, The John P. and Catherine T. MacArthur Foundation.

Jewitt, C., & Kress, G. (2003) *Multimodal literacy,* New York, US, Peter Lang Publishing.

Jewitt, C. (2009) *Handbook for Multimodal Analysis*, London. Routledge.

JISC/British Library/UCL (2008) *Information Behaviour of the Researcher of the Future.* [Online], Available at http://tinyurl.com/2zd26a (Accessed 09/05/2012).

Joinson A.N. and Paine, C.B. (2007) 'Self-disclosure, privacy and the Internet', in Joinson, A., McKenna, K., Postmes, T. and Reips, U.D. (eds) *The Oxford Handbook of Internet Psychology,* Oxford, UK, OUP.

Johnson, E. and Vasudevan, L. (2012) 'Seeing and Hearing Students' Lived and Embodied Critical Literacy Practices', *Theory into Practice,* vol.51, no.1, pp.34-41.

Joseph, J.E. (2004) *Language and identity: national, ethnic, religious,* Basingstoke, UK, Palgrave Macmillan.

Keen A. (2007) *The Cult of the Amateur: How Today's internet is killing our culture,* New York, US, Doubleday.

Kellner, D. (1998) 'Multiple Literacies and Critical Pedagogy in a Multicultural Society', *Educational Theory,* vol.48, no.1, pp.103-22.

Kellner, D. M. (2002) 'Technological revolution, multiple literacies, and the restructuring of education', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age,* London, UK, Routledge.

Kist, W. (2005) *New Literacies in Action: Teaching and Learning in Multiple Media,* New York, US, Teacher's College Press.

Kraut, R., Mukhopadhyay, T., Szczypula, J., Kiesler, S. and Scherlis, B. (1999) 'Information and Communication: Alternative Uses of the Internet in Households' *Information Systems Research* Vol. 10, No. 4, pp. 287–303.

Kress, G. (1997) *Before Writing: Rethinking the Paths to Literacy,* London, UK, Routledge.

Kress, G. (2003) *Literacy in the New Media Age,* Abingdon, UK, Routledge.

Kress, G., & van Leeuwen. (1996) *Reading images: the grammar of visual design,* Abingdon, UK, Routledge.

Land, R. and Bayne, S. (2005) 'Screen or monitor? Issues of surveillance and disciplinary power in online learning environments', in Land, R. and Bayne, S. (eds) *Education in Cyberspace,* Abingdon, UK, Routledge Falmer.

Lankshear, C., & McLaren, P. (eds) (1993) *Critical literacy,* Albany, NY: State University of New York Press.

Lankshear, C., & Knobel, M. (2002) 'What am I bid? Reading, writing and ratings at eBay.com', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age,* London, UK, Routledge.

Lankshear, C., & Knobel, M. (2003) *New Literacies: Changing Knowledge and Classroom Learning,* Buckingham, UK, Open University Press.

Latour, B. (1996) 'On Interobjectivity', in *Mind, Culture and Activity,* vol.3, no.4, pp.228-45.

Leander, K. (2008) 'Towards a connective ethnography of online/offline literacy networks', in Coiro, J., Knobel, M, Lankshear, C., and Leu D.(eds) *Handbook of Research on New Literacies,* Mahwah, NJ, US, Lawrence Erlbaum Publishers

Leitch, S. (2006) *Prosperity for All in a Global Economy: World Class Skills,* UK, HM Govt.

Lemke, J. (1998) 'Multiplying meaning: Visual and verbal semiotics in scientific text', in J. R. Martin, J. and Veel, R. (eds), *Reading science: Critical and functional perspectives on discourses of science,* London, UK, Routledge.

Lemke, J. (2008) 'Identity, Development and Desire: Critical Questions', in Caldas-Coulthard, C.R. and Iedema, R. (eds) *Identity Trouble: Critical Discourse and Contested Identities,* Basingstoke, UK, Palgrave Macmillan.

Lewis, C., & Fabos, B. (2005) 'Instant messaging, literacies, and social identities', *Reading Research Quarterly,* vol.40, no.4, pp.470–501.

Livingstone, S. (2009) *Children and the Internet,* Cambridge, UK, Polity Press.

Luke, A. (2012) 'Critical Literacy: Foundational Notes', *Theory into Practice,* vol.51, no.1, pp.4-11.

Luke, C. (1997) *Technological literacy.* Canberra, AU, Language Australia Publications. [Online], Available at http://tinyurl.com/8hlx6ls (Accessed 29/09/2012).

Marwick, A.E. and boyd, d. (2007) 'I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience'. *New Media & Society* vol.20, no.10 pp. 1-20.

McCracken, G. (1988) *The long interview,* Newbury Park, CA, US, Sage.

McKenna, K. (2007) 'Through the Internet looking glass: expressing and validating the true self', in Joinson, A., McKenna, K., Postmes, T. and Reips, U.D. (eds) *The Oxford Handbook of Internet Psychology,* Oxford, UK, OUP.

Menezes de Souza, L. M. T. (2003) 'Literacy and dreamspace: multimodal texts in a Brazilian indigenous community', in S. Goodman, T. Lillis, J. Maybin, & N. Mercer (eds), *Language, Literacy and Education: A Reader,* Stoke on Trent, UK, Trentham Books Limited/Open University Press.

Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis,* 2nd edition, Thousand Oaks, CA, US, Sage.

Mills, K.A. (2010) 'A Review of the "Digital Turn" in the New Literacy Studies', *Review of Educational Research,* vol.80, no.2, pp. 246–271

Nash, S. S. (2012) *E-learning Queen,* [Online], Available at elearnqueen.blogspot.com (Accessed 03/09/2012).

New London Group (1996) 'A pedagogy of multiliteracies: designing social futures', *Harvard Educational Review*, vol.66, no.1, pp. 60-92.

New Media Consortium (2005) *A Global Imperative – the report of the 21st century literacy summit* [Online], Available at http://tinyurl.com/9nr63dk (Accessed 09/05/2012).

New Media Consortium (2012) *Horizon Project Retreat Communiqué* [Online], Available at http://tinyurl.com/7hnkzk3 (Accessed 03/09/2012).

Ong, W. (1982) *Orality and literacy: the technologizing of the word,* London, UK, Methuen.

Paul, R. (1983) 'An agenda item for the informal logic/critical thinking movement', *Informal Logic Newsletter*, vol. 5, no. 2.

Pepe, A., Wolff, S. and Van Godtsenhoven, K. (2012) One, None, One Hundred Thousand Profiles *First Monday 17(4)* [Online], Available at http://tinyurl.com/8humzmg (Accessed 09/05/2012).

Pew Internet and American Life Project (2009) *Wireless Internet Use*, Washington, US, Pew Research Centre.

PIAAC Literacy Expert Group (2009) 'PIAAC Literacy: A Conceptual Framework', *OECD Education Working Papers*, No. 34, OECD Publishing.

Prensky, M. (2001) 'Digital natives, digital immigrants', *On the Horizon,* vol.9, no.5 [Online], Available at http://tinyurl.com/ypgvf (Accessed 29/09/2012).

Prinsloo, M., & Brier, M. (1996) *The Social Uses of Literacy: Theory and Practice in Contemporary South Africa,* Amsterdam, NL, John Benjamins.

Rex, L. A., Bunn, M., Davila, B. A., Dickinson, H. A., Carpenter Ford, A., Gerben, C., McBee and Orzulak, M. J. *(2010)* 'A Review of Discourse Analysis in Literacy Research: Equitable Access', *Reading Research Quarterly*, vol.45, no.1, pp. 94-115.

Richards, K. (2009) 'Interviews', in Heigham, J., & Croker, R. A. (eds) *Qualitative Research in Applied Linguistics: A Practical Introduction,* Basingstoke, UK, Palgrave Macmillan.

Robinson, K. (2006) *Do schools kill creativity?* YouTube video of talk given at TED Conference, added by TED Talks [Online], Available at http://tinyurl.com/cmvy687 (Accessed 30/06/2013).

Rogers, C. (1951) *Client-centered therapy*, Boston, MA, US, Houghton Mifflin.

Saldaña, J. (2011) *The Coding Manual for Qualitative Researchers,* London, UK, Sage.

Scribner, S. and Cole, M. (1981) *The Psychology of Literacy,* Cambridge, MA, US, Harvard University Press.

Sefton-Green, J. (ed) (1998) *Digital diversions: Youth culture in the age of multimedia,* London, UK, UCL Press.

Shor, I. (1982) *Empowering Education: Critical Teaching for Social Change,* Chicago, US, University of Chicago Press.

Siegel, L. (2008) *Against the Machine: Being Human in the Age of the Electronic Mob,* New York, US, Spiegel and Grab.

Siemens, G. (2012) *elearnspace* [Online], Available at www.elearnspace.org (Accessed 03/09/2012).

Silverman, D. (2000) *Doing Qualitative Research,* London, UK, Sage.

Singel, R. (2010) *How Facebook Could Beat Google to Win the Net*, [Online], Available at http://tinyurl.com/32d6clk (Accessed 09/05/2012)

Sloterdijk, P. (2004) *Sphären III: Schaume* Frankfurt am Main, DE, Suhrkamp.

Sloterdijk, P. (2005) *Im Weltinnenraum des Kapitals: Für eine philosophische Theorie der Globalisierung* Frankfurt am Main, DE, Suhrkamp.

Smuts, J. C. (1926) *Holism and Evolution,* London, UK, Macmillan

Snyder, I. (ed) (1998) *Page to Screen: Taking Literacy into the Electronic Era,* London, UK, Routledge.

Snyder, I. (2002) 'Communication, imagination, critique - literacy education for the electronic age', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Snyder, I., Jones, A., and Lo Bianco, J. (2005) *Using Information and Communication Technologies in Adult Literacy Education: New Practices, New Challenges. An Adult Literacy National Project Report* Leabrook, AU, National Centre for Vocational Education Research (NCVER).

Steiner, P. (1993) 'On the Internet nobody knows you're a dog', *The New Yorker*, vol. 69, no. 20, p.61.

Strauss, A.L (1987) *Qualitative Analysis for Social Scientists,* Cambridge, UK, Cambridge University Press

Street, B. (1995) *Social Literacies: Critical Approaches to Literacy in Development, Ethnography and Education,* London, UK, Pearson.

Street, B. (1997) 'The implications of the 'new literacy studies' for literacy education', *English in Education*, vol.31, no.3, pp.45-59.

Swanwick, R., (2003) 'Sign bilingual deaf children's approach to writing: individual strategies for bridging the gap between BSL and written English', in Harrison, R., Reeve, F., Hanson, A., & Clarke, J. (eds) *Supporting Lifelong Learning: Volume 1 Perspectives on learning,* London, UK, Routledge Falmer/ Open University.

Teurlings, J. (2010) 'Media literacy and the challenge of contemporary culture. On savvy viewers and critical apathy', *European Journal of Cultural Studies,* vol.13, no.3, pp.359-373.

Turkle, S. (1995) *Life on the Screen: Identity in the Age of the Internet,* London, UK, Weidenfeld and Nicholson.

Tyner, K. R. (1998) *Literacy in a Digital World: Teaching and Learning in the Age of Information,* New Jersey, US, Lawrence Erlbaum and Associates.

UNESCO (2005) *Education for All Global Monitoring Report: Literacy for Life,* Paris, FR, UNESCO.

Vossen, G. and Hagemann, S. (2007) *Unleashing Web 2.0: From Concepts to Creativity,* San Francisco, US, Morgan Kaufman.

Wallace, C. (2003) 'Local literacies and global literacy', in S. Goodman, T. Lillis, J. Maybin, & N. Mercer (eds) *Language, Literacy and Education: A Reader*, Stoke on Trent, UK, Trentham Books Limited/Open University Press.

Walsh, C.S. (2009) 'The multimodal design of school texts', *The Journal of Research in Reading Special Issue on Literacy and Technology,* vol.32, no.1, pp.24-40.

Walton, M. (2007) 'Cheating literacy: The limitations of simulated classroom discourse in educational software for children', *Language and Education,* vol.21, no.3, pp.197–215.

Warschauer, M. (2002) 'Languages.com: the Internet and linguistic pluralism', in Snyder, I. (ed), *Silicon Literacies: Communication, Innovation and Education in the Electronic Age*, London, UK, Routledge.

Warschauer, M. and Ware, P. (2008) 'Learning, Change and Power: Competing Frames of Technology and Literacy', in Coiro, J., Knobel, M, Lankshear, C., and Leu D. (eds) *Handbook of Research on New Literacies,* Mahwah, NJ, US, Lawrence Erlbaum Publishers.

Watters, A. (2012) *Hack Education,* [Online], Available at hackeducation.com (Accessed 03/09/2012).

Wegerif, T. (2001) *Qualitative Research Interviewing,* London, UK, Sage.

Wellmann, B. and Haythornthwaite, C. (2002) *Internet in Everyday Life,* Oxford, UK, Blackwell Publishers.

Wesch, M. (2008) 'Context collapse'. *Digital ethnography,* 31 July [Online], Available at http://tinyurl.com/8o49bhs (Accessed 08/05/2012).

Wesch, M. (2009) *The Machine is (Changing) US, YouTube Culture and the Politics of Authenticity,* Talk given at Personal Democracy Forum, You Tube video, added by personal democracy [Online], Available at http://tinyurl.com/8nhza9g (Accessed 08/05/2012).

White, D.S. and Le Cornu, L. (2011) 'Visitors and Residents: A new typology for online engagement', *First Monday,* vol.16, no.9 [Online], Available at http://tinyurl.com/8pubqv2 (Accessed 09/05/2012).

Wilber, D. (ed) (2010) Beyond New Literacies. *Digital Culture & Education,* vol.2, no.1.

Williams, R. (1975). *The Long Revolution,* Westport, Connecticut, US, Greenwood Press.

Wortham, S. (2008) 'Shifting Identities in the Classroom', in Caldas-Coulthard, C.R. and Iedema,

R. (eds) *Identity Trouble: Critical Discourse and Contested Identities,* Basingstoke, UK, Palgrave Macmillan.

Zuckerberg, M. (2012) *Open letter to prospective investors in Facebook*. [Online], Available at http://tinyurl.com/77dvud7 (Accessed 09/05/2012).

9. APPENDIXES

Appendix A: Participants

Name (anon.)	Location	Nationality	Gender	Age Bracket	Occupation
Anne	UK	British	F	55+	Semi-retired IT tutor
Barry	UK	British	M	55+	Semi-retired IT tutor
Basil	UK	British	M	55+	Semi-retired IT tutor
Carol	UK	British	F	55+	Retired IT tutor
Gerald	UK	British	M	55+	Semi-retired IT tutor
Mark	UK	British	M	55+	Semi-retired IT tutor
Mary	UK	British	M	55+	Retired IT tutor
Terry	UK	British	M	55+	Semi-retired IT tutor
Alfredo	Mexico DF	Mexican	M	30-50	Education administration
Alicia	Mexico DF	Mexican	F	30-50	Training developer
Edgar	Mexico DF	Mexican	M	30-50	Training developer
Eduardo	Mexico DF	Mexican	M	30-50	Education administration
Irma	Mexico DF	Mexican	F	30-50	Education administration
Ismael	Mexico DF	Mexican	M	30-50	Education administration
Jacqueline	Mexico DF	Mexican	F	30-50	Training developer
Mabel	Mexico DF	Mexican	F	30-50	Education administration
Paloma	Mexico DF	Mexican	F	30-50	Training developer
Rosa	Mexico DF	Mexican	F	30-50	Training

					developer
Virginia	Mexico DF	Mexican	F	30-50	Education administration
Zacarias	Mexico DF	Mexican	M	30-50	Education administration
Jacobo	Spain	Spanish	M	16	Secondary student
Magali	Mexico DF	Spanish	F	30-50	Education administration
Noelia	Spain	Spanish	F	16	Secondary student
Patricio	Spain	Spanish	M	16	Secondary student
Sara	Spain	Spanish	F	16	Secondary student
Sonia	Spain	Spanish	F	16	Secondary student

Appendix B: Interview Schedule

Name (anon.)	Date 1st Interview	Location 1st Interview	Date 2nd Interview	Location 2nd Interview	Comments
Alfredo	2/2/10	Mexico DF	31/3/10	Skype	
Alicia	4/2/10	Mexico DF	24/3/10	Skype	
Anne	12/3/10	UK	14/4/10	Skype	
Barry	15/3/10	UK	16/4/10	Skype	
Basil	11/3/10	UK	15/4/10	Skype	
Carol	18/3/10	UK	30/6/10	UK	Delay due to researcher illness, 2nd face to face due to availability
Edgar	2/2/10	Mexico DF	25/3/10	Skype	
Eduardo	29/1/10	Mexico DF	25/3/10	Skype	
Gerald	12/3/10	UK	20/4/10	Skype	
Irma	29/1/10	Mexico DF	18/3/10	Skype	
Ismael	28/1/10	Mexico DF	7/4/10	Mexico DF	2nd face to face due to availability
Jacobo	28/9/10	Spain	29/11/10	Skype	
Jacqueline	4/2/10	Mexico DF	27/3/10	Skype	
Mabel	2/2/10	Mexico DF	31/3/10	Skype	
Magali	28/1/10	Mexico DF	23/3/10	Skype	
Mark	18/3/10	UK	21/6/10	Skype	Delay due to researcher illness
Mary	9/3/10	UK	21/6/10	Skype	Delay due to researcher illness
Noelia	28/9/10	Spain	29/11/10	Skype	
Paloma	4/2/10	Mexico DF	21/4/10	Skype	
Patricio	28/9/10	Spain	29/11/10	Skype	
Rosa	4/2/10	Mexico DF	7/4/10	Skype	
Sara	30/9/10	Spain	14/1/10	Skype	Delay due to interviewee availability
Sonia	1/10/10	Spain	14/1/10	Skype	Delay due to interviewee availability
Terry	15/3/10	UK	16/4/10	Skype	
Virginia	29/1/10	Mexico DF	17/3/10	Skype	
Zacarias	2/2/10	Mexico DF	19/3/10	Skype	

Appendix C: Example section of coded transcript

Taken from Anne (UK) first interview. This is a section from about halfway through the interview, when it was in full flow, the conversation at that point was focused on social media. Many of the codes here led to the pattern "Choosing Channels and Tools". The use of colour is only to clarify the linkage of each utterance to the code on the right.

INT	...Do you use social media at all?	
RES	I am on Facebook. Sometimes my students will contact me. I don't use it very much. I have got a Twitter account but I don't use it.	For work Apathy/for interests -negative Experimental testing?
INT	How do you feel about Facebook? Do you feel at home on Facebook? Why don't you use it very much?	
RES	I think it's a bit of a distraction, yes.	Timewasting
INT	So, the kinds of things that go on aren't really useful?	
RES	I suspect they probably could be useful. I just need to put a bit more life into it.	Apathy/for interests -negative (follow up 2nd int)
INT	Do you think that's the case that you haven't got your head round it at all?	
RES	Partly. I mean, sometimes I go to a book group in Ipswich and some of the people there used to use Scrabbulus on Facebook and I don't know whether that's available or whether it's been taken off. My husband took himself off due to concerns about privacy, the privacy policy.	For interests Apathy/for interests -negative (follow up 2nd int) Privacy: abstention
INT	How do you feel about that?	
RES	I've left myself on Facebook but I have a restricted profile. I try not to put anything that I wouldn't want shared.	Tactical choices Privacy: abstention

| INT	No personal information?	
RES	No. I think you have to be aware of that don't you and I suspect a lot of people aren't aware. It's difficult, I'd like to stay on, because going back to things, that workshop I mentioned, they set up a Facebook group for that and when you go to that sort of event it is quite nice to be able to keep in touch with people and to share photos, all that sort of thing. But I'm not sort of heavily into Facebook or social networking. I have had a little play with Second Life, because the OU uses it now on my course.	Awareness Others: innocence Peer pressure/own criteria Value of social media and interaction Apathy/ for interests – negative Experimental testing/for work
INT	They actually use it on your course do they?	
RES	They used it on the course. It's an optional thing for students last year.	For work
INT	So, you have an avatar do you?	
RES	Yes.	
INT	Do you use that?	
RES	I've just played around. One issue is the spec of the computer, because you have to have quite a powerful computer. We've got several computers and because I've got one desktop, I've got one laptop from the access I do which I use for assessments, which is quite high spec to run voice recognition and generally that one is okay to run Second Life, but it's the only one that is.	Experimental testing Self as sophisticated user
INT	What do you think of Second Life?	
RES	I haven't been on it for ages. I haven't been on it for about six months.	For interests – negative
	...	

Appendix D: Coding table example – *Choosing Channels and Tools*

As I described in section 4.3.3, the coding process had several stages that involved a process of progressive consolidation in two cycles, as seen in the table in that section (p.99). The following table aims to illustrate this for the codes that led in the end to the "Choosing Channels and Tools" pattern, which was called "Tool and Channel choice" before the final renaming process took place. It shows the results in each of the 2 phases of each cycle. The first column shows the initial codes, and the second shows the headings that grouped these codes in the relevant mind map. (See Appendix E). The third and fourth columns show the further consolidation of the codes relating to selection. The initial codes all had a relation to the idea of tactical criticism in the initial analytical framework, but as can be seen in the initial coding column there were many aspects that do not fit easily into that category, and through the process other categories emerged.

Cycle 1, Phase 1 INITIAL CODING	Cycle 1, Phase 2 MIND MAPPING	Cycle 2, Phase 1 CONSOLIDATION	Cycle 2,Phase 2 PATTERNS
filters by interest	FILTERS	SELECTION	TOOL AND CHANNEL CHOICE
filters by work			
filters by use			
quality of	QUALITY		
signal to noise			
serious vs. informal			
interaction			
experimental	SELECTION		
experimental			
privacy: exclusion			
privacy: abstention			
chosen sources:			
chosen sources:			
chosen sources:			
tactical choices	TRUST	TRUST	
strategic choices			
trust in self			
trust in sources			
trust in others			

Appendix E: Mind Map example – Criticality codes (initial - part 1)

The initial codes from Appendix D can be seen at the top left of the map.
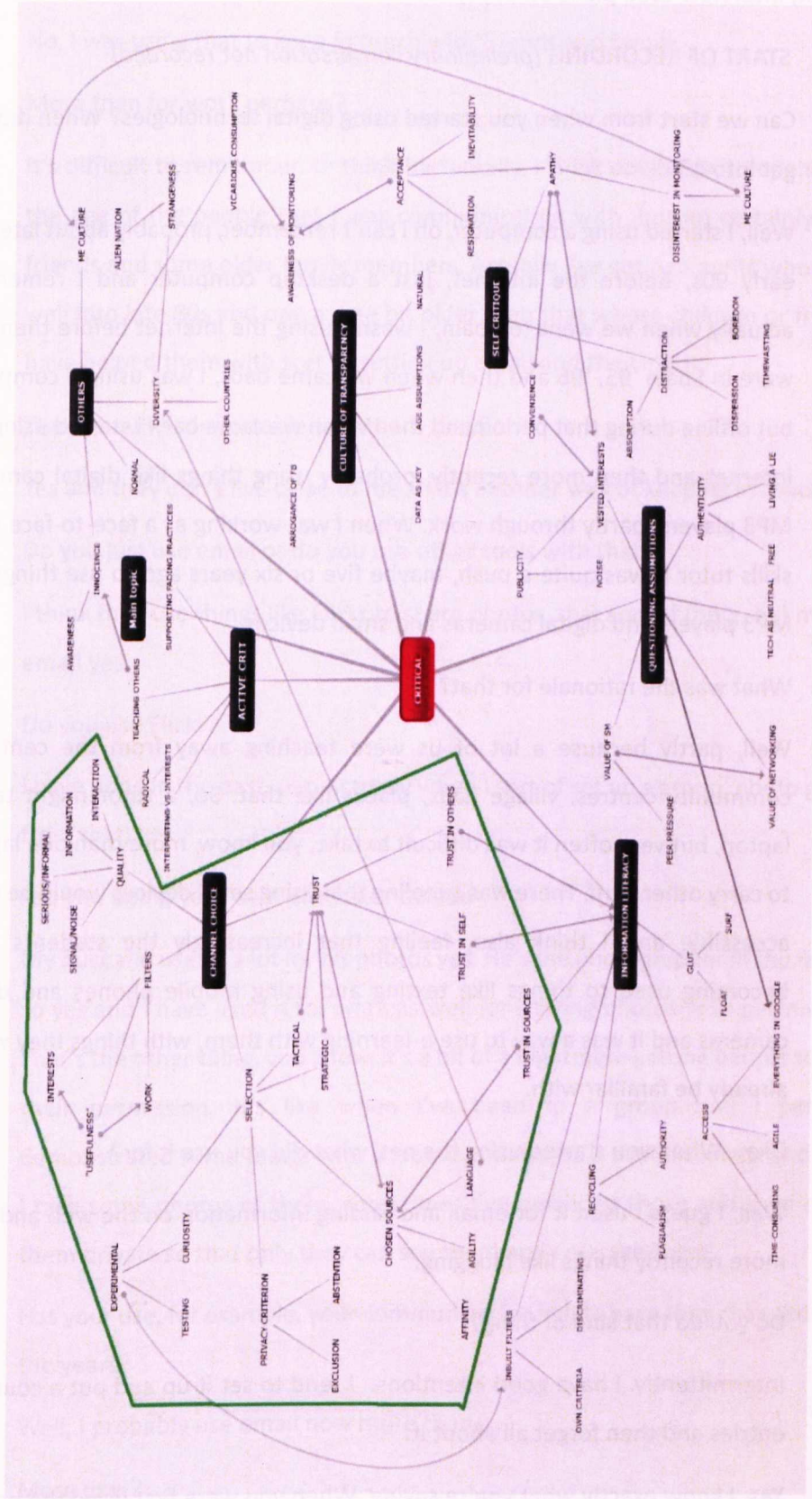
Anne, UK, interview took place on 12/3/2010

START OF RECORDING *(preliminary conversation not recorded)*

INT   Can we start from when you started using digital technologies? When did you get into it?

RES   Well, I started using a computer, oh I can't remember, probably about late 80s, early 90s, before the internet, just a desktop computer and I remember actually when we went to Spain, I wasn't using the internet before then. We were in Spain '95, '96 and then when we came back, I was using a computer, but offline during that period and then when we came back I started using the internet and then more recently, probably using things like digital cameras, MP3 players, partly through work. When I was working as a face-to-face basic skills tutor it was quite a push, maybe five or six years ago to use things like MP3 players and digital cameras and small devices.

INT   What was the rationale for that?

RES   Well, partly because a lot of us were teaching away from the centre in community centres, village halls, places like that. So, a tutor might take a laptop, but very often it was difficult to take, you know, more than one laptop, to carry other stuff. There was a feeling that using small devices would be more accessible and I think also, feeling that increasingly the students were becoming used to things like texting and using mobile phones and digital cameras and it was a way to use e-learning with them, with things they would already be familiar with.

INT   Okay. When you started using the net, what did you use it for?

RES   Well, I guess I used it for email and finding information on the web and then more recently things like blogging.

INT   Do you do that kind of thing?

RES   Intermittently. I have good intentions. I tend to set it up and put a couple of entries and then forget all about it.

INT   Yes, I know exactly what you're saying. When you were first using the net and

using email and so on, for information, was the email purely professional or was that-,

RES   No, I was using that to keep in touch with friends and family.

INT   More than for work perhaps?

RES   It's difficult to remember, to think back really. I think obviously it depends on the age of the people that I was communicating with, but no certainly with friends and some older family members. Actually I've got two aunts who were well into late 80s and one a wee bit older than that whose children or friends have helped them with sort of setting up email and they use it.

INT   They're quite comfortable with it are they?

RES   Yes and they don't live close to me so it's another way of keeping in touch.

INT   Do you just use email or do you use other tools with that?

RES   I think they use things like Flickr to share photos, that sort of thing, but mainly email yes.

INT   Do you use Flickr?

RES   I have done in the past, yes. Actually when I sort of set up a group, photo group from that, yes.

INT   Are you doing your own photos or do you-,

RES   My husband uses it a lot for his photos yes. He's the photographer in the family, so yes and I have used it for work as well for sharing photos with permission. That's the other thing, you know, it's a bit of a nightmare getting people to give their permission. It's like when I've been to a group and I perhaps demonstrated some things with a laptop and maybe a digital camera and then I take some photos of them, sometimes I've uploaded those and then made them private so that only they can see them and I can see them.

INT   Has your use, for example, your communication habits have they changed over the years?

RES   Well, I probably use email now more than-,

INT   More now?

RES   Yes, than other methods of-, well, I can't remember when I last wrote a letter. I might use email instead of phoning people, it just depends on-,

INT   Depends on the relationship with the people?

RES   Yes it does.

INT   Or the context of the message?

RES   Sometimes the context, how quickly I want a reply, yes.

INT   Does it depend on the person too?

RES   I'm not sure. I think it does to some extent, yes. I mean, some people are quite slow in replying to emails. If I want a quicker response I would phone them. Like my daughter. Not this one. I've got a daughter who's older who's living in Ipswich. She's got a work email and she's got a hotmail account, but sometimes she's quite slow responding to hotmail so I might ring her or text her instead.

INT   Is all of that quite conscious?

RES   I think it depends how urgent the message is.

RES   I had to contact her the other day about going to a student and she's interested in chaperoning. Sometimes I take a chaperone with me and so I need a quick decision. She's about to go on holiday so I couldn't remember what day she was away so-,

INT   You needed a quick response, so you-,

RES   In that case I phoned her, yes. Whereas, otherwise I might have emailed if it was less urgent.

INT   Do you use other tools, other online tools for communication?

RES   Are we talking about work or more personal use?

INT   Well both really.

RES   Just thinking about the last couple of days I'm using Doodle, do you know Doodle to fix up-, with my students to arrange some dates for having a live chat? That's to do with the course. So, I use that. I have used a Wiki in the past with my Openings people. That was set up due to the Action Research project actually.

INT   So, that came with the project?

RES   Yes, that was a very useful sort of offshoot of that.

INT   With regard to things like Skype?

RES   Well I use Skype with you, don't I, or try to, yes. I book my hotel room, because I'm going to Spain in a couple of weeks' time, I book my hotel room using Skype.

INT   So, you rang them up on Skype.

RES   Yes, well I emailed them about availability and they emailed me back and the place I stayed before doesn't have secure credit card booking. I don't like sending my credit card details in an email, so this other place uses Skype so I could just-, which was much better, yes.

INT   We have talked of how some of your uses have changed over the years and you've incorporated new tools. Are there any tools that you used at the beginning that you've now dropped for others?

RES   Oh I don't know. Some things I've tried in the past. I use Firefox now rather than Internet Explorer.

INT   Did you change suddenly or is it a slow process?

RES   No, I think I changed suddenly but some time back.

INT   Do you remember that being difficult to change?

RES   No. It was quite straightforward and I have had a look at some other browsers I looked at more recently. I think I looked at Safari, just out of curiosity to see how it was different, but I didn't take it up. I'm sure there are things that I've used in the past that I felt were a bit clunky and I haven't persevered with them.

INT   Why did you choose Firefox?

RES   I was recommended it.

INT   What were the reasons?

RES   I think at the time you had to have browsing and Internet Explorer didn't have tabs. If you're working a lot on the internet, because some of these e-learning projects that I'm involved with, obviously it's quite intensive, so having those

features is quite helpful.

INT   Do you think that your use has increased over the years or is it still as it was at the beginning?

RES   No, it's increased.

INT   Increased a lot?

RES   I'm tending to do things online that I used to do in another way. I mean, I'm thinking about things like renewing the car tax and-,

INT   Administrative stuff?

RES   Yes, sort of e-government type things, the electoral register and that sort of thing and also looking up train times and those sort of things, whereas before I might have used the phone.

INT   It's just more convenient?

RES   Yes. It makes me sound like a real geek. I mean the other thing I do, because I do actually spend some time away from the computer, is that I've just joined a choir quite recently just before Christmas and the person running the choir sends out the parts as MP3 files for us to practice. So, that's quite nice.

INT   It's easier that way I suppose?

RES   Yes. So, she'll send me an email. Well, we still have a rehearsal once a week, but she sends out an email with just your parts in MP3 and then you can play it off the computer or put it on an iPod.

INT   So, you can hear it and practice?

RES   Yes, practice in the car or wherever. So, that's an example of something that's completely changed. I haven't done any singing for a few years and before it used to be all paper based.

INT   That's interesting, the word geek you used, do you see yourself as a computer buff?

RES   I'm not sure. I think the 'buff' implies some expertise doesn't it?

INT   Maybe yes!

RES   You know, I mean I think the answer is yes. I enjoy using it. The thing is with

digital technologies, with things like Word documents, they're completely customisable to your requirements aren't they? Because I work in accessibility-
,

INT   That's important?

RES   Well, as you get older your vision gets less good and I use a lot of the things that I'm recommending for students with disabilities, you know, constantly telling them or asking them, 'Do you know how to change the screen colours in Word and Windows, do you know how to change the fonts, increase the size?' and use all this assisted technology. I'm using that for myself. When I'm, for instance, doing an assignment, you know, I'll use online mapping programmes to plan it out and sometimes I use voice recognition software to dictate as well, to speed it up. I also tend to use these programmes that I've been given by the Access centre. Like mind mapping.

INT   What do you use for mind mapping?

RES   Inspiration. It's okay. Somebody last week, we did a dyslexia workshop in Cambridge and there was a student there who told me that there's a programme called MindMap which was developed by Tony Buzan who's obviously the inventor of the Mindmap and she said it was the best one she'd tried.

INT   The next question is about now, rather than how it's developed over time, concerned with the development, it seems to have been cumulative, rather than leaving things behind. You've just added more, I guess? Do you see it that way?

RES   I'm sure I have left things behind, but I just actually can't think of what they are at the moment. Do you have any examples that people have said to you they've left things behind?

INT   Well, yes some, for example, have changed, you mentioned the browser and some people have had-,

RES   I think thinking about hardware, I was thinking we used to have a zip drive with those big disks. We don't use anything like that. Obviously the floppy disk has gone a long time ago.

INT   You don't bother with that anymore?

RES   No, and I tell you another thing that I do use quite a lot is Google docs.

INT   So, you've got your stuff in the cloud? Or do you use that for creating it or do you actually use it for keeping stuff?

RES   Both. Yes, sometimes I use it for creating templates that I might want to access off a different computer.

INT   Do you find it works okay for that?

RES   It works reasonably well, yes. It doesn't like complex formatting, like the template reports that the Access centre uses, they've got very complex formatting and you're right, sometimes I've anonymised so I can use them again. I've uploaded them and you're right you can't see them, it does something really strange with them. Really basic stuff, just text it's fine with. One of the e-learning projects actually Tribal, they use it as a technical issues log. It's a spreadsheet, so there are about ten people including me who are sharing it, but I do find it quite clunky.

INT   Yes, it's clunky. It's useful for certain things.

RES   You know, you have to scroll across and up and down and I really don't like it for that, but for what I'm using it for, for other things, it seems to be okay.

INT   Do you have any-, how do you feel about the cloud, keeping your stuff in somebody else's server?

RES   It worries me a little bit about availability of it and security. I mean I wouldn't put stuff up there that's confidential or some stuff I minimise like students reports obviously. I think there were issues about reliability. Just occasionally it hasn't been accessible, but it doesn't seem to be a big problem.

INT   It's more about making it accessible than the fact that somebody has access?

RES   It works both ways doesn't it? You have the option of sharing documents don't you?

INT   I'm thinking of-, some people have talked to me about concerns regarding the fact that the Google docs is accessible to all of Google, rather a large number of people.

RES   Yes. I would be careful about what I put up there.

INT   Talk to me about a day with technology. What sort of things do you do and what places do you visit?

RES   I probably start with checking my email and I've got a personal email account and then I've got my OU email on First Class. So, if it was Monday to Friday and it depends a bit whether it's at the beginning of a course or whether things have settled down. So, I'd do that.

INT   First is the OU or first is the personal?

RES   No, personal, yes. Again, isn't related to work, but if it's around an assignment deadline, I'd go on the ETMA system to see whether people had submitted assignments and then I might go on the BBC website to check on news. I use that quite a lot. I use local websites.

INT   For local stuff, local news?

RES   Yes.

INT   Do you also read local newspapers?

RES   Not as much as I should do, no.

INT   Do you think you should?

RES   I occasionally buy the East Anglian, but not very often, yes.

INT   It's interesting, you say, 'As I should do,' and so on, which makes it sound like that there's-, do you think that there's a problem in relation in being online?

RES   My daughter wants to go into journalism and I'm wondering whether she's actually going to have a job to go into, because now so many people get their news off the web, don't they? She wants to go into fashion journalism, so I imagine those magazines will still be continuing.

INT   Maybe if she was an online journalist?

RES   Yes, I have spoken to her, yes.

INT   What other things do you do? You mentioned that you do some things offline as well, are there things that maybe ten years ago you could have done offline and you now do online, apart from the e-government stuff that you

mentioned, in leisure perhaps?

RES   I'm just trying to think. I am quite interested in learning Spanish and keeping my Spanish up and I have sometimes-, I used to go to a class locally, but I'm not doing that at the moment, just because I've been too busy. I sometimes look at podcasts on the web for Spanish language, those sort of things.

INT   Interesting. Do you, for example, do you watch television online?

RES   Sometimes, yes. Some of the BBC iPlayer and sometimes, again, sort of related to OU, sometimes I send out links if there's something on BBC iPlayer or Listen Again on the radio that would interest the students. So, sometimes we watch it. It just depends whether I've been able to watch it. There are other people in the house and if my daughter wants to watch something on the television, I mean we've got two TVs, I might watch it online.

INT   Does it vary? Do you use it on a Saturday when you don't have so much work to do in working terms? Do you use the computer the same amount?

RES   It just depends whether I've got marking to do. There's no major cut off between Monday and Friday and Saturdays and Sundays.

INT   Or in the evening and the day?

RES   No. These things have become blurred.

INT   Do you think that's a good thing or a bad thing?

RES   It works both ways. I think it gives you flexibility. I've got a friend who lives up the coast who's working on these e-learning projects and I know that she will sort of go on the website late at night and will email all her students at the end of the day and she likes that flexibility. She's got four children.

INT   So, by the time she's put them to bed she-,

RES   They're different ages. I think she likes having the flexibility of doing that.

INT   Is that important to you, that flexibility?

RES   Yes it is, yes.

INT   You make the most of that do you, you sort of stretch your day?

RES   Yes, sometimes. You can have a day where you do a long day, yes.

INT   Tell me about it, yes.

RES   You're the same. Yes, and then you can have-, during the week I might have a day where I take the afternoon off and go to the gym or go and have a swim or go and do other things. So, I'm not working nine to five.

INT   More like nine to twelve.

RES   Exactly. Yes, I mean some days you're obviously working very hard and a very long day.

INT   Do you think there's an encroachment there?

RES   Yes.

INT   The long days are more than the days off?

RES   They can be yes. It's a factor with OU work in particular. Someone said to me it's famine or feast, you know. So, you'll have a very busy period and then-,

INT   A very fallow period?

RES   Yes, exactly.

INT   Do you think that on average you do more work now that you're online? If you looked at the whole year that you'd end up doing more than before?

RES   I mean, the other thing, you say, 'before'. I gave up-, I used to work for Suffolk Basic Skills teaching face to face and I gave up about two and a half years ago and I think that was like a step change, but when I was working for them, I'd get in the car, I'd spend probably thirty minutes, sometimes longer, driving over to the centre to get there twenty minutes early to set up. Then I'd teach a two-hour session and then I'd drive home. So, I'd end up doing four hours, maybe a bit more if the traffic was bad, for which I was paid for two hours and the twenty minutes preparation time. I don't find driving in the car particularly pleasurable and I wasn't being paid for it. Whereas, you know, if I was working for four hours here-, when you're working from home you can work for two hours and then take a break. You can start early. I'm happy to start at eight o'clock and do two and half hours and then take the dog for a walk or whatever. It's more flexible. I mean, obviously, sometimes I'm driving to see students, but it's not every day.

INT   How would you say that technology fits into your life?

RES   That's a difficult question. Where do you start? It's just become an integral part now. I think it's important to have some activities that are away from it. I mean, I do have quite a few activities which are not really to do with technology. I'll say I'm a Guide leader with a youth group in the evening.

INT   Those things are completely offline?

RES   Well, they are, but even thinking about those, they're slightly informed by or facilitated. Like these MP3's coming through the email.

INT   That makes life a bit easier?

RES   Yes and sometimes I take the laptop into Guides and we might show a DVD. We're talking about showing them-, there's a programme on TV that's available on GTV now and we're going to show them that next term I think.

INT   That's interesting. How do you think it would be if somebody broke the internet, if it suddenly disappeared and we were back to 1995 for example?

RES   You know how it feels when the router goes wrong, when the router needs resetting. It's suddenly like, 'What do I do first?'

INT   How do you feel? You've had I presume, moments, episodes-,

RES   Actually we had quite a long power cut. I mean I'm quite capable of resetting the router, that's usually a temporary glitch, but a couple of months ago we had quite a long power cut here after a storm and everything went off from sort of mid-evening and it was in the winter so candles and all that and didn't come back on until about midday the next day. It was strange. It depended on where you lived. Some people were hardly affected at all-,

INT   And other people they had to give them back-up?

RES   Yes.

INT   How was that?

RES   I had to sort of think about what I could do and somebody had actually sent me a handwritten assignment through the post, this was an Openings assignment so I sat down with a candle and marked that one. That was the only one I could do. I usually don't like handwritten assignments, we don't get very

many of them.

INT   Why not? Because they're difficult to read?

RES   Yes, peoples handwriting.

INT   Also it's one thing that everything else is on the computer.

RES   Yes, that was the funny thing, because when I first started working for the OU which was about ten years ago, because my youngest daughter was quite young then and on the first course everything was submitted electronically and I just got used to it and when I started the Openings work I started getting either hand-, postal assignments and I suddenly realised that I was going to have to keep them safe somewhere, because if you leave one on the table and you spill coffee over it, there's not another copy. Whereas computer ones you can just redownload.

INT   Exactly.

RES   So, to go back to the question, I don't know. I just can't imagine it. How would we manage? Everything is assumed it's online isn't it?

INT   Increasingly, yes.

RES   I mean, I use online banking.

INT   Do you do most things like that online?

RES   Quite a lot, yes.

INT   Do you buy things online as well?

RES   Yes. I use Ebay. Amazon, yes.

INT   Do you find it easy to use Ebay or Amazon? Do you notice a difference between something like Amazon and something like Ebay?

RES   I think they're different aren't they? I haven't used Ebay recently actually. I think I just go through phases.

INT   Do you have concerns about any of that kind of thing? Do you use it obviously, but security perhaps or other things? Do you use social media at all?

RES   I am on Facebook. Sometimes my students will contact me. I don't use it very much. I have got a Twitter account but I don't use it.

INT   How do you feel about Facebook? Do you feel at home on Facebook? Why don't you use it very much?

RES   I think it's a bit of a distraction, yes.

INT   So, the kinds of things that go on aren't really useful?

RES   I suspect they probably could be useful. I just need to put a bit more life into it.

INT   Do you think that's the case that you haven't got your head round it at all?

RES   Partly. I mean, sometimes I go to a book group in Ipswich and some of the people there used to use Scrabbulus on Facebook and I don't know whether that's available or whether it's been taken off. My husband took himself off due to concerns about privacy, the privacy policy.

INT   How do you feel about that?

RES   I've left myself on Facebook but I have a restricted profile. I try not to put anything that I wouldn't want shared.

INT   No personal information?

RES   No. I think you have to be aware of that don't you and I suspect a lot of people aren't aware. It's difficult, I'd like to stay on, because going back to things, that workshop I mentioned, they set up a Facebook group for that and when you go to that sort of event it is quite nice to be able to keep in touch with people and to share photos, all that sort of thing. But I'm not sort of heavily into Facebook or social networking. I have had a little play with Second Life, because the OU uses it now on my course.

INT   They actually use it on your course do they?

RES   They used it on the course. It's an optional thing for students last year.

INT   So, you have an avatar do you?

RES   Yes.

INT   Do you use that?

RES   I've just played around. One issue is the spec of the computer, because you have to have quite a powerful computer. We've got several computers and

because I've got one desktop, I've got one laptop from the access I do which I use for assessments, which is quite high spec to run voice recognition and generally that one is okay to run Second Life, but it's the only one that is.

INT   What do you think of Second Life?

RES   I haven't been on it for ages. I haven't been on it for about six months.

INT   Did you feel that it was something that you could get involved with?

RES   I was sort of playing with it. I think you have to make quite a big investment in time to be comfortable with it sort of technically.

INT   Do you think that's an issue the sort of comfort?

RES   Quite a few of my students are into, can't remember what they're called, multi people games, what's the term for it?

INT   Massively Multi User Online Role-playing Games.

RES   Yes. Several of them are and last year I had a student who I got to know who had chronic fatigue syndrome and was sort of housebound and quite often bed bound and she was quite involved in Second Life. She came to-, we had two face-to-face tutorials and she came to the first one. She uses a wheelchair and her partner brought her, but I know that she's quite involved with Second Life and the other games. There is the argument, you know, that students with other learning disabilities and disorders can use it, maybe. Students perhaps with Asperger's and autism they might find face-to-face events quite difficult or mental health difficulties.

INT   Yes. Maybe more safe?

RES   It's like how simulations can be used for teaching can't they? There's that one-, I sometimes use, my students I show them the roller coaster simulation. Have you seen that?

INT   I haven't seen that.

RES   Someone's written this programme about the physics of roller coasters and how you design one with the biggest drop without it coming off the rails. There's a simulation where you can play, you can adjust the speed and the function.

INT   So, you can go off the rails.

RES   You can play with it and the point is that you couldn't do this in real life, because if it went wrong you'd probably kill somebody, unless the roller coaster was empty I guess. If you put in roller coaster simulation in Google I'm sure it will find it.

INT   Do you have other concerns about the increasing presence of the digital-,

RES   I just think we can't turn the clock back.

INT   Do you think about it, the security or the privacy issue? You've mentioned privacy.

RES   Yes, I think you've got to be aware and I used to have a spam filter called pop file which sort of codes your incoming emails by vocabulary and it was working fine and then it went wrong, so I've had to disable it and then since then I've had to sort of tweak the other filter on the email, because obviously then I started getting all the junk email, spam emails through. It's just being aware isn't it?

INT   Yes, it's interesting this issue of awareness.

RES   I'm not sure how my daughter is at seventeen. She knows that it would be unwise to meet up with somebody who she's only met on the internet and doesn't know, but... I don't think she would do that. I've talked to her and I think inherently she's too sensible to do that, but-,

INT   Do you see yourself as consciously managing your identity online or is it something that's sort of-,

RES   Only in the most basic way.

INT   Do you ever Google yourself?

RES   I have done yes. I am on the internet. You will find me in Google because I wrote an article for the BBC website about, quite a long time ago now, about working with deaf learners. So, if you write and put Anne Banham, deaf learners in Google, I would come up near the top. So, I am there, yes.

INT   It's something you've done for sort of fun? It's not something you do-,

RES   No. It's something I put on my CV, because it's quite a useful thing to have done. But about the risks, there was a case on Facebook wasn't there and there's a policeman who'd had a gay relationship or something and he lost his job over it.

INT   Do you take precautions?

RES   I think I've got quite a strong password, but I don't change it, which I should do.

INT   Do you ever check it and stuff like that, send it to some password sites?

RES   What, check the strength of it?

INT   Yes, or there are even sites that can generate you new passwords.

RES   I have enough trouble remembering the ones I've got without changing it. I've never had any problems with online banking as far as I'm aware.

INT   So, you're quite confident in that?

RES   I did have a problem some time ago with somebody cloning my credit card.

INT   Cloning it?

RES   Well, no I don't know. Someone getting the credit card details and making some purchases, but it was all sorted out quite quickly.

INT   Yes, it seems that the banks are quite aware of the issue these days.

RES   Yes. I mean they picked up on it instantly and actually it was quite a small amount but it was where it was. I think it was the Philippines or something like that. And another time they rang me up when I'd purchased one download for my daughter off a music site, something like 79p. I guess because it was out of character or something. There was some reason, something had triggered it.

INT   Does that level of detail-, do you have any worries about the government or institutions having enormous amounts of detail about you to the extent that they can identify anomalous behaviour in that way?

RES   I mean, based on their previous record of losing USB sticks and CD ROMs and... I mean there are all sorts of anomalies aren't there? I mean, the Access centre, up until very recently, used to send out students' medical evidence in the post.

I mean, my post is very reliable, but how would you know if it didn't arrive?

INT   Or it arrived somewhere else.

RES   Exactly. So, they stopped doing that about six months ago and they now email it out. When it was sent out in paper I always used to have to shred it, which often was a real pain. Now they send it out via email but then it's stored on a server somewhere isn't it?

INT   Yes, it's all there. These are concerns that sort of-, what I'm interested in is that these are things we all think about but to what extent do we do things about it?

RES   No, we don't, no. I happily use the same password day in, day out, because I can't remember lots of different passwords. I'm sure there's a way round that isn't there? Password generators and stuff like that…. *(interrupted by phone call)*

        …sorry.

INT   Well, this has been a very interesting conversation, thank you and I'm using up all your time. I may…

        END OF RECORDING *(posterior conversation about follow-up not recorded)*

<u>**Appendix G: 2nd Interview transcript example**</u>

Ismael, México DF, interview took place on 7/4/2010

START OF RECORDING *(preliminary conversation not recorded)*

INT   As I mentioned, the idea is to go into a little more depth into some of the aspects you spoke about in the first interview, particularly creativity, and information and communication. I am especially interested in what takes place when you are involved in these activities, how you feel, how you interact with people. Perhaps we could start with the aspect that seems to interest you most. Creativity, right?

RES   Yes, yes, very much so. But in fact the others are also very, very important. It is only that they have lost some relevance in my life, shall we say. In favour of creativity. It is as if there are distinct periods in my life as a user of technology. And for a long time the communication aspect was very important. But at the same time as e-mail, I discovered two things. One was the possibility of consulting and even downloading music files, which was new to me and very important. The other was Photoshop and the potential for graphic design. These two aspects focused all my attention. And in the end it was Photoshop which really took over all my attention and my time. I spent much more time on that. And that is why I didn't explore information and communication further. Today they are much less important for me. From an emotional point of view at least.

INT   Would you say they have become normal?

RES   Yes. I would say I have assimilated them. I think I have also become a little milder, and less freakishly obsessed with the machine. I use it differently, and the use of technology is more regular now. It is no longer abnormal. 15 years ago it was a total anomaly, at least in México. It was really strange. Back then music or cinema databases were a kind of science fiction for many people.

INT   Yes, and I suppose that had its attractions.

RES   Yes, and now things have become more normal, both on a global level and locally in my environment. And I have become more normal too.

INT   So would you say it was as if e-mail has become something as normal as using

the telephone.

RES Yes, and more utilitarian. But I can see one sector, the kids, people younger than I am, for whom this immediate, incessant contact is really vital, with Internet and social networks like Facebook and Twitter. You can see what they are doing though it is with different technology. But 10 or 12 years ago there was something similar to this need for continuous contact you see now. But what I can say is that when I ask people why I should use Facebook, for example, I have never got a satisfactory response. Not one, nothing that indicates to me that I might need something like Facebook. Twitter yes, And I have explored it a little, superficially, but not Facebook, It doesn't attract me.

INT I'd like to ask you about an interesting aspect of the interview which was your communication with your daughter in Germany. How would you describe the conversation with her on Skype, where I believe you use audio and text? Is it a conversation with some subtitles? How would you compare it with the way you talked to her before?

RES Before using this technology?

INT Before. Because I believe you now use Skype. Do you see a difference?

RES Well, yes. A screen with a video call and chat, well yes, it does enrich the communication a lot. It is completely different. And the price too. From very expensive to free. With good quality, close to the quality of the pone. There are some failed calls, though that has more to do with the bandwidth I have. Not so much Skype as my contract. It is much richer. I am a little modest about going on screen, but I can always see her. She has no problem with that, she always appears, while I don´t. And she says: "You are almost never on screen, just me".

INT Does she want that?

RES No, she doesn't seem to.

INT It's normal.

RES Yes, she isn't really asking for that. And when I do put the video on it doesn't seem to make a great difference to her either. It is a hybrid, of acoustic, visual and text. Yes it is quite a lot richer than a normal phone call. A lot richer...

INT   When she talks to you does she look at the camera?

RES   Yes

INT   So it feels like she is talking directly to you?

RES   Yes, not all the time. She often has the TV on next to her. It depends on her mood, the time, whether the program interests her, whether her mum is there or not. There are various factors. But yes, she tends to look at the camera. She treats it as the focal point.

INT   OK. And do you have long conversations with her?

RES   The average is around half an hour.

INT   Are they frequent?

RES   Every Sunday.

INT   And what do you do, narrate the week?

RES   Narrate the week?

INT   Yes, tell each other the news of the week.

RES   Let's see, my wife tells me it is a long monologue on my part. As my daughter doesn't talk so much, she is more monosyllabic. "How are you?" "Good" "How did it go, well?" "Yes". "How's school?" "Good". And so I take over and I start to tell her about my week. And as I do that, funny situations emerge. Humour is really important in our conversations. We laugh, tell jokes, and talk about films. Films are important. She likes horror films. So she tells me about the American horror films she tends to go to see. And I tell her about things I have seen in the street. And so the conversation takes shape. We also talk a lot about the trips she is going on, and when, what we will do when she comes and so on. That's what we talk about.

INT   Is it a regular thing?

RES   Yes, generally. I miss it a lot. For example, yesterday I missed her, and I decided not to ring her home on the phone. There are three ways to communicate with her. One is Skype, which is direct as we are both on it. Second, is to ring her mobile, which costs me a fortune. Third is to ring her home, where her mum and her mum's husband live. Yesterday I waited a while and decided not to call. And

later I couldn't see her on Skype. I miss it a lot, because it is whole week without contact. Until the next Sunday.

INT   And are you satisfied with that communication? Apart from the timetable, would you like to have more of it, if possible?

RES   Yes, but she doesn't use the mail. And mail has its idiosyncracies too, you know. I was just thinking about that this morning, when I got a mail, one of those ones with lots of bullet points. And it was just asking to be replied to in the same way. And I thought, shall I give a solid, overall reply or shall I distribute the reply? And in the end I ended up repeating the repetitions in the bullet points. Because if you enter into the dynamics of arguing each point, you have to respond to each point. Even if it is just with an OK. Which leads to a certain degree of redundancy. I think this is very interesting, the expectations each of us has about a mail, what kind of reply it should, and parts that are implicit in software like Outlook, you can program it to say you are on holiday, and even ask for replies. What do you think of that?

INT   Well, I don't use it.

RES   To me it seems terribly invasive. But I don't use Facebook either, there are a whole load of issues there... I don't know what you think. Elements of communication, imposed by the software, which in my view should be personal choices.

INT   Yes

RES   Part of the protocol, and the etiquette in Flickr, that network, involves a series of things that are understood. For example if someone visits and bookmarks your photo, it is courteous to return the visit. And if they bookmarked an image, you should not bookmark them back just to be diplomatic. If you don't like their images at first, you should take a closer look. And if you still find nothing you like, it is better not to bookmark something you don't like. It is a mark of honesty in the network. Although it is also misused. There are people who do things that are considered very bad by members of some groups on Flickr. For example, there are people who every time they comment also post a photo of theirs. And they say "Visit my gallery", or "These are my best photos". These practices are very unpopular among some users. Or using large animations or logos. I don't

like it much either.

INT   And do these groups define this etiquette, do they have written rules?

RES   Yes they do. There are also more quantitative groups, which count visits, bookmarks, contacts etc. The qualitative groups are more interesting. For example, there is something very complicated which is to post a YouTube link in Flickr, and yesterday a contact of mine posted a black and white photo of a dog in the sea. So I see it and I say "Sea dog", and there is a Swedish group called "Sea dog". So I go to YouTube, and I find the link to "Sea dog", and I post it to her comments wall, and furthermore I adjust the HTML formatting so that it only says "Sea dog". All of that is very complicated for me and I have to do it step by step. But I love to do that. Leave a note that links to another network. YouTube. When I have received that kind of comment I feel it makes for a much closer relationship than any quantitative stuff.

INT   Would you say associative rather than rational or analytic links? A kind of emotional connection?

RES   That's right. There is a group that tries to comment with images rather than texts. So you comment on a photo with another photo, normally your own. So you are playing with not writing. The idea is that you write as little as possible. The idea is:"This image of yours reminds me vaguely of this one of mine". Vaguely or strongly. And you make a series of interesting connections. Graphic, not textual. The non-textual seems very interesting to me.

INT   There is a related aspect you spoke about that interested me. In that context when you began it was all numerical. How many stars did they give me? Etc. And then you discovered a more critical world. To what extent are those more critical groups better due to the comments, or are there differences in the quality of the art or images that are posted?

RES   Much better. No, no, the more critical groups tend to be of very high quality images. Very, very high.

INT   Very different to the...?

RES   Yes, very different. And with themes...for example, minimalism, abstract images, black and white geometry. There are very specific themes that are much more

interesting than simply... let's say, I think I mentioned this last time, in Flickr, and I suppose in general in photography, though for me photography is Flickr, I don't have any other photographic context other than Flickr, to take pictures of landscapes, children and pets is the most cliché. But it is also easy to go to the other hyper critical poser extreme and say "I would never take a landscape picture". But there are groups that say "OK, a landscape is OK", "Some clouds? OK". But some clouds, not all clouds, or all pets. There are some good self-regulated groups, and some groups that are totally Zen, totally minimalist, that don't interest me either.

INT   And do you think it is possible to speak here of a visual literacy?

RES   Sure, I don't think an ideal globalised world should be made up of people who watch films by French directors. I think there is also an interesting humorous element involved in the possibility of using more "pop" images. I think there is a kind of scale of quality of course. But I don't think that has much to do with Flickr.

INT   And you mentioned groups, do you identify with certain groups?

RES   I belong to about 500 groups which is totally unmanageable. I regularly visit about 10, maybe. 10 are really interesting. And when the quantitative appetite takes over, I visit a couple of numerical groups, where I know if I post an image I will get around 40 visits. When I am feel a little depressive that makes me feel good. Getting 40 visits to one of your images is encouraging. And then there are other groups that are much more constructive, critical, productive. Around 10. For example I have photos of rural education which has always fascinated me. The other guy had photos of rural education from the 40s and 50s. Vary interesting but very old, antiques. So I started posting current ones, from three or four months back. He created the group and I was the first member. Now two weeks later, we are four. And now I say: "OK, pictures of rural education can go to this group", but the fever that happens with these technologies also happened with Flickr. At one point we were all crazy about groups. If you were in the stairs group you spent all your time looking for stairs, or in the doors group, for doors. Now, more than looking for the group, I go my own way. I take photos and if they fit in somewhere great, and if not, that's fine. That is one

aspect and the other is that I began to sell the images I make.

INT   I wanted to ask you about that, whether it is just a hobby, because at one point you did mention that idea.

RES   Yes. It started as a hobby, and it was like that every night for about 10 years. I played with Photoshop. And then I showed my work to some people and they said: "They are good. Why don't you take it more seriously?" So I sent some to Cuba and they selected me, and I said "This is going well. So well that I will make some prints". I printed 40 and framed them and I had an exhibition and invited all my family and friends and I sold them all. I thought: "I have to be a digital artist. That is my future". But in the second exhibition, when all my family and friends had already bought one, I didn't sell any more. And in the third, none. And then, when they didn't sell I was very discouraged. I had had a moment when I felt like an artist, and that I might be able to live from my work. So I had to rethink the situation. And I started doing less digital art and more photos, and I thought that maybe that artist I had thought I was, was really just a guy with a hobby. But it is an important hobby in my life. I don't think I can live on what I earn from it, but I do intend to have more exhibitions.

INT   Another thing I wanted to ask about was the degree of integration. The idea that even at the breakfast table, you can get a message, look at it, and return to what you were doing. I don't know if you see it as multitasking or just rapid switching, but it seems very integrated.

RES   Yes, yes. But the machine is not often on the breakfast table. I have tried to restrict my use of technology so as not to affect the relationship. But as I said last time, it can be summed up in two simple sentences. I would say to my wife: "I don't see any reason to switch it off" and she would say "but I see no reason to turn it on, Ismael". I have had to limit my use, a lot. But if I could I would not limit it. It would be as you say, with the machine here at my side and my wife behind me and my daughter, and I would be showing them... not my daughter in Germany, I have a nine-month-old baby girl. Yesterday I was looking for a reference for my wife from Gallup about happiness. We were looking at it and it was interesting because she is very good at statistics, and she showed me how to interpret what they understand as happiness, and questioned why we

couldn't see the instrument they used, and the questions they asked. And at that point I said "I am going to show you a video". We were in bed with the laptop, we haven't done that for years. Watching a video just after looking at the Gallup page and laughing at the questions they were asking the guy in the video, and how they presented a graph with a scale that started on 5 and not 0. And the question was how they could be paying attention to a guy who presented a graph like that. We had a good laugh there together, and that's what I like, that kind of integration. And in YouTube I have found special music for babies for my baby girl. I would have no problem integrating it more, but I can understand that there are people who would have problems with that.

INT   Yes. You said in the other interview that it is still too early to say that kind of thing is happening...

RES   Yes

INT   Well, thank you Ismael...

END OF RECORDING