AN ETHNOGRAPHY OF STUDENTS' EXTENSIVE USE OF COMPUTERS AND DIGITAL TECHNOLOGIES WITHIN FURTHER EDUCATION CLASSROOMS.

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Copyright Statement

ABSTRACT

This thesis analyses how the extensive use of networked computers, which were the primary classroom learning resource for three Level 3 cohorts of Further Education students, impacted on how the students approached the academic elements of their coursework. Using an ethnographic methodology the students were followed as they progressed over one academic year, to identify how they engaged with their learning and used the technologies over this period. The study of students' classroom academic and literacy practices when using the new digital technologies of computers and the Internet as resources in post-compulsory education is a relatively neglected area. At a time when there is the continued call for the increased use of these technologies across the curricula, this ethnography offers an insight into students' responses to the technologies and how these significant educational resources can also divide the classroom into both educational and social-leisure spaces.

What became apparent over the year was students' superficial level of engagement with online research resources and how that information was then processed. Students' use of software to manipulate digital text bypassed any evidencing of intermediary cognitive processes, therefore at times idea generation, critical development and level of ownership became challenging to identify. Notably, students' extensive use of computers resulted in their gaze being primarily directed to their computer monitors and despite the sociality amongst students for non-educational activities, both in and out of the classrooms, the benefits of peer discussion and interaction for learning was absent due to this level of academic isolation.

Students' use of the technologies for either educational or social-leisure use was reflective of the learning conditions and what affected their levels of motivation and attention. For a number of students, their excessive use of the classroom computers to access online social-leisure resources came at a cost to their grades and their ambitions for progression had to be reduced. There is no doubting the value of computers and the Internet as classroom learning resources, however, this research identifies that they are certainly not a quick panacea for education. The evidence illustrates that to attain the potential they offer, there needs to be relative adjustments to pedagogy and learning cultures and how students conceptualise the space of computer-resourced classrooms.

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Acknowledgements

LIST OF ABBREVIATIONS

BERA	British Educational Research Association
CMC	Computer Mediated Communication
ESRC	Economic and Social Research Council
FE	Further Education
FMP	Final Major Project
HE	Higher Education
ICT	Information and Communications Technology
LRC	Learning Resource Centre
LSA	Learning Support Assistant
NLS	New Literacy Studies
PGCE	Postgraduate Certificate in Education
SfL	Skills for Life
VLE	Virtual Learning Environment
ZPD	Zone of Proximal Development

KEY TO TRANSCRIPTS AND TEXTUAL CONVENTIONS

WITHIN QUOTATIONS FROM INTERVIEWS

- A pause is indicated by three dots …
- Where interview material has been edited out is indicated by […].
- Raised voices or emphases are indicated by CAPITALISED TEXT.
- Background, contextual information or non-verbal utterances are indicated by [square] parentheses.
- During group interviews if one interviewee interrupts another this is indicated by a hyphen at the end of the first quote –.
- When the researcher is quoted during an interview this is indicated through using the initials AB.

TEXTUAL CONVENTIONS

Any proper nouns that are frequently abbreviated in day-to-day usage will in the first instance be written in full and thereafter using their abbreviation, for example, Further Education will be abbreviated to FE.

To protect the anonymity of the research sites of this thesis, which belonged to a college of Further Education College it will be referred to as 'North Dale College' throughout the text.

Within FE those who study there are referred to in a range of ways, depending on the current trend of the time. This has occasionally been customers, but generally either students, or learners depending on the context. At the time of writing 'learner' was predominantly used in the more official artefacts and discourse. From the students' standpoint, when asked, they viewed themselves unanimously as students, so in respect to their ownership of this signifier, 'student' will be used throughout to represent them in the text when an individual pseudonym is not more appropriate. The use of the noun 'lecturer' to represent the teaching staff of FE was predominant in contracts and institutional artefacts; however, these staff were commonly referred to by themselves and by students as 'tutors'. As such, there is no reason to change this, which will be retained throughout the text to reflect the actuality of the context.

Also, throughout this text I will be referring to classroom 'sessions', rather than 'lesson' to reflect the broad range of activities and the diversity of modes of teaching and learning that take place within the timetabled FE classroom. This dualism was reflected in the title of one of the more official artefacts of North Dale College, referred to as a Lesson/Session Plan that sets out the time focused aims and objectives of the activities intended by the tutor. As the time in the field was being completed it was reduced in its title to Session Plan.

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

This thesis pivots around an ethnography of a year spent in FE classrooms where networked computers were the primary education resource for the students. The aim was to investigate how the presence of new digital technologies in a classroom affected both the teaching and learning and the range of social activities within this environment. As most of the students' activities took place on these networked machines the classrooms where the ethnographic observations took place are periodically referred to within this text as *computer-resourced classrooms*.

Digital technologies, especially since the advent of the Internet, have greatly increased access to all levels of information. These new technologies are entrenched within the media and the world around us and are predicted to become even more ever present into the fabrics of our lives and the surrounding architecture in the future (Greenfield 2006). As such their application in educating those students who have grown up with digital technologies is being explored and expanded all the time to the extent where technology in learning is now an expectation, rather than a privilege.

In an age of spatial mobility and mobile lives (Urry, 2007; Elliott and Urry, 2010) networked technologies can afford an alternative to supportive face-to-face contact through the vast array of online social facilities (Chen and Choi, 2011). Even for those in relative poverty, the global diffusion of digital technologies has opened up the world where normal communication infrastructures have failed to reach. For example, the mobile phone in remote areas of Africa affords all levels of the population a means to communicate where the deficit of local, or national network has otherwise prevented it (Ling and Donner, 2009). As a consequence, the Internet and digital technologies have shrunk the social world, yet also divided it into cyber, or virtual space and the terrestrial space that our corporeal bodies inhabit.

In both the world itself and within education, such gains also come with both opportunities and responsibilities.

> 'Technology has become a challenge – it is the chance we have given ourselves, as a culture, to reinvent ourselves and display some creativity' (Braidotti, 2002: 257).

Cultures are derived from social networks and belief systems; they involve identity work as a dynamic and often an agential process where actions are also susceptible to the echoes of the

differences from ''in-between' spaces' (Bhabha, 1994: 1 original emphasis). Taking this into the context of education and the classroom, cultures come together and negotiate some form of prioritised balance, or imbalance of recurring negotiations and renegotiations, depending on the dynamics and priorities of the social and virtual spaces within the room. The classroom itself is, through policy and the institution, somewhat discursively and idealistically imagined as a discrete place of education. But, the cultural reality becomes much more than a place of education contained by its four walls (Willis, 2003), if indeed it ever was that simplistic a conception.

The digitally formed cultures of this generation of students, together with the current emphasis and expectations in education towards the incorporation of technologies into the learning process ensures that, '[c]ulture can thus no longer be understood as separate from technology' (Poster, 2006: 9).

> 'Technology is at the heart of a process of blurring fundamental categorical divides between self and other; a sort of heteroglossia of the species' (Braidotti, 2006: no page).

Under such a premise, young people have the resources to draw more into their studentship through a medley of diverse socio-technologically driven cultural expectations than which was intended by the institution, or the educator. Any ambivalent state towards the cultural supremacy of education has the potential to become a performative enunciation through the enactment of cultural differences (Bhabha, 1994). A site of education thus can emerge as a site of potential struggle mediated through discursive cultural differences. In this environment there is the potential, and space, for identity work and identity politics to operate, as an undercurrent, and feasibly a 'point of *suture*' (Hall, 1996: 5 original emphasis).

Perhaps this is not to be unexpected when the students, that now enter post-compulsory education, are of a generation that have grown up with technologies as part of their everyday world.   This has prompted the use of such unstable terms as the generational 'digital divide', or 'digital natives' (Prensky, 2001), which assume that it is only young people who are technologically competent. The reality can differ and it now becomes more that of digital inclusion and exclusion, or users and non-users, those with high speed connections and those with lesser speeds, instances where digital technologies are creating a divide in personal contact (Robinson, 2012) and so on. That is unless more focused terms are drawn on, such as the technologically and socially empowered 'Generation Z', or the 'Net Generation' which refers to that generation born from the early 1990s onward. These users are less defined by family background than others (Wellner, 2000) and their social

activities pivot around digital technologies for entertainment and communication; for those within this bracket the use of technologies is the norm (Green and Hannon, 2007). That is not saying that those who are older do not have a similar commitment to technologies, it was just not available for them at an early stage of their lives.

It is within this context that the interests and the basis of this thesis are founded. This current generation of students, as digitally networked young people, carry into the classroom a cultural lifestyle where connectivity to the Internet, social networks and technologies and media can be accessed any time, any place. This social condition coincides with the current expectations towards educational providers and the tutors to offer students a pedagogical experience that embeds technologies into the fabric of the teaching and learning that takes place within the digital classroom. The digitally resourced learning environment is thus loaded with a weight of expectations bearing down from policy, the institution, the tutors and the students, as young people of a digital age. Within the space of the classroom itself, it is of especial interest to this research to consider how that space is formed conceptually and how the subjects, as students and as young people and the tutors themselves, imagine themselves operating within that space.

The social, cultural and educational elements of new technologies and their impact on teaching and learning within an educational environment are therefore significant to future practices. Thus rendering the focus of this research as eminently topical and pertinent, in that it adds to existing literature through the direct focus into the classroom space where education with digital devices takes place. This value is anticipated as being of interest to all those involved in education policy, research and practice who have an interest in new technologies in education and how they are responded to as educational and cultural artefacts.

1.2 THE STIMULUS FOR THE RESEARCH

> It was always because I thought I identified cracks, silent tremors, and dysfunctions in things I saw, institutions I was dealing with, or my relations with others, that I set out to do a piece of work…' (Foucault, 2000: 458).

To now move on from setting the context and relevance of the research in the previous section, this section will now expand into the personal motivation behind it. It was initially stimulated from the personal experience of the practices of many FE students engaging with social and entertainment digital media in the classroom and the personal and professional interest in investigating why this was occurring. These new media and technologies were accessed through students' personal, or

institutional digital technologies. With this in mind there was also the question of how students were using institutional technologies and the Internet academically and the effect of this on their literacy practices.

Colleagues at the institution where I worked had begun to take students engagement with social and entertainment media during sessions for granted, as it was so prevalent, albeit at differing levels. However, this was seemingly not being responded to pedagogically, as any reactions were primarily disciplinary in that students were reminded that this was inappropriate behaviour. Notably at local and national professional development and training events these topics were continually raised as points of discussion and frustration amongst colleagues from other institutions.

This thesis, in part emerged through this situation and from earlier postgraduate research (Barbour, 2005) where it was clear that there was a grass roots frustration within the classroom, which included main course tutors, key and basic skills tutors and even the students themselves. This frustration appeared to stem from the expectations and understandings of what should and could take place within the classroom and its more discrete spaces.

During the earlier research (ibid.) the tutors were consistently commenting on students failing to engage with the text-based artefacts of the courses and the reluctance, by students generally, to read even core assignment briefs beyond the first page; this was even if there were only two or three pages long. Even more frustrating, to all of the tutors, was students constantly fiddling with their mobile phones in the classroom. This not only distracted them from listening to the tutors when they were talking to the students, but also limited their engagement with their course work.

At this period of time, the dominant social technology used by FE students was online messaging, such as MSN and a range of online chat rooms. Whenever the students had a lesson that was in an ICT classroom there seemed to be a constant underground digital dialogue going on with both friends inside and outside the room. With this sociocultural engagement with new digital technologies, which constantly disturbed the teaching and learning, the classrooms emerged not just as a place for education, but a place of hybrid spaces and purposes. This example of a lack of engagement, or resistance to education, by students in the classroom, is by no means uncommon in earlier educational research in the UK, and elsewhere (see, for example, Willis, 1977; Alpert, 1991; Ganzel, 1998; Weis, 2004;). However, the increased presence of technological artefacts, both mobile and more fixed, can afford 'specific fields of action…[or] may close off certain forms of

action' (Savat, 2009: 3). In this sense technologies can act to empower students, or to disempower them, depending on how they are used. Excessive use of a mobile phone, or social networks can also indicate technologically deterministic rituals, or fetishism with technology (Harvey, 2003) amongst users that is not yet understood as new technologies are evolving and becoming increasingly prevalent in day-to-day life.

It was this emergence and pervasive presence of both socio-cultural and educational resources, formed through new digital technologies, in the classroom and a seeming shift in how students conceptualised the space of the classroom and their levels of engagement with both the hard copy and the digital textual artefacts for learning that was both intriguing and educationally challenging. The students had enrolled themselves into post-compulsory education, yet the ease of access and the overpowering draw of maintaining a digital presence and contact with friends drew them away from the intent of the educational space into other alternative and more social spaces and priorities. It was the proclivity of students to access the increasingly broad range of modes of entertainment that the Internet afforded, which appeared not only to be damaging to their immediate college work, but also threatening their potential grades, which in turn put their potential futures at risk. My early considerations had been to wonder if these actions were some form of coping mechanism towards being in an environment that they did not fully want to be in, for whatever reason. Or, that whatever was occurring educationally was for some reason not engaging them with sufficient interest. This brought to mind de Certeau's (1984: 30) recount of the cultural 'ways of operating', which will be revisited later, that can occur when someone is in an environment that they have, or need, to be in but is not necessarily that of their ideal choosing. As a response they draw on their own culture in order to cope with their current conditions and to, 'establish within it a degree of *plurality* and creativity' (ibid: 30 original emphasis). In this sense students demonstrate the facets of their identity by drawing on their sociocultural use of classroom technologies. To extend this into a culturally and politically spatial notion of *spaces*, in the multiple, being created with one place, Foucault (1986: 23), suggests that 'the anxiety of our era has to do fundamentally with space' and that within a single *real* place several spaces can be juxtaposed.

In any educational environment, especially one constantly mediated by official and non-official technologies and a far from simplistic structure and power distribution, it is not only the students that contribute to the dynamics of the place but importantly, the educators. Sites of education, as such, are impacted upon through inherent and emerging internal and external politics, and the agents of power, together with potentially agential acts of those with less power. I was just as much

interested in how the tutors viewed and responded to these new challenges to teaching and learning as well as why they were occurring, and how there were affecting, or changing the literacies and social and educational activities of the classroom. Notable in its application for this context, Massumi (2002: 217) considers that 'affect is situational: eventfully ingressive to context' and therefore relative to both educational and non-educational spaces existing within a computer-resourced classroom; as Massumi (ibid. original emphasis) adds, 'affect is *trans-situational*'.

1.3 OUTLINE OF THE RESEARCH QUESTIONS

From this stimulus the aims of the research were constructed as research questions that are particularly relevant with the current call, and expectations for the use of technologies within classroom environments. New digital technologies and computers have brought to the classroom all the facilities of complex software and the resources of the Internet as arguably one of the most significant changes to the classroom environment in recent years. It is the students' interaction with these technologies that interests this research and how that can shape the social and learning environment of the classroom.

These have shaped the primary research question as: How are computers and digital technologies shaping the social learning environment of the FE classroom, when they are used as the primary learning resource? This is followed by the subsidiary questions: How do students use these technologies for research purposes and then the processing of the information that is sourced? How is students' use of these resources in the classroom affected by their potential for use as a social and leisure resource? What factors, environmental, social and personal affect the way students use these technologies both within a specific session and over the academic year?

CHAPTER 2: LITERATURE REVIEW

2.1 PART 1: SITUATING THE RESEARCH: WORKING AND LEARNING

This section explores, through the literature, how the policy and financial pressures that drive FE place considerable pressures and demands on its tutors. I will go on to suggest that in computer-resourced classrooms this could influence working practices and resultantly affect the classroom as a learning environment. The relevance of this to the research focus is that when students have individual computers and Internet access it can foster the expectation of periods of more independent learning. This situation may offer tutors the opportunity to leave students to their own devices and attend to their own time pressured duties. Although this may be a fruitful strategy for tutors, it could limit the work needed to monitor and guide students' independent learning and the creation of peer learning cultures that create focused opportunities for critical dialogue and engagement between students, which are integral to learning.

2.1.1 FURTHER EDUCATION AS A SECTOR OF EDUCATION

As a sector of education FE has been subjected to a constant politics of change and been referred to variously as, the 'Cinderella service' (Randle and Brady, 1997), institutions that do 'everything else' (Howard, 2009: 21) and 'the neglected 'middle child'' (Foster, 2005: 48). This narrative is reproduced in FE's systemic exclusion from discussions on education that predominantly focus on schools and universities (ibid.), belying FE's significant contribution to post-compulsory education.

FE's subordinate status is even more surprising considering around 3 million students are educated in FE colleges (AoC, 2012). Within these figures 853,000 16-18 year olds were enrolled in FE compared to 435,000 in maintained schools and academy sixth forms. During the same period, the number of full-time undergraduate and postgraduate students, including non-UK domicile students at UK universities was 2,496,645 (HESA, 2013). These comparisons highlight the value of FE colleges within UK education, even without taking into account the statistics of other courses that FE offers for older students, such as the increasing number of degrees offered and the part-time courses that cater for those who are unemployed, in work, or retired. For many students FE is an opportunity for 'second chance learning' (Hodgson and Spours, 1999: 94), especially those who previously may have been classed as non-traditional students, or are without the grades to make the transition to higher qualifications elsewhere. In the higher education stakes 'FE colleges 'reach the

students others cannot reach'' (IoE, 2012), by offering courses for those students who do not want to study at a university, therefore providing continuity for FE students. In recent years colleges have also catered for 14-16 year old young people, who are still enrolled in full-time compulsory schooling. From September 2013 FE colleges have been able to provide 14-16 centres. These offer high quality vocational qualifications for those young people who want early access to practical and technical education that some schools may be unable to provide (DfE, 2013).

Although FE may be under valued, for a significant amount of the population it is a valuable provider of vocational and academic education. The range of learners FE attracts and the broadening of the middle ground of education that it occupies, is perhaps one reason why FE is frequently reworked to be more things to more people.

The Further and Higher Education Act of 1992 brought significant changes to colleges' funding and administration. It removed all local government control and colleges were granted corporate status with the opportunity to emerge from the 'new vocationalism' (Rees, Williamson, and Winkler, 1989) of the 1980s, which considered that education was failing to prepare students to meet the needs of industry. These changes situated FE firmly at the heart of a national strategy to raise the population's skills and qualifications. This financially driven system prioritised student retention and achievement and consequently those more disruptive students were retained, often to the detriment of 'the learning of others' (Lucas, 1998: 302). Colleges, 'literally cannot afford to exclude students, even if they wanted to' (Fisher, 2009: 23). Since the Act, every FE student represents income, therefore, 'defining the terrain upon which practitioners operate' (Avis, 2003: 321).

The Foster Review of 2005 (Foster, 2005) brought further change by proposing a unified and primary purpose for colleges, rather than their prevailing heterogeneous state. Colleges were expected to raise their profiles as dynamic and innovative institutions and involve local employers as key stakeholders, as well as acknowledging the voice of the students. The underpinning message from the review was that colleges should drive forward the nation's skills generation, by responding to the skills needs of local employers and therefore providing a pool of skilled and adaptable workers. This symbiosis would aim to underpin both the stability of local economies, and the economic competitiveness of the nation.

In recent years FE colleges have strived to broaden their provision further by offering higher education courses, and half of all Foundation Degree students are taught in colleges, with 257 now providing both undergraduate and postgraduate courses. In 2012, 170,00 students studied higher education in FE colleges (AoC, 2012). Importantly for many FE students this offers internal progression rather than a transition to an external university. Now, more than ever, it seems FE is becoming a keystone in economic development and learning provision.

What this section has offered is a brief account of how FE has developed in recent decades and its role as a learning provider and therefore the context of where the ethnography took place. Although this thesis is very much about students in computer-resourced classrooms, these discrete learning spaces cannot function without the tutor. Therefore without considering FE's working conditions and how these may sway FE tutors' practices, any meaningful inquiry into student practices risks dilution. It is to this issue that I therefore turn to next.

2.1.2 TEACHING STAFF: WORKING WITHIN FE AND IDENTITY POLITICS

What this section explores is the effect of work intensification on FE tutors and inasmuch as they may be employees of an institution and work within contracted parameters, it will be considered if this level of labour may determine individualistic responses to working within these conditions. Depending on the strategies, there may be consequences in how computer-resourced classrooms and their digital resources are conceptualised by both tutors and students. In addition, when there is a personal, or emotional investment in work the notion of affective, or emotional labour are salient values that will be discussed as approaches to working within constraining conditions, despite the personal costs that can occur. Within this context, the work of social theorists Foucault and de Certeau will be drawn on to examine how individuals may exert some level of control through discrete actions.

Although there is a focus on FE tutors in this section, at this point it needs to be established that within the research itself there was never the intention to question tutors on their classroom practices. Not only would this have taken the research in another direction, but also it could have jeopardised the research if tutors believed that the line of enquiry was questioning their integrity and privacy. The tutors that participated in this research reflected what FE embraces as a learning provider. Between them they taught students with a range of skill levels and learning needs, including those who had decided that they no longer wanted to stay at school for sixth form, and

those without the grades to progress in school if they wanted to; even those whose behaviour needed somewhere other than school to nurture their learning. A number of them also taught on foundation degree courses.

A full-time FE tutor is contracted for a minimum of 24 direct contact hours with students each week; the remainder of the working week is allocated for administrative duties. This would typically include: attending meetings, session preparation, assessing student work, responding to emails, course administration, interviewing prospective students and for some, their lunch hour could even be absorbed travelling between sites to teach at another part of the college, and so on. The inevitable result of this level of FE workload results in shortcuts being taken, or tutors taking work home to complete (Avis, Bathmaker and Parson, 2001). Part-time hourly paid tutors have similar duties, but they receive a flat pay rate for each hour worked and within that is an allocation for administrative duties.

What emerges as a labour intensive system, is identified in the naming of some research papers, for example: Emotional labour, ethics of care: work intensification in FE colleges (Salisbury et al, 2006); A profession in crisis: status, culture and identity in the further education college (Robson, 1998). This seems incongruous considering the value of local FE colleges and the sector as a whole to learning and skills generation, not least the sheer number of enrolled students.

Following the 1992 changes to an output-based funding model students were viewed as 'units of funding' (Elliott, 1996: 16) with an accompanying technocratic rationality that has been prevalent in education in recent years (see, for example, Aronowitz and Giroux, 1985; Bauer, 1993; Hussein, 2007). Working within these business ontologies and surveillance cultures (Fisher, 2009) the performance of teaching staff is continually monitored by internal audit systems, which attempt 'to render transparent the detail of their practice' (Avis, 2003: 324). For tutors, the pressure is firmly situated on them to gain achievement from all students within a cohort, disregarding any potential variance in cognitive ability, or even behavioural issues. Tutors also have regular internal teaching observations, as well as the stressful Ofsted inspections. If a grade 2, which represents 'good', out of the grading scale of 4 is not achieved remedial work is undertaken, followed by another observation until a grade 2 performance is attained. The grade 3 of satisfactory is no longer satisfactory enough and is applied to indicate a need to improve. As Avis (2003: 324) denotes, performativity establishes a 'blame culture' and the subsequent demand of accountability on the individual.

Any student at risk of not achieving will typically result in extra administration and a potential increase in instrumental practice (Simmons and Thompson, 2008) to ensure student achievement meets expectations. The workload from this could typically include extra entries in student records, emails to both course and student services colleagues, a range of face-to-face meetings, which may include colleagues, managers, the student or even their parents and so on. These would need to be fitted within the existing allocation of administrative hours, or overflow into personal time unless other strategies were devised; although, this is not to indicate an absence of concern for students identified as at risk. Additional workload, such as this, adding to an already demanding role can be seen as one of a range of factors that cumulatively affect morale and contribute to the high turnover of FE staff (Avis, 2003). Any perception of education and learning as formed through intrapersonal processes becomes rationalised down to statistical evidence.

> …the technology of performativity appears as misleadingly objective and hyper-rational. Central to its functioning is the translation of complex social processes and events into simple figures or categories of judgement (Ball, 2003: 217).

Ball's reference to 'simple figures' belies the potential tension between working conditions and audit cultures and what Fisher (2009: 23) refers to as 'post-disciplinary framework'. Fisher, commenting from personal experience, adds that some FE students can be:

> ...slumped on desk, talking almost constantly, snacking incessantly […] Students are aware that if they don't attend for weeks on end, and/or if they don't produce any work, they will not face any meaningful action (Fisher, 2009: 23).

Drawing on Fisher is by no means intended to pathologise the behaviour of some FE students, although from my own experiences and anecdotal comments from colleagues, Fisher's observation is by no means uncommon amongst some cohorts. The point being made is that the need to maintain high student achievement may influence working practices when students have relative impunity to inappropriate behaviour. If students themselves become aware of this, it may then be challenging to motivate those who adopt a 'whatever' (Agamben, 1993) approach to education, which may be due to a range of circumstances (Hodkinson and James, 2003). Agamben's notion of a 'whatever being' is particularly useful in conceptualising this level of studentship and will be expanded on within Section 2.1.7.

Working within financially driven systems can place FE tutors between conflicting pressures. Ball (2003: 216) suggests educators' 'struggles are often internalized and set the care of the self against

the duty to others'. A supposition from this is any boundaries of self and professionalism may be hazy, and conflated. In this context Ball's reference to, 'care of the self', can be ambiguous depending on how the self is constructed and if the ideologies of the educator draw in both personal and professional self/s. Under current funding structures a 'duty to others' conflates any ethic of ensuring quality of learning with meeting targets that ensure an income stream for the institution.

This situation is also complicated by the supposition that FE tutors have 'dual professional identities' (Robson, 1998: 603), which consist of the occupational-practitioner and the professional teacher. What is perhaps more appropriate is that there is a co-existence of three entities, consisting of practitioner, tutor-facilitator and administrator. Any attempts to conflate these merely disguise the reality of the role distribution of FE tutors who would have initially been recruited for their occupational/practitioner skills and experience. This, conjoined with a weight on 'individual 'performance management'' (ibid: 600 original emphasis) may confuse purpose and what can be accomplished in some situations, especially when computers are polyvalent objects that are responsive to the needs of the user.

Under these circumstances, Ball's (2003: 216) earlier Foucauldian reference to a 'care of the self' is thought provoking and asks the question of exactly which self a tutor may consider themself to be when they enter a classroom, and therefore, within the focus of this study, which version/s students see and how that shapes their view of education within that session. Foucault (1982: 777-778 original emphasis) refers to "dividing practices": the subject is either divided inside himself or divided from others'. Given the affordance of a computer-resourced classroom to offer students a means to engage with both educational, or non-educational activities through access to the Internet, the same technologies potentially offer tutors a means to divide their role and address any outstanding administration should the students be directed to independent learning activities. Although, not only would tutors be dividing themself within the same place, but they also become divided from the students during these periods as their attention is directed to the staff computer. Outwardly, this situation appears to be beneficial to both students and tutor, especially within the context of this research where Level 3[1] students at North Dale College were expected to be at an academic level to manage independent learning. A flaw may be that students are unprepared for the level of study expected, or are distracted from their coursework in other ways and need more intervention from the tutors.

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[1] Level 3 courses in FE are two years in duration and are equivalent to AS/A Level qualifications.

Foucault's metaphor for his books was that they should be, 'a kind of tool-box others can rummage through to find a tool they can use however they wish in their own area' (Foucault, 1994: 523). His work is therefore used in this spirit to conceptualise how the demands of working in education can shape the identities of its tutors and their ways of operating within the constraints, demands and opportunities of their work role.

One of Foucault's accomplishments was to critique the view of power as repressive and monolithic. His argument was to contend that power could be multiple and flow in different directions, therefore offering differing points at which it could be resisted (Medina, 2011: 10). For Foucault, power can be diffuse and circulate within the fabric of society; therefore subjects can both undergo and exercise power (Foucault, 1980: 98). From power, it is posited, emerges truth, or what is projected as truth due to, 'the status of those who are charged with saying what is true' (ibid: 131). This notion can be reimagined in an FE context and how the institution is constituted through policy and the ways they have to attain funding. These determiners that sustain the operations would be expected to disperse with a hierarchical downward momentum through a college and at each stage that it is picked up, it is coloured differently depending on the level it is at and whom it is directed towards. These colourations may be rendered by employees working within the ethos of a directive, or through discrete and micro resistances that are oppositional yet still work within the system. Any direct conflict would by nature be limited as this would be at risk of disciplinary action and therefore less viable for reaching any intended outcome.

Resistance to power, or exercising power, can become more discrete when facilitated through digital technologies. By way of an example within education, professional workloads dictate that much internal communication is through emails, rather than the logistical challenges of arranging face-to-face meetings. Resultantly, in some situations the potential for confrontation is avoided. In the middle ground of FE are first tier managers, who are curriculum leaders but still maintain a level of teaching within their contracts. Small scale research has identified how these intermediate level staff can use coping strategies, or strategies of resistance and avoidance to prioritise their workload (Page, 2010a; 2010b). These are principled at a level where more senior managers' leadership strategies are considered questionable as they are, 'driven by financial rather than educational imperatives' (Page, 2010b: 10).

> …it was apparent that those emails and meetings concerned with managerial imperatives were most likely to be ignored. Communication concerning learners was usually responded to (Page, 2010b: 8).

Foucault (1980: 99) suggests that hegemonic power is composed of distinctive 'techniques and tactics', and he recommends that any analysis of power should start at its lowest level, or the furthest distance it reaches and then analyse how it ascends from that point. Foucault's rationale is that how power is distributed can then be examined for the varying levels of investment in it, how it is transformed or extended, and so on. Research into any classroom will undoubtedly give an insight into how education is conceptualised, enacted or resisted at its most fundamental level. The significance of computer-resourced classrooms is that the technologies can provide other, more discrete and often less visibly apparent strategies as a response to learning and working conditions. As indicated above (Page, 2010a, 2010b) technology offers alternate and covert ways of exerting a level of control, or opposition to a request, or requirement without the immediate repercussion that face-to-face exchanges could incur. As this level of management is hierarchically closer to tutors than senior management, it can be imagined that tutors may use similar digital strategies. The computer therefore can be conceived of as a device that strategically affords more discrete resistances. Even to others within the immediate area anything observable may be limited due to the user's upper body partially blocking the screen. What is on the screen may also be ephemeral in nature as a user can rapidly switch between applications, or online resources; this or the action of minimising, or closing what is on screen are subject to the control of the user.

With power there is always resistance and for Foucault (1978: 95) these are viewed as 'redistributions, realignments' (ibid: 94), they are part of what power traverses and therefore 'always "inside" power' (ibid: 95). His message is, power is everywhere and there is no binary opposition between rulers and ruled; it is more the techniques of how power is produced and the connections that are made. The tactics used for resistance need to underpin the ethical relationship of the protagonist to the power that is being opposed. For example, a tutor's care of self could determine a redistribution of time so that administration targets could be met without intruding into personal time. Or by resisting administration, they could spend more time planning for, or doing teaching. That is, if they felt that students were being disadvantaged by an instrumental, or limited curriculum that was imposed on them.

In a recent text, and remaining within the context of self-care in response to modern forms of power, Ball (2013: 144) advocates a practice for selfhood as 'rethinking our relationship to ourselves and to others, and our possibilities of existence'. Such an ethic can possibly be worked out through a self-reflexive approach to professional practice and perhaps some cunning. The suggestion is, the way out of this within the boundaries of subjectivation is for a, 'self

understanding as a process of "finding" ourselves' as a mutable subject' (2013: 147 original emphasis).   Foucault's work on the potential for those subjectivated within disciplinary systems to engage in different practices, albeit within the boundaries of subjectivation (Youdell, 2006), is productive in imagining the position that tutors can be in.   The need to maintain the expectations of the institution, as an efficient professional *and* administrator, but still deliver *quality* education, needs some strategies for working within the system by firstly recognising it and then responding to it. Birchell (1993: 277) suggests that Foucault's work offers a means of self-analysis for those who are subjugated within power structures by asking the questions: 'where are we? who are we?'. For Foucault (1982: 781) the struggle is establishing individuality within conditions that are regulatory and thus revolve, 'around the question: Who are we?' In the context of this study these are pertinent questions, not as introspective devices, but more towards what a tutor role encapsulates. Foucault (ibid.) explicates how there can be two meanings of the word subject: 'subject to someone else by control and dependence; and tied to his own identity'. In the context of an FE tutor this could be positioned as what is expected of them as an employee, or needed of them as an educator with an ethic of care towards students' learning and within this, what they expect of themselves.

The same questions can also be applied to students, particularly in computer-resourced classrooms. Networked computers could be used for a range of alternative, discrete practices within an already discrete space and therefore those that are not directly coursework relevant may identify how students/young people view themselves in this environment. The use of technologies to author space in this way is explored more in Section 2.3.4.

This line of enquiry that was initiated with Foucault, is now developed further by turning to the cultural scholar Michel de Certeau (1984) who conceptualises empowerment as ways of working within the containment of aspects of life and work, but in an upbeat rather than defeatist manner (Buchanan, 2000: 87). de Certeau is known for his critical approach to strategies and tactics, where an individual can construct 'a degree of *plurality* and creativity' (de Certeau 1984: 30 original emphasis) in a situation they deem to be inadequate. This is not unlike Foucault's notion of working within power structures to make changes. Where Foucault's work can be diverse and at times elusive, de Certeau's notion of tactics as practices can be more decisive and clearer within cultural and work settings, by bringing seemingly insignificant moments, or events into critical attention (Buchanan, 2000).

Buchanan (2000: 87), reviewing de Certeau's work, comments that, 'strategy and tactics are not so much modalities of power as indexes of belief', adding that strategies 'actually produce a place' (ibid.). As such, 'strategy is a technique of place, and tactics is a technique of space' (ibid: 89). Therefore, just as much as the institution's strategies, shaped by policy, produce the college as the place that senior management envision, so those working within the college can be imagined as various means to ensure their space within the institution adjusts to fit within their values, or needs. That is, for those individuals who consider there is a need for micro adjustments.

An FE college, as a place, functions through the strategies of senior management working within current policy and funding structures. It can then be shaped at classroom level through the pedagogy of the tutor, who may see the need to work between any expected practice and individual strategies, which they are able to apply. Then there may be those adjustments that tactically address anything that may be constraining to them. The same can notionally occur as students, individually or collectively, adjust the classroom to attain some balance between that of the tutor and their own, as a way of 'making do' (de Certeau, 1984: 29) within that space. For de Certeau (1984: 36 original emphasis), 'every "strategic" rationalization seeks first of all to distinguish its "own" place, that is, the place of its own power and will, from an "environment"'. The distinction within the context of this research that is situated within computer-resourced classrooms, is that this environment can be multi-functional and multi-spatial through the facility of digital technologies to enable digital spaces and opportunities within the one place. Pertinently, a tactic 'operates in isolated actions […] It takes advantage of "opportunities" […] It poaches in them' (de Certeau, 1984: 37 original emphasis). de Certeau's reference to poaching can be used to indicate the use of something, either belonging to someone else, or normally for a specific use, being used for another purpose. This could be time itself, or an object subverted through, 'clever tricks, knowing how to get away with things' (ibid: xix). All of this can be encompassed within de Certeau's phrase of 'ways of operating', as actions that 'intervene in a field which regulates them' (ibid: 30).

Buchanan (2000: 91) advocates, in a similar manner to Foucault's comment on his own books, that de Certeau's text (1984) functions 'to make a certain type of discussion possible', rather than conclusive statements and that it should be used in that spirit. Thrift (2008: 75-76) concurs adding that de Certeau's work should not be taken as a set of fixed theoretical conclusions, more that it 'should be seen as a means whereby it becomes possible to open up more spaces within which the operational logic of culture can be addressed'.

What so far emerges from this section is that some factors within working conditions may result in individuals using agential means to address workload and/or self-esteem. Within this it is reasonable to expect that there will be some level of emotional cost incurred, due to the need to establish individual practices within a regime of working. This can be imagined as the emotional geography of an FE tutor's working environment. Therefore, what now follows is directed to this topic and how emotions and values can be both damaging, and potentially liberating for the educator. This draws in the ethical directive regarding students' quality of learning, as educators can be caught between administrative duties and ensuring a quality learning experience for students. An illustration of this occurs when James and Diment (2003) present the case of Gwen, a humanistic FE educator, who considered that her contracted work hours were insufficient for the level of learning she considered students, who were seen individually in the workplace, needed. The 'disjuncture between the rhetoric and reality' (ibid: 417) of their work role and contracted hours meant that to satisfy their commitment to the students needs, and therefore their *self* as an educator was to work extra, unpaid hours. For Gwen the costs incurred were both emotional and material.

What this brief example aims to illustrate is the position a tutor may find themself in of having insufficient time, or means to deliver all that is expected of them, or that they expect of themselves when an ethic of care is directed to students' learning.

This also connects with conversations on this topic frequently overheard in staff rooms, conferences and professional development events during and outside of the periods of this research. These would portray the demanding and actual geography of tutors' working days, as they moved between classrooms and cohorts, and for some tutors even different sites or institutions. Hargreaves (2001) makes the connection between high-stakes school inspections and the emotional geographies of an educator's working conditions and their interactions with others by conceptualising them as a teacher's 'emotional underlife' (ibid: 1058). Inspections do exist in FE, as internal quality systems and externally through the stressful Ofsted inspections. By situating emotional geography, or emotional underlife within the context of this study, they can become apt descriptors of tutors' day-to-day duties as they travel between classrooms, offices and other venues and the ranging tasks and demands incurred along the way. As tutors work independently during teaching hours with little contact with other professionals, the work intensity within the classroom risks being internalised, therefore forming an emotional undercurrent, or geography. The individual impact may well determine how a tutor approaches not only their administrative work, but also pedagogy and

therefore students' learning, depending on how this is acted out in the classroom. As will now be discussed further, emotions can be both needy and costly in working conditions, or used as a more liberatory project.

In recent years attention has been drawn to the emotional aspects of teaching and the affective labour of educators (Kostogriz, 2012). Focusing on the same affective labour, but in other professions, Hochschild (2003) coined the term emotional labour, or emotional management, for those occurrences within a professional role when intrapersonal skills are drawn on to enable feelings to be suppressed, or emotions to be acted out for the benefit of others. In some areas, especially health care, it is suggested that where there was once a need for emotional labour, there is evidence of an increase in insensitivity to patients' feelings (Theodosius, 2008). The suggestion is that this is due to changes within the profession that have increased both pace and quantity of work; although those professionals that are at risk of abuse from service users may still encounter challenging situations where there is a need to suppress personal feelings and present a professional face (ibid: 5). There is the likelihood these conditions will be incurred amongst many professions in contact with clients, customers or the public at large. For FE tutors there are not only the demands from the workload (Salisbury et al, 2006), but also those situations where emotional labour may be required (Salisbury et al, 2006; Jephcote, Salisbury and Rees, 2008) and, for some, a need to cope with challenging student behaviour (Wallace, 2002).

By contrast Kostogriz (2012), takes a more positive view to the affective labour of educators, suggesting it creates possibilities where educators adopt an, 'emotional language, practice the ethics of care, and, thus, experience their professional life on terms other than those predefined for them by standards-based reforms' (ibid: 410), or more applicable to FE, the 'terrors or performativity' (Ball, 2003). As a strategy, Kostogriz (2012: 410) suggests that what attempts to control educator's heads cannot control the ethics of their hearts and through affective practices they can transform circumstances, 'in local settings and classrooms'. Drawing on Vygotsky, Kostogriz argues that in these contexts affective labour can, through interaffectivity, bring 'thinking and feeling, knowledge and passion to the zone of human contact and proximal relations between self and others' (ibid: 409). Affective labour is thus situated as an emotional response to an educator's subjectivation by economic models of work and offers agentic potential for both working within, and improving existing systems.

What surfaces, so far, from this section is that there are divergent ways of working within the prevailing conditions of an, 'overburdened profession' (Avis, Bathmaker and Parson, 2001: 75). This may be by drawing time from one role, teaching, to satisfy the needs of 'onerous administrative burdens' (ibid: 76). How much time may be dependent on immediate work priorities and the level of an instrumental and minimalist approach to practice (Simmons and Thompson, 2008: 612); not forgetting the strategy of taking work home (Avis, Bathmaker and Parson, 2001). An alternative to these costly tactics could be, as Kostogriz (2012) suggests, the melding of interaffectivity into pedagogy to generate and scaffold a desire to learn.

For an FE tutor to achieve all that is expected of them in their contracted hours certainly appears challenging. When students are expected to work independently with computers there is no doubt an opportunity opens to take time from any teaching duties to address any immediately pressing administrative needs. A danger is that not all students may have the educational maturity, or inclination to work at the level of independence that is anticipated. On these occasions there may then be a need for remedial interventions, or a more adaptive pedagogy, otherwise this limitation in skills may be at risk of being viewed in a negative light.

One question that arises within any pedagogical approach and the expectation for students to work independently, is the potential isolation they may incur from working at computers for long periods. To return to Kostogriz (2012: 410) and the view derived from Vygotsky's principles of learning that 'affective labour injects social life in education', Kostogriz (ibid.) argues that through this affective transaction educators can work within, but outside of the accountability and performativity measures as pedagogy remains within the classroom as unmeasurable tactics. Kostogriz argues the rationalisation of education into a fetishism of numbers has both alienated and disenchanted teachers when teaching quality is predominantly measured as productivity. From the conditions that create this situation, the 'teacher is subsumed so that they become professionally poorer' (Kostogriz, 2012: 400). Kostogriz presents a strong political argument that education needs to return to a caring profession, rather than one of rationalisation. What emerges as pertinent to this thesis is the belief that affective labour can initiate and nurture a social learning environment and therefore a learning climate that engages students (ibid.). From the previous reference to Vygotsky there is the emphasis on a dialogical co-construction of knowledge, which can empower students through the social interaction, rather than learning through the transmission of knowledge. As a counter to learning entirely in isolation, such a strategy could empower students' concept formation, imagination and creativity. This affective approach extends to the zone of proximal development

(ZPD), interaffectivity and those affective transitions that 'cultivate the desire to learn' (Watkins, 2010: 271). Watkins (ibid.) believes, current pedagogic practice incites independent learning and although this may be a long-term objective it is a skill learned over time and educators can scaffold students learning so that they work towards acquiring 'more sophisticated levels of competence' (ibid.). An option would be for a tutor to cultivate a classroom culture of affective learning thereby encouraging more interaction between tutor and students and therefore peer interaction and learning and a scaffolding of knowledge. Not only could this relieve any burden on the tutor and the strain of attaining independent learning for those not quite ready for it, it could nurture a more sophisticated learning environment.

With this in mind, returning to what for tutor Gwen (James and Diment, 2003) became a costly exercise in an ethic of care for individual students, this can be reimagined in a cohort situation as a more liberatory project for both students and the educator. A different pedagogical approach could have been used, drawing on the dynamics of social learning amongst peers, therefore generating local learning conditions. Rather than the working conditions resulting in a need for emotional labour, the situation, 'can be conceived in Foucauldian terms as not simply repressive but enabling, with the moment of recognition involving at one and the same time a need for acknowledgment and a confirmation of self-worth' (Watkins, 2010: 273).

To recap, the value of this focus on FE tutors within this thesis is that how tutors view and respond to the demands of their professional role, and all that encompasses, may determine how they conceptualise the classroom. That is, the room as a workspace, their approach to pedagogy and consequently the level of learning that takes place. This then may determine how students perceive themselves, as being students and therefore as active, or passive investors in their learning. The aim is not to be able to classify, and therefore be able to point a finger at complacent, *whatever* students, or to conceptualise what being a 'good' tutor entails. Resultantly, as Willis (2003) indicates, responses to teaching and learning cannot be understood exclusively by what occurs within the walls of a classroom, especially if it is extensively resourced with networked computers. The value of considering this situation is located within two of the research questions, which include the potential for the classroom technologies to be used as social, and leisure resources and the social and personal factors that could affect students' uses of these resources. If, on occasion a portion of a tutor's classroom time is of necessity diverted to non-teaching professional demands, some students who are intended to work independently may not be ready for this unless they are facilitated. If this occurs they may be unable to progress, particularly if there is not a culture of peer

support established. They may then find themselves in what Lather (2007: 162), drawing on Ellsworth (1997) refers to as a 'stuck place', which are those moments or situations where 'ruptures, failures, breaks and refusals' (Lather, 2008: 495) can occur. If this happens to a student when they are at home there are other options due to the extended range of possibilities available within the more informal setting, and they may decide to do something else and then when ready return to their coursework. As computers are polyvalent objects that border cross context, what practices occur outside of the classroom may consequently be replicated, if the support mechanism within education is deficient. Situations as this may provoke a more superficial approach to learning and concomitantly place at risk the benefits gained from deep learning that contribute to good academic practice, such as the digital literacies for effective researching online and the consequent ways in which the student then processes the information they source.

This discussion, establishes that for the educator their workplace may become a 'site of struggle' (Avis, 1999: 260). Avis (ibid.) situates this with fluctuating skills expectations and the challenges of re-professionalisation, but it is just as apposite when the struggle is broader and reflects the capacity, or astuteness to function within everyday professional demands and personal challenges. Farrell (2000) describes this situation aptly as 'working identities', which are discursively constructed.

> I find it helpful to think of these tensions between structure and agency in terms of individuals using their available identities as resources with which they 'work' (and rework) discourses to generate new identities for new contexts, identities which may not be ideal but with which they can live (Farrell, 2000: 21 original emphasis).

In this context it is perhaps not so much 'identity work', more identity management and a praxis that can cope with the demands placed upon the educator. Although Farrell's stress on, 'which they can live with' could suggest a selfish state. The considered suggestion from this section is that not all educators may be, or, are able to be, as committed, capable, or experienced as others, in ensuring that any insufficiencies in students' learning are actioned on. This could even be that the system that is worked in is viewed as fit for purpose and aligned with their educator ideology.

Due to the broad vested interests in education, any regime will surely be deficient in some areas. The day-to-day micro level demands on tutors can be alleviated through strategies of working around some challenging situations. This section clearly indicates that there are tensions formed through the assemblage of managerialism, performativity, educational values, personal values and ethics to self and students, and so on. Inevitably, and relative to the focus of this research, for the

educator, it is within the classroom where tensions in professionalism and identity/ies merge, or are bracketed away as an, 'assemble of *procedures*' (de Certeau 1984: 43 original emphasis).

As identified earlier in this section, FE colleges cater for the broad demographics of the locality they serve and concomitantly they can attract a diverse range of students with differing approaches to education and learning, which the following sections will review.

2.1.3 THE DIVERSITY OF FURTHER EDUCATION STUDENTS

The substantial 2001-2005 project, Transforming Learning Cultures in Further Education acknowledged the diversity amongst FE students and their ways of engaging with education. This is supported by both earlier and later research (Hodkinson and Bloomer, 2001; Hyland and Merrill, 2003; Gibson, 2004; Hodkinson et al, 2007; James and Biesta, 2007).

FE colleges' mission to provide education and training for the communities and businesses within their locality, conjoined with the sector's rapid growth and diversification has seen an increase in students enrolling who previously may not have considered post-compulsory education. This is partially due to the reduction of the youth employment market (Rikowski, 2001) and limited work opportunities for young people. Resultantly, teaching staff increasingly need to gain achievements from students with diverse learning abilities (Hyland and Merrill, 2003). Concomitantly, there has been widespread concern about the recruitment of students lacking the ability to cope with their coursework, and therefore an increase in basic skills programmes and recruitment of learning support staff (Harris and Hyland, 1995). As will be detailed in Section 2.2.1, these skills concerns show no signs of abating (Bailey and Robson, 2004; Robson and Bailey, 2009).

The students that took part in the research reflected this diversity: a number did not want to progress to sixth form and instead sought what they considered to be a more adult learning environment and a more specialist course than offered at a school, or sixth form college. Others did not have the requisite grades to progress to sixth form and FE offered the opportunity to progress in education. Some were older and had reduced work hours to attend college, others had been unemployed and a small number had already completed degree courses and sought a change in direction. Resultantly across the cohorts there was a range of learning and life experiences.

As this research is interested in how students approach learning and their digital literacies in a computer rich and discrete environment, it is not just individual traits but the dynamics within a cohort that have empirical value. The next section investigates literature that explores students' experiences of FE.

2.1.4 STUDENTS' EXPERIENCES AND RESPONSES TO BEING IN FE

Despite a significant level of post-war research interest in UK youth studies, education in general, FE as a sector and its teaching staff, there has been little directed towards FE students themselves and especially their engagement with their studies. Notably there has been little within the formal learning context of the classroom, and even less still when considering the impact of the increased use of new digital technologies on classroom conduct and approaches to learning. However, within what literature there is, a division was made between those students that resist education in some deviant way and those, especially on the more academic courses, who are situated as conformist in nature and accommodate the learning experience.

The validity of such a clear divide was examined by Avis in the mid-1980s when he focused on how ten, 'so-called conformist' (1985: 708) academic A Level Sociology students at the college where he taught either accommodated or resisted facets of their FE experience. What emerged was that any clear notion of conformism by this group of students was something much more complex and variable in nature. The students had enrolled at the college as a means of escaping the oppression they had experienced while at school and they assumed college would offer them a more adult learning environment. However, they still encountered some of those same negatively perceived practices, which then became the focus of their resistances. These adverse elements of their college experience, notably the curriculum and the approach of some tutors, created a level of ambivalence to education amongst the students; although despite this they still remained resolute to their instrumental aims of completing the course, as this would enable their planned progression to higher education. Thus their challenge became one of 'survival' (ibid: 719) through a repertoire of strategies. These were represented as 'a moment of reflexivity, of appropriation, of a reworking that is indicated by the indeterminacy of student subjectivities' (ibid: 737). For example, one student relieved the boredom they experienced from writing tasks and the imposition of this 'state of being' (ibid: 735) by talking to others. Another, at times, would be more confrontational, albeit less resistant, and dress or behave somewhat theatrically and the cathartic nature of this 'allowed later work to be done' (ibid: 719). For others their response to the tedium of a tutor's pedagogy was to be absent from some of the sessions. These actions illustrate a level of slippage that can occur

when students work between the boundaries of either accommodating or resisting education, which then counters any previous considerations of academic students being somewhat acquiescent. In essence, these particular students conformed to a credentialist ethic regarding the value of their studies, but thereafter were critical about some aspects of their course and responded to these at an individualistic level.

Around the same period as Avis, Aggleton (1987), conducted his FE research with a much narrower focus by selecting a small sample of underachieving GCE A Level students. The aim was to investigate why these students from relatively privileged middle-class backgrounds and upbringings, which had encouraged a high degree of autonomy in their children, were rejecting the ideals of educational achievement.

Like Avis's students these had left school to study at college due to their 'antipathy towards aspects of the schooling process' (ibid: 65) with the belief that the FE environment would offer greater autonomy, not least the availability of courses that were not offered at their school sixth-form. Despite being schooled at relatively experimental or open institutions these students felt oppressed by how their time there had been regulated. At college they found this was repeated and any attempts by tutors to control them were resisted in a manner similar to how they negotiated their personal freedom at home, especially through the use of verbal arguments. In this respect, the students anticipated being able to negotiate their educational experience not only in this way, but also by expecting to replicate their mode of behaviour within subcultural contexts such as local bars, arts centre and youth theatre which celebrated individuality and personal autonomy.

Notably these students' resistances did not challenge wider power relations and structural oppression; it was more to attain a level of personal control within their immediate lives and therefore a rejection of any attempts by adults in authority to govern them. The students blurred any distinction between work and leisure with the rationale that work should be pleasurable; that is within their conceptions of pleasure rather than other forms of gratification, such as the satisfaction of educational achievement.   Therefore their strategies within education were directed towards the gain of personal control over how space, time and systems of meaning were managed, and one way was through irregular attendance. Aggleton argues that these students' strategies could be viewed more as contestations of power, rather than a resistance to it. Despite these struggles for control the spaces that the students tried to claim, were in fact severely circumscribed. Of particular note, and seemingly contradictory to their conduct, when some of the students reflected on their college

experience they chastised the lack of structure they had encountered on their course and the fact that they were not actually made to work by the tutors, or taught to develop their study skills. They considered that they could have done much better in their studies had these occurred (ibid: 77); though how they would have responded had they occurred is only open to conjecture. On this academic note, Aggleton (1987: 73) comments that amongst the sample, male students in particular relied on individualist ''intrinsic talent' [for academic success], notes were rarely, if ever, taken in class, set work was seldom completed and lectures were for the large part sporadically attended'.

What the ethnography does not offer, due to its narrow focus, is how typical this behaviour was of students from this type of background and there may well have been others at the college who were doing well in their studies.

Some two decades later, Atkins (2008) directed her FE research to students of a much lower academic level than either Avis, or Aggleton. Incorporating 3 cohorts of Level 1 students from two FE colleges Atkins explored their learning identities and aspirations and how they responded to their educational experience. At this level, the students were working towards gaining a qualification that is the equivalent of D-G grade GCSE, as the limited qualifications that they had left school with effectively excluded them from the broader range of FE courses. Level 1 courses are at an introductory, or foundation level with the aim to develop students' essential skills and allow them further progression within post-compulsory education, or entry into employment or work training schemes.

The students offered a credentialist rhetoric of working hard, but this was countered by observation data that indicated that they predominantly spent their time fantasising about celebrity cultures and 'doing leisure' (ibid: 199). This was fuelled through their fascination with celebrity cultures and the naïve expectation that achieving an affluent lifestyle would be an effortless transformation from their current status. What is uncertain however is if the students' contradictory declaration of a work ethic was delusional, or simply a defensive discourse used to avoid any confrontative discussions on this topic with adults.

The tutors considered the students' ambivalence towards the course was due to their lack of concentration skills, but Atkins posits that their preoccupation with non-educational leisure activities and friendship maintenance afforded them a means of coping with, or escaping from 'the mundane drudgery' (ibid: 195) of their immediate studies and potential futures within a low pay,

low skill employment bracket. This avoidance of educational activities and using college time to direct their discourse towards idealised lifestyles and 'unreal hopes' (ibid: 202) were of high value to their immediate needs and a way of momentarily sidestepping a seemingly narrow positioning in education, life and future employment prospects.

Atkins suggests that the students had 'similar occupational aspirations to their more educationally successful middle class peers but are more constrained by fundamental structural forces and lack the agency and cultural capital to realise those aspirations' (ibid: 202-203). At one point Atkins risks articulating these young people from low socio-economic backgrounds further into limited positions by her perpetuation of the deficit discourse that seems to frequently attach itself to these young people when adding that they 'reject a system which can only offer them a limited transition in low value courses' (ibid: 203) and that they are 'effectively excluded from many work-based learning programmes where training is only available at Level 2 or above' (ibid: 197). These comments are not completely unfounded, however 12 of the 32 students did progress to Level 2 courses. If completed this could allow them to advance to Level 3 and beyond, especially as FE colleges are very focused on retaining students for internal progression.

The classroom strategies the students used can be perceived of as their means of coping with a lack of motivation towards their immediate educational setting. The conjecture is that this rejection is partially due to the low level of exchange value offered on completion. Level 1 courses are broad in content and as such offer a more rudimentary level knowledge to a range of subjects and without a direct route of subject progression it therefore limited in immediate value and stimulation. That is aside from their credentialist function, which when completed can enable students to progress to higher-level courses with more defined vocational content.

The value of Atkins' research within this thesis is its study of how these Level 1 students used their time in the classroom, relative to social and leisure interests and how these were viewed against educational priorities, and therefore how they negotiated their identities as both young people and students within a discrete environment. It serves to illustrate that when education, for whatever reason, is less than ideal and in some way does not engage students, their interests outside of education can permeate classroom time, and compete for attention.

In this context, Ball, Macrae and Maquire (2000: 59) indicate in a study of the transitions of young people into post-compulsory education that, 'social lives are not just sub-cultural practices, they are

pivotal elements of their identities and are equal to, if not more important than, their education selves'. This can be extended into the consideration that linear transitions from school to college, or university and then to employment now draw into this equation more short-term choices for post-adolescents, such as 'gap years' and that this discontinuity may even be through reduced motivation, or 'learning fatigue'. Whatever stimulates this lassitude may well be idiosyncratic and resultantly shifts attention away from the academic. As Atkins indicates the Level 1 students she focused on had identities where the diverse elements in their lives such as learning, leisure and domesticity appeared to be synonymous, albeit with the balance swaying towards leisure interests. What offered them an element of hope, or escapism, were their idealised dreams of transformed lifestyles fuelled by their attention to the media's glossy depiction of celebrities.

As initially commented at the start of this section there has been a marked deficit in research output on FE students' use of digital technologies within the classroom-learning environment. One example, although not in an FE context, but with Level 3 students is however worth studying. Barden (2014), albeit with an explicit focus on dyslexia and learning and in the setting of a highly successful sixth form college with a strong and well-resourced ICT focus, examines, through a discrete short-term project, with a convenience sample of five 'diligent' dyslexic students from across the institution, the educational affordance of the online social utility Facebook as a 'digitally mediated social network' (ibid: 6). As Barden comments, students who are dyslexic can find those activities involving literacies challenging, not least as they can quickly forget information and are often disorganised with poor time management skills. In a learning environment these factors can result in low levels of confidence and self-esteem, stress and an aversion to 'academic' work.

Barden's rationale for using Facebook as the platform for his project was his concern that many of the specialist learning technologies that aim to support dyslexia can be stigmatising for the student using them, as they mark them out to others as in need of support. Although, the research (Seale, Draffan and Wald, 2008) that Barden draws on for this postulation also indicates that many of the university students interviewed viewed these assistive technologies extremely positively. However, Barden is resolute in his positioning that those who are dyslexic have an ambivalent relationship with learning technologies and any gain may be countered by the stigma of using them. By directing this at those technologies that are tailored to supporting dyslexia he does avoid the everyday technologies that now support many dyslexic students, such as the ranging text and graphic functions of Microsoft Word, the audio facilities of other everyday software and the inbuilt functions on a computer that can read out text that the student may otherwise find challenging to

decode, and so on. Despite this the aim of Barden's study was to examine the affordance of Facebook as an educational resource through a short-term project consisting of five discrete 90 minute sessions over a 5 week period where Barden, a part-time specialist dyslexia tutor at the college, facilitated the students to independently co-construct a group Facebook group page following his initial guidance and support. The Facebook page was to function as a platform for the students' joint research into dyslexia, with the rationale that due to its ubiquity amongst a large portion of young people, Facebook did not carry the same negative connotations as discrete assistive technologies. It therefore provided a means to examine the educational affordance of digitally mediated social networks for 'scaffolded co-construction' of a negotiated educational task. Barden draws on Lankshear and Knobel (2003: 180) for this approach to scaffolded learning where participants work collaboratively with ICT and according to their individual strengths; there is a negotiated time frame for completion, and as a result an authentic product. The aim is that the members of the group collectively design and implement the learning activities, which incorporate developing 'cultural and critical understandings of literacy practices involving these technologies' (ibid.).

The five dyslexic students that Barden selected indicated that using Facebook to learn about dyslexia, which was of significant personal interest to them, rather than something within their curricula afforded them to experience learning inclusion. This 'levelled the playing field' against some of their existing dyslexic learning challenges, in that the content of the Facebook page became a form of distributed, or outsourced memory that retained subject conversations and acted as a pedagogic hub. The argument is that this social and collaborative approach to learning offered the students increased control over their literacies and learning and therefore a more positive scholarly experience.

Facebook has the capacity to act as both a portal and a multimodal repository for collective conversations, links and media that group users upload. In this way the accrued knowledge and resources reflects Web 2.0 epistemology as a social-constructivist model where a webpage is co-constructed and communally retained. Within this context Barden argues that the students developed metacognitive awareness, with a sense of agency and therefore could 'reframe themselves as successful learners, experts and helpers' (ibid: 14) within this social and collaborative environment.

As a small-scale project, Barden's research appeared to be successful and the students appeared to positively engage with it. However, it must be noted that this was very much a short-term undertaking with an inherent personal interest to Barden as a tutor, but predominantly as a researcher, and the small number of students, and, it was detached from the formal curricula. Therefore, there is the question of how using Facebook, as a learning resource, would fare in day-to-day learning conditions over a longer period, with a more curriculum specific topic. Selwyn (2009: 157 original emphasis), using data from over 900 students at a UK university, has indicated that higher-level students use Facebook in an educational context for:

> …*post-hoc* critiquing of learning experiences and events, the exchange of logistical or factual information about teaching and assessment requirements, instances of supplication and moral support with regards to assessment or learning, or the promotion of oneself as academically incompetent and/or disengaged.

Any 'forms of continuous learning or *ad hoc* educational exchanges' (ibid: 170) were absent from the data, although Facebook did appear to have value as part of students' overall university experience, predominantly through the informal learning of becoming and being a student via Facebook page entries. This aspect of studentship was facilitated through the learning of social roles, understanding values and the shaping of identities and therefore the cultural nuances and the identity politics of being an undergraduate, and within that constructing and maintaining a public image to peers. Notably Facebook acted, 'as a ready space for resistance and the contestation of the asymmetrical power relationship built into the established offline positions of university, student and lecturer' (ibid: 172) and there was a distinct lack of self-images that offered the student as being 'a 'geek' or a 'swot'' (ibid.), and positively engaged with their studies. Selwyn suggests that the behaviour evidenced through students' use of Facebook was just 'students simply being students' and that any attempt to regulate this, or 'appropriate *Facebook* for educationally 'appropriate' or 'valid'' (ibid.) was unadvisable. In that sense these digital spaces were ones that students had appropriated for themselves, and as such had become part of the 'social glue' that helps students settle into their university lives (Madge, Meek, Wellens and Hooley, 2009). To interrupt that context and suggest the use of Facebook for more formal learning was largely not welcomed.

With the above in mind, the caveat with Barden's research is that the short-term novelty of such a project may not be repeated when using a more curriculum-focused topic. The novel could then risk being replaced by the everyday and the mundane, but just in a different digital format. With university students, social media is seen as 'their space' and as Selwyn (2009) indicates its value is largely for other educationally related issues, rather than as an immediate learning platform. These

issues could be challenged through pedagogy and the curriculum, and therefore remain open to conjecture. Additionally, some tutors could be adversely affected by a more prolonged use of new technologies: Barden clearly had a focused and personal research agenda with the project that was not institutionally driven, which once replaced by the need to sustain this level of interest with students over the academic year, may bring in new challenges. One danger being that a more mandatory use of technologies could risk becoming what one lecturer referred to as risking becoming, ''mechanical' modes of pedagogy – 'you put up the slides, put your lecture notes online…so that your arse is covered' (Selwyn, 2013: 1).

What emerges through this section and especially Avis and Aggleton's earlier research, is that students can arrive at FE colleges with expectations and if these are unfulfilled then they may respond to the situation through a range of strategies, some of which may be benign and others more assertive. A common anticipation by the students was a much more adult environment than had been experienced at school, but for some even this was insufficient and they expected similar levels of autonomy to what they had at home and in their social lives. Therefore, for these students any rules and norms of place were viewed as flexible. In this sense college was not viewed as a discrete place with a specific purpose, but something much more malleable. Foundational in this were personal histories and experiences, and youthful identities formed from social and cultural environments. More specific triggers for resistance could be a reaction to a particular tutor, or some aspect of the curriculum, such as long periods of writing.

Atkins' (2008) Level 1 students arrived at college in a much more constrained position, due to the broad and introductory nature of their course and their immediate limitations for study and employment. Their reaction, therefore, was to both life and education and by imagining idealised lifestyles they filtered out any challenges of education and realism of their futures. Barden's Facebook research with its very selective sample and focus, albeit at a successful sixth-form college, counters the notion that students outside of compulsory education, but not at university, will resist or contest elements of their time in education in some way. Barden's short project was tailored to both develop students' skills and draw into their learning their cultural and social uses of technologies through a familiar digital platform. This strategy afforded the students a positive learning experience over the duration of the project. The application of the success of the short-term and discrete project would be uncertain if fitted into the main curriculum and when considered with Selwyn's (2009) research on university students' use of Facebook its adoption into formal education would seem to be a step too far. What it does suggest is that networked and digital

media can engage students when the subject and the duration are fitting, whereas for Atkins' students their dreams of celebrity lifestyles through their media saturation fulfilled the purpose of masking the mundaneness of education, day-to-day life and uncertain futures. As with Aggleton's research into the educational affordance of Facebook, students bring into the spaces of education cultural values that are drivers, or otherwise influential, in their social and leisure lives. Their response to the educational conditions they encounter can determine how much they draw on these and therefore may be an indicator of how they view their college learning experience.

As previously commented, there is limited research directly on FE students and what is particularly absent is how students' engage with digital technologies while in the classroom. Despite this what travels through the literature discussed is that students are certainly not passive receptors for education and therefore both internal and external issues can affect their response to education. For students to engage with learning it needs to have a purpose or stimulus, which may be a topic of interest, or a topic delivered in an engaging manner or something more credentialist that enables the student to progress. When this does not occur and some aspects of education are viewed as a negative experience a range of strategies may be drawn on so that these periods can then be coped with.

With what has been discussed in this section the aim has not only been to explore the literature on FE students and their responses to post-compulsory education, but to situate this thesis as timely by extending this body of work into the context of students' responses to learning in networked computer resourced classrooms. What now follows explores the notion of learning disposition and its relationship with identity.

2.1.5 LEARNING DISPOSITIONS

This section explores disposition and its relationship with identity and how this has value when enquiring into how students respond to being in computer-resourced classrooms. In doing this it aims to afford a level of understanding to the division of activities that can occur when students engage with both learning activities and those that could be considered as off-task. This examines the validity of the suggestion of divisions in student identity apparent in tutor deficit discourse and literature when students use digital technologies for something other than coursework. In doing this the argument is that this view may be considered as insensitive to students and their needs and that their identity is something much more fluid, individualistic but culturally shaped and multi-faceted, especially through their close connection with networked technologies.

Crick and Goldspink (2014: 28) suggest that the meaning of disposition can be quite vague, but usually refers to 'a tendency to behave in a certain way', and disposition to learning is suggested as, 'tendencies to respond to situations in certain ways' (Carr and Claxton, 2002: 10). Clearly what affects disposition can therefore be instrumental in stimulating, or otherwise affecting how students engage with and identify with classroom learning conditions.

Heil (2005: 350 original emphasis) suggests that, 'disposition is 'triggered' by a 'stimulus' and the result is a manifestation of the disposition'. Disposition, therefore, as an active, or passive power (ibid.), relates to whatever a person, or even object, encounters that provokes a response from them. For Williams (2005) dispositions that manifest as dynamic result in some sort of change occurring compared to any previous state of being. Differences in disposition occur when one object, human or not, reacts differently to type-identical stimuli than another object does (Mumford 1998: 14). This could be imagined as those instances in education when that not all students respond to learning a particular topic, or the approach to teaching it, or even the learning resources used in the same way. Some dispositions may change little, but what occurs in classroom situations may have the capacity to modify, or change or even instil disposition. In part, this will be discussed in Chapter 5 and the conditions that may affect students' sensitivity to their learning environment.

As Claxton and Carr (2004: 95) suggest, albeit with a focus on young children, education – and therefore learning conditions – 'can cumulatively affect individual's tendencies to respond to, interpret and construct learning opportunities in certain ways, strengthening some of these and weakening others'. Bloomer and Hodkinson (2000: 583), in a study of school students aiming to progress to FE institutions, indicate that there has been a deficit in the study of change in students' perception of, and approaches to learning, over a duration of time. Of note, the authors (ibid.) add that dispositions can transform even within short periods of time and that this can be connected to broader social, economic and cultural contexts. In doing this they argue that wider issues of identity formation can connect to disposition, where 'changes in identity…[can be] crucial to understanding changes in…disposition to knowledge and learning' (ibid: 593-594). Bloomer and Hodkinson (ibid: 587) add, individual student's dispositions may vary according to the situations they find themselves in, and their learning disposition may, at times, modify to become increasingly utilitarian in nature.

This section is therefore germane to gathering some understanding of how students may act in those learning conditions where their networked computers have access to resources they use in social

and cultural contexts. Not only that, but as the fieldwork was conducted over one academic year it aims to contribute to reducing the deficit in studies of change in students' engagement with their studies, identified above by Bloomer and Hodkinson (2000).

If disposition and its relationship with identity can affect how students see themselves and their actions in computer-resourced environments, this clearly illustrates the multi-faceted nature of identity. However, the deficit discourse that has emerged amongst tutors towards students' off-task use of technologies is counter to this and pivots around the notion of identity switching between activities that correspond to either being a student, or those not related to coursework and therefore that of a young person. A typical tutor response would be to treat this as something with a potential range of disciplinary actions.

A 'learning' disposition differs from having the *capability* to learn but the two do interact. Capability has been likened to the 'toolkit' of learning which contains the 'skills, strategies and abilities which learning requires' (Carr and Claxton, 2002: 10). Learning dispositions, like disposition itself can be harder to pin down but as Carr and Claxton (ibid: 33) indicate, in a classroom context they can be dependent on the 'relationships between the individual learner and the environment, so we also see them as situated and distributed'. Perkins, Jay and Tishman (1993: 18) also suggest that what a disposition to learning is can be somewhat elusive but includes: 'motivations, affect, sensitivities, values'. Therefore, within these categories the nature of the learning conditions can include the learning environment, the topic and the resources available. Other students, the tutor and so on can also be taken as playing an important role in determining a student's disposition to learning.

A stable learning disposition can be having the resilience to continue with a task and become involved with it (Nicholls, 1984), which can be the result of previous learning experiences (Carr and Claxton, 2002). Clearly disposition is a key attribute for learning, but it is just one of several elements that may constitute engagement with learning. Buckingham, Shum and Crick (2012) consider that a deep engagement with learning occurs when several personal assets of a student merge for a purpose. These can include not only having an appropriate disposition to a task but also individualistic values, attitudes and skills, including those aspects of their identity they draw on in a learning situation.   A learning disposition is considered by the authors to be 'personal and autogenic' (ibid: 94). But, as with resilience (Nicholls, 1984), dispositions can develop through the energy that comes from having the desire and motivation to learn (Perkins, Jay and Tishman, 1993:

25-27). This may be influenced in some way by a range of other factors, such as the need for career progression or change, or significant others who exert a positive influence. Or, as highlighted above by Bloomer and Hodkinson (2000), it may also be credentialist, which for many students may be to achieve progression to the next stage of their learning or employment.

Dispositions emerge as being personal and therefore intrinsic qualities that can move from one aspect of an individual's identity to another. Crick (2012) suggests, by drawing on Vygotsky, that this is a scaffolding activity, but considers that in an educational context the term of disposition itself is insufficient due to what occurs within identity, as sets of beliefs with affective loading. Crick (ibid: 683) consequently believes that the 'term 'learning power' is more fitting because it incorporates values, attitudes and dispositions', which as indicated above (Buckingham, Shum and Crick, 2012) can facilitate deep learning.

Learning power may thus reflect change in an individual, and what they identify with through their learning, not least what motivates them to be identified as someone with specific knowledge and skills. Disposition as a learning attribute then modifies from a notion of the way a person has the tendency to respond to a particular situation (Carr and Caxton, 2002) to something more active and 'the proclivities that lead us in one direction rather than another' (Perkins, 1995: 275). Thus, why those with interests in one, or more of the broad aspects of media orientate to media courses and likewise with music students.

As indicated up to this point, disposition, even if considered to be autogenic (Buckingham, Shum and Crick 2012), is far from being a discrete human quality and can be associated with what affects identity. Shelton and Peters (2006: 209) offer one insight into this. They connect individuals' negotiation of identity with both identity separation and management and suggest that disposition can, 'symbolically alter a person's self-concept by the individual to further incorporate an identity into, (rather than separate it from) their self-concept'. In their research the authors focus on how changes in self-concept can render changes in an individual's disposition towards their tattoos and consequently the agentic decisions behind their removal. As those aspects of their identity that had been associated with the tattoos are now redundant, through actions of erasure they affirm new, or changed identity goals.

The significance of the decisions behind tattoo removal to an educational topic is to illustrate just one instance of the close connection that can occur between disposition and identity. This is

especially apparent, in recent years when personal tattoos, or 'getting inked' has seen a significant rise in both popularity (Henley 2010) and also regret (Fottrell 2014) amongst broad sectors of society. Just as change can occur with someone's disposition towards their tattoos and therefore how they negotiate and modify their consumer identity, lifestyle and other personal priorities, so the same premise may fit with how a student is disposed as a consumer of education, and subsequently how they identify with being a student.

The mechanisms that form a learning disposition are suggested as being 'intimately linked with identity or self-stories' (Crick and Goldspink, 2014: 29) and therefore the way in which students' discourse focuses on themselves as learners. A successful illustration of this could be Barden's (2014) Facebook project where dyslexic students jointly researched the subject of dyslexia (see Section 2.1.4). Countering this would be Atkins' (2008) students who appeared to be more focused on a discourse centred on celebrity lifestyles rather than education. In both of these cases the students' dispositions to learning could be considered to be situationally sensitive, but whether this is a virtue, as argued by Flanagan (2009), is worth considering. In Barden's case, clearly yes as the students responded positively to the learning conditions of their dyslexia Facebook page project. However, Atkins' students disengaged with their learning and in the classroom they prioritised off-task leisure discourse above learning discourse. This was seemingly due to a lack of interest in the relevance of their course curricula and their potentially limited prospects for future employment. Therefore, their dispositions could be considered as being situationally sensitive. Without more detailed accounts of the curriculum, or the pedagogy that these students experienced it is difficult to determine if their dispositions in this context were indeed appropriate. Although, the suggestion from the research was that their course was lacking in its consideration towards the range of students that were likely to enrol on it. Likewise, Barden's (2014) project in some way supports the argument (see Crick and Goldspink, 2014) that a student's disposition to learning can be closely connected to the pedagogical design they encounter. The advice is that educators' should take into account students' existing learning dispositions and identity as a means of supporting their engagement with learning. How these can be identified, or assessed is not made apparent.

Sfard and Prusak (2005) suggest that disposition can be viewed as an embodied characteristic, but the practices that correspond to this may not be predetermined and can be subject to change (Rööst, Jonsson, Liljestrand and Essén 2009). Crick and Goldspink (2014: 30) add that disposition, 'is maintained in and through the learner's engagement with their environment, and reflexively through affective states and self-narrative'. Again, it is worth drawing on Barden's project as an example

that somewhat supports this statement.   Aside from the students' engagement in the classroom, their Facebook page could be considered as an additional, but mediated environment where their active engagement and learning, and, self-narrative was archived.

Clearly, disposition forms a connection with identity, although some authors suggest identity itself has become something of a challenging contemporary topic. As Jenkins (1996: 7) comments: 'everybody, it seems, has something to say about it'. Bauman (2004: 16-17 original emphasis) suggests that, ''identity' is revealed to us only as something to be invented rather than discovered; as a target of an effort, an 'objective'…or to choose from alternative offers'. Therefore identity shaping is considered to be an agentic process of choice. Bauman later extends this point to differentiating between, 'those who can compose or decompose their identities more or less at will…[and those]…who in the end are burdened with identities enforced and imposed by *others*; identities which they themselves resent but are not allowed to shed' (ibid: 38). He therefore suggests with some ambiguity that structures of dominance, in their diversity, both formal and otherwise, are one consideration when studying the shaping and formation of identity. Consequently identity, for Bauman, may be something singular and fixed, or singular but more fluid, compound and therefore faceted. In some way connected to the latter point of Bauman, the authors Benwell and Stockoe (2006: 3) state that, 'it is assumed that although people may present themselves differently in different contexts, underneath that presentation lurks a private, *pre-discursive* and stable identity'. They then (ibid: 4 original emphasis) suggest that identity has been '*relocated*: from the 'private' realms of cognition and experience, to the 'public' realms of discourse and other semiotic systems of meaning-making'. Atkins' (2008) students serve as an example of this latter point through their engagement with media messages of celebrity cultures and imagined future lifestyles. Thus suggesting how much their cultural preferences shaped what they identified with, through their inter-group discourse in the classroom. The concept of identity that emerges, unless power structures are so intensive as to prevent expression, is one that remains situated within the individual. But, there must be some core identity otherwise it cannot be controlled by others, or self-developed. What follows intends to illustrate that identity cannot be considered as education in this context expects it to be, where the young person enters the classroom and becomes the student and the trappings of identity that shaped the digitally social young person are left behind. Identity thus is singular and therefore individualist but multi-faceted through an individual's social and cultural development where context may be significant in how that individual projects their identity. Technologies, however, can extend context, through the digital or virtual spaces that they offer. This will be explained further.

A distinction with the students in this research was how they used the technologies to illustrate their identity as young social people, as they digitally moved between education and socio-cultural artefacts. This was achieved through the polyvalency of their classroom computers; illustrating how much digital technologies are embedded within their culture and identity. Bauman's notion of identity being imposed by others can be contextualised by education expecting students to embody an identity that tutors envisaged a student as being. Anything other than that became a deficit, but as the students in this research illustrated they used the technologies to respond to education trying to locate them within a specific institutional and tutor shaped identity of independent learners. Their off-task uses of technology fulfilled their culturally shaped multi-faceted identity, just as much as when they were focused on coursework. Thus underlining the complexity of identity and its close relationship with new technologies. The computers in the classrooms facilitated students to move between educational activities and cultural interests as a demonstration of their one underlying, but multi-faceted identity. In a discrete environment like a classroom some of these facets can become more expressive than others dependent on the specificity of the context, such as the day, the tutor, the assignment, the stage of the academic year, a particular point of time within a session, and so on. As Farham and Churchill (2011: 359) comment: 'people maintain social boundaries and show different facets or sides of their character according to the demands of the current social situation'. The authors conclude that the 'levels of identity faceting correlated with the extent to which they tended to have incompatible roles and identities' (ibid: 362). This serves in illustrating the notion of how people may present themselves differently in different contexts, yet they still remain who they intrinsically are and it is those facets that are drawn which are the enablers for adapting to different situations.

What now follows extends this further and then leads on to discuss how the boundaries between the formal and informal and work and life are becoming increasingly less divided in society. This can occur benignly through overlapping contexts, further illustrating the facets of self within one identity.

Benwell and Stockoe (2006: 4) reinforce the notion that what we identify with is discursive in nature and therefore socially and culturally formed: 'who we are to each other, then, is accomplished, disputed, ascribed, resisted, managed and negotiated in discourse'. The authors (ibid.) reflect on the range of often near-synonymous terms used for 'identity', which are often theoretically supported and succinctly add that they themselves view the term 'identity' broadly as, '*who people are to each other*' (ibid: 6 original emphasis). Although this can surely be unwrapped

a little further to, how each actor sees themself as being; not least when the authors (ibid: 5 original emphasis) draw in terms such terms as ''self', 'selfhood', 'position''. Rutherford (2007: 9) brings this together when stating that, 'we need others in order to make narratives which give meaning to our individual selves'; thus re-emphasising context and the social and cultural flow of identity, and especially the role that social technologies and digital communication play in this. This therefore offers an indication of how there can be the flow of movement between the social environment of classrooms and educational discourse and the off-task social and cultural uses of classroom technologies. In the context of the interests of this thesis, the question of how stable the facets, or layers of that *self* actually is when there are distinct divisions of presence between real and digital activities will be explored further below (see Section 2.1.6) by drawing on Martin et al. (2013). This particular research focuses on an expert game player who appeared to successfully manage their responsibilities between clearly disparate real and virtual world environments, where they are the common denominator.

However, as will now be discussed some boundaries in life, which were and for many still are kept distinctly separate, are diminishing. One of the reasons for this is through the affordances and ubiquity of digital technologies and media. A rationale for exploring this topic within student focused research, is that this reduction in the clear delineation of roles and context is occurring at pace as a broad shift across many factions of society. This may then have an effect on how students situationally perceive some aspects of their identity through technologies and consequently why they may engage with them in a discrete and timetabled learning environment.

Amongst many professions modern working demands challenge the viability of achieving a comfortable work-life balance, not least being able to remain within the hours of a working contract. Taking work home, or staying at the workplace beyond contracted working hours (Jozwiak, 2014), appears to have become a feature of modern-day employment. Digital and networked technologies have featured large in creating this situation, especially in those conditions where the employee can be tethered to their work at any time through the technologies they use. In education, pressured working practices are by no means uncommon (see ATL, 2012; Shaw, 2014). The time demands for maintaining a professional profile and, or professional development flow into personal time; not discounting those circumstances when the allocated time for day-to-day tasks may be insufficient and the peaks of workload are addressed during evenings and weekends. This blurring of boundaries between work and personal life can become further nuanced and therefore

trouble any notion of clear boundaries between worker identity and that same individual outside of working hours.

Therefore the limitations of the notion of identity being formed through distinct divisions will be explored by drawing on anecdotal examples from FE. An art tutor visits a gallery exhibition in their personal time, initially for their own interest and pleasure. They then they transfer this new knowledge and information, even the exhibition catalogues as resources into their teaching. In this way work and personal activities become conflated in what appears to be a benign and positive way. The other example, a music tutor, goes to a concert to see one of their favourite performers; in that non-formal context they identify some different ways of engaging an audience. The same tutor, during their work lunch break watches one of the multitude of YouTube videos on musicians, and how they achieve a particular sound. These are not just self-sponsored activities to maintain personal and professional knowledge and skills, but activities where this new knowledge, and experiences are then disseminated to students to enrich their learning.

These examples, sketched out from real anecdotes, during the period of this study, exemplify practices that may appear benign to the professional. In this context defined identity boundaries can be difficult to imagine. Subject interest, professional demands, having student learning in mind or even a need to keep on top of a workload, which may be to ensure progression in employment, or just avoiding being vulnerable to changing workplace conditions conflate. Thus, any notion of discrete places for specific activities can begin to evaporate through personal interests and commitment, the pressured expectations of modern life and therefore a dissolving of role boundaries.

The aim of the above paragraphs has been to illustrate just a number of ways in which time and space for learning and working is, in some situations, becoming reconfigured. From this notion, identity or the identification of purpose within each setting that is engaged with becomes open to interpretation according to needs and expectations. Therefore as with identity, place and the spaces within can also become fluid and malleable. Consequently identity can be conceptualised as much more than a simple switching process between roles and expectations.

To return the focus to students, as with a tutor's learning, professional development or simply keeping up with day-to-day duties, FE student learning may not be confined to timetabled periods at college. Apart from the general features of catching up on college work while at home, students

will have access to an online learning platform, such as Moodle or Blackboard, where tutor comments and resources can be accessed remotely. There may even be a course dedicated Facebook page, or similar where more informal information is accessed, or exchanged. Indeed, both the Music and Media departments where this research was conducted now have individual Facebook pages. On these, tutors and students can communicate by adding comments or uploading images and videos that are subject relevant but not necessarily curriculum bounded. Consequently, as professional identity can be rethought as no longer bounded to time and place, the same may occur with learner identity through the increased use of social and leisure technologies. As Turkle (2008: 125 original emphasis) comments, within a context of digital technologies, 'we never "graduate" from working on identity; we simply work on it with the materials we have at hand at a particular stage of life'.

What this section has been working towards is the notion that an individual can be constituted of many facets. This may be dependent on where they are, whom they are with, their own expectations or the demands placed on them and what the resources at hand are used for. Not least what affects their disposition and what influence this then has on their identity. Turkle (2008: 128) succinctly comments: 'Technology increases one's options'. Therefore, if individuals are considered as active agents in 'determining the dynamics of social life and in shaping individual activities' (Sfard and Prusak 2005: 15), online networks as one part of identity management have the capability to further extend this. What follows will investigate this further. In particular there will be focus on a specific case of how one person's presence and different aspects of their identity can simultaneously and successfully function between real and virtual world environments (Martin et al., 2013). In doing this it hones the focus further to working towards some understanding of how students may engage with both the real world environment of the classroom and their on-task and off-task use of networked computers.

2.1.6.EXTENDING PRESENCE: FUNCTIONING IN AND BETWEEN THE REAL AND VIRTUAL

Nusselder (2009: 8) suggests identity management is, 'remediated by the extensions of ourselves in new media'. Networked technologies have facilitated this situation and the result has been significant changes for social, leisure and commercial activities. Common examples are multi-national business videoconference events; family or friends interacting at the same time regardless of where they are across the globe, and not least social and leisure activities, such as online

multiplier games - the list could go on. In some of these instances identity in both real and virtual space may well appear consistent; in others the user of the technology may be fulfilling one role in the real world and another distinctly different in the virtual world. Yet these are facets of identity, or identification with place and purpose that comprise one person. What the integration of new technologies and media into day-to-day lives affords is the facilitation of a more fluid movement within what comprises the identity of an individual. As indicated this may also be context specific.

If, as commented, presence can be achieved simultaneously, in both the real world and the digital, through the immediacy of networked technologies this further extends the faceted nature of identity. Zahorik and Jenison (1998: 78 original emphasis) suggest presence is individually perceived as a, 'subjective feeling of existence within a given environment…of "being there"'. Riva, Waterworth and Waterworth (ibid.) use Damasio's (2000) thesis that our self - that is our sense of self and our presence - emerges from a deep need to establish how that self is mapped in its relationship to others. Others exclusively focusing on presence in a virtual world context and Second Life in particular are interested in the construct of presence as a measure for how real a mediated environment is to the user (Yee et al. 2007). Warburton (2009) references the three layers of presence in this context as, physical, communication and status.

In particular, the more our bio-cultural mechanisms can differentiate the world around us, the more we can experience a sense of presence (Riva, Waterworth and Waterworth 2004: 405). As Zahorik and Jenison (1998: 88) suggest, it is how we interact with an environment 'that is considered primary to our way of existing in the world'. Riva, Waterworth and Waterworth (2004) add that presence can be invoked through both the real world and also media, and, pertinent to this study, it is the mediated presence that can enter into competition with real world presence. The level of this can be dependent on the degree of immersion, which may also involve rapid shifts of presence between the two (ibid: 413). Spagnolli and Gamberini (2002) imply that these shifts are anything but clear boundary movements between the real and virtual, but more a wider distribution of presence. Spagnolli, Varotto and Mantovani (2003) extend this further suggesting that presence, rather than just being measured as a state of mind, can be considered as an action-based process within an environment where local and cultural resources are utilised by the actors involved. In an everyday context Riva, Waterworth and Waterworth (2004: 415 original emphasis) add that:

> Normal, everyday levels of presence arise from a split of attentional resources between layers of differing content, with some attention being directed to the current external situation. Minimal presence results from a lack of integration of the three layers, such that

attention is mostly directed towards contents of extended consciousness that are unrelated to the present external environment – a psychological state of *absence*.

The focus of these researchers is investigating digital participation and the levels of presence that occur in virtual and mediated spaces, while the actor is situated in a real world environment. If applied into a more day-to-day setting, this could be imagined as someone walking through a busy or noisy part of a city, or taking a train on their daily commute and engaging with some form of digital media. As Greenfield (2008) comments (see section 2.3.2) this interaction with whatever is being engaged with through the technology decreases the level of engagement the individual has with their immediate world. Therefore, their attention and consequently presence will be distributed to a degree that is partially dependent on the media and their level of interest in it.

The same could take place in a less digital context if two, or more people talk together while travelling; or in other social occasions when the immediate focus is not fully directed to the surrounding environment, or context. Therefore how presence is distributed can be dependent on the immediate conditions of the particular situation. For example, if a student is daydreaming and gazing out of a classroom window or texting on their mobile phone, their attention and therefore level of their presence moves away from classroom activities until something draws them back, such as a teacher's rebuke. During a train commute, this refocus could be the arrival at the destination station. Although the interaction with the technology may still continue, such as listening to music or continuing a mobile phone call but perhaps at a lesser level, depending on the dynamics and familiarity of the immediate situation and the level of attention and presence it requires. Likewise, a media student engaged in completing a particularly complex range of actions with creative software may not be aware of what is occurring elsewhere in the classrooms, as their attention and therefore level of presence is directed more to the computer screen.

In the context of either virtual, or real environments, Zahorik and Jenison (1998) argue that presence is relative to the level of successfully supported actions in an environment. If the actor dynamics involve a successful ecological coupling between perception and action, then presence can be inferred (ibid.). In this way the third layer of *extended presence* (Riva, Waterworth and Waterworth 2004), takes place in the evolution of the self where meaning moves beyond comprehension to significance. This can be taken as how much something is valued, or worth through 'the perception of affective qualities' (ibid: 412). The extended self is explained as the *you*, that is 'modified by the acts of apprehending something' (ibid: 408). Educationally, this heightened

presence would be apparent in those conditions that provoke a period of particularly deep engagement with an activity, or deep learning.

What now follows is especially of interest in conceptualising students' use of networked technologies, and therefore the divided presence between real world and digital activities within a classroom.

With a focus on the simultaneous interactions of one individual functioning in both the real world and virtual world, Martin et al. (2013) analyse the actions of an expert gamer to explore the concept of layers of presence. They posit how the player's presence is distributed, not only within the dynamic interactions of a multiplayer online role-playing game but also with what is occurring in their immediate domestic environment. The player reads the online game through multiple computer monitors that display the graphical actions of the game and the on-screen text-based conversations they have with other players. In addition he has to manage the behaviour of his online character. Together with these multiple demands on his attention in the virtual world, there is also his need to be aware of and respond to differing demands from his immediate domestic environment. From their observations of the player, Martin et al. (ibid.) make a clear connection with how the player distributed both their presence and attention between these two very different environments. Notably, this illustrates the high level of skills and experience the player needed, especially multimodal information literacies and management, to accomplish how his time and attention were distributed between disparate settings and demands. As the player absorbed information from both the computer screens and the real world, the authors draw into focus how, in order to successfully function in just the gaming context alone, the player needed to leverage multiple presences. The skills used are presented as 'high-end virtual literacies' (ibid: 227), and the point is made that what the player is actually doing is using multiple literacies to *read* both of the environments that he had presence in. These were multimodal contexts that involved text conversations, graphics, actions of other players; added to this were the demands of his online character and the attention required in his real domestic environment from a girlfriend and three apparently demanding domestic cats.

The player's actions could be perceived of as a multitasking exercise, and a division of attention. But, Martin et al. (2013) consider that these terms are too narrow and do not convey the nuances involved. That is, not just the range of literacies used but also how the player's attention was

distributed across multiple layers, and therefore how that person's presence was distributed, or layered (ibid: 239).

The notion of the player's attention being distributed is aligned with Hutchins' (1995a) theorisation of distributed cognition. For this mode of cognition to take place, it is noted that multiple activities need to be engaged with, both successfully and simultaneously. Martin et al. (2013: 234 emphasis added) make the point that for this to be successful the individual needs a capacity to learn from mistakes, and 'being able to manage multiple inputs from multiple *presences* at once'. Hutchins (1995b) suggests that cognition functions beyond the individual agent and often incorporates technological devices. Using the context of an aircraft cockpit Hutchins (ibid.) theorises a distributed, socio-technical system where memory is not only used as a resource between the pilots but also emerges from the mechanics of the cockpit controls and instruments. In this sense information processing is the sum of the interaction that human agents have with technical systems, which then produces systems, which 'may have cognitive properties in their own right that cannot be reduced to the cognitive properties of individual persons' (ibid: 266).   Hutchins, within this aviation context, suggests that cognition needs to be mapped using the cockpit as a whole unit of analysis, which is 'how information is represented and how representations are transformed and propagated through the system' (ibid: 287). The belief is that those technological devices that are introduced into the environment of the cockpit affect the flow of information within it and its possible trajectories, or how it is transformed. In a similar vein Martin et al. (2013) suggest the value of studying how a game player manages their distributed attention to maximise his group's performance across different spaces and times has a range of implications for those situations where shared problems can be encountered. This can immediately be seen as pertinent to education and group learning conditions, especially when technologies are used, and not least a range of other contexts where individuals interact for shared goals.

Although much of the contemporary literature on layers of presence focuses on virtual worlds and gaming contexts, Riva, Waterworth and Waterworth (2004: 418) do relate it to other media, which may only demand a limited number of layers. An example could be current classroom learning and the range of media that students may use. For example, a book that is a compelling read involves extended consciousness, whereas a video can modify core and extended presence, but to draw in proto presence needs a more immersive context such as virtual reality. Significantly, what is drawn attention to is that, 'if what is happening is not of interest or importance to the individual, the layers of presence will not be integrated and presence will be relatively weak' (ibid.).

Attaining presence therefore becomes a subjective experience of the sensation, or feeling of being involved in an environment. This may be dependent on those variables that have the capacity to affect presence and therefore the level of immersion and identification with an environment. Coelho et al. (2006: 30) citing Zahorik and Jenison (1998) comment that the feeling of presence can be the result of the 'efficacy of the match between perception and action'. Although this is discussed in a virtual reality context, where the technology itself can be a highly influential factor in the user's experience, it is emphasised by Coelho et al. (2006: 32) that there are two categories in which a range of variables can be arranged, which are the characteristics of (i) the user and (ii) the media. Within this premise the individual user needs to play an active part and be both interested and aware of the meaning of the material presented. Significantly, the experience is further enhanced by the presence of others and the number of interactions that take place with them, which can then serve to verify the existence of the environment. In addition, presence can also be heightened when the participant has some level of control within the environment, rather than being a passive observer.

Many of these factors discussed above for attaining a high degree of presence can be aligned to those that would be evident in many successful classroom-learning contexts. For example, students having access to appropriate learning media or other resources, whether they are analogue or digital. Also, students empowered to take ownership of their learning through the conditions within their learning environment, which stimulates, or strengthens an interest in the subject. Additionally, and not least, peers to interact with for the value of social learning and support. All of these, and others, if apparent could support the learner towards attaining a high level of presence within the learning environment and therefore the opportunity for deep learning.

Martin et al. (2013) place a particular emphasis on *layers* of presence and dictionary definitions of the noun make references to 'sheet' and typically 'one of several' with synonyms such as veneer and blanket. All of these suggest a lamination, or overlaying of materials, which may or may not be bonded and therefore with the potential to be added to, or removed; or even travelled through, depending on permeability of each layer. Particularly, it suggests some form of stratified structure with divisions that may, or may not be of differing dimensions, materials or content composition. Hence, some of these may add integrity to a structure while others could be weaker and more vulnerable in nature.

With the above in mind, it is worth examining how Martin et al. (ibid: 239) describe the expert game player's actions in the following section:

> …fluid and rapid shifts of presence…ability to distribute attention to different layers….simultaneously engage with the physical space and within the game….ability to interact with his surrounding virtual and physical spaces, as well as informational resources….Jaea's layers of presence vary in proportion with the activity he is currently engaged in…

These actions were viewed positively, as they were appropriate behaviour for the conditions where they took place. However, in another situation they may not be if, for example, an individual is expected by others to only be focused on one particular task. Significantly, what needs to be reflected on is that these comments describe the actions of an *expert* player and therefore someone who has spent time mastering the virtual game they play. Yet they still have the ability to manage and satisfy any demands from their immediate real world location while they play the online game. In this particular case there are two seemingly disparate demands on the player, which pivot around the real world of domesticity and the virtual gaming world. However, these two important aspects of their life appear to comfortably coexist during the duration of the game, where they are the common denominator. The player is not appearing to disadvantage either context, even though the other players that they are interacting with virtually may be unaware of his domestic situation.

In the context of a classroom, this could be positively likened to a proficient student who is aware of the capacity of all the resources at hand and selectively uses them. And, when appropriate they are able to successfully interact with their peers and tutors, both online and within the classroom, to enhance both their own learning experience and that of others, and if need be recognise when they need a revitalising break.

Understanding how there can be this level of movement between layers of presence is recognising how differentiated actions can occur, regardless of any differences in context. This may render a smooth but variable presence and identity, or something that fluctuates and is more of a switching process and therefore potentially erratic and unpredictable. As Martin et al. (2013) conclude, if there was a sudden shift from the virtual self to the physical self due to an interruption, this could have substantial repercussions to the integrity of the virtual activities. The immediate consequence would be to disrupt the cohesion of the player's team. Although they could have the potential to recover, but only if they had expert level strategies and experience to do this. In the context of real world group situations, this could be an interruption to a group activity by one member that was out

of context to their normal behaviour. If those involved were not sufficiently skilled, or sympathetic enough to cope with, or ignore the situation, then the stability of their immediate or future integrity as a social group could be marred, not least the repercussions to that individual.

As the focus of the research by Martin et al. prioritised one specific case to discuss layers and presence, in the context of this thesis it is worth extending this beyond those situations where rotating between different activities is acceptable behaviour. To do that Deleuze and Guattari (1987: 40) will be drawn on and how they consider layers within a spatial and philosophical framing and where 'layers…come at least in pairs…[and] [t]he assemblage is between two layers'. For the authors an assemblage is something that in its multiplicity changes in nature as it expands its connections (ibid: 8). In DeleuzoGuattarian terms these actions for change can be either (a) rhizomatic, and hence affective, transformative and non-hierarchical, or (b) arborescent, which is hierarchical and linear like in nature and more controlled in creativity, structure and development.

The player that Martin et al. (2013) analyse through his responses to the dynamic challenges of both a virtual game and the real world interactions with their partner and domestic cats, appears to exemplify rhizomatic behaviour. The person as an assemblage that is both game player and domestic partner appears to move quite seamlessly between the real and virtual worlds and clearly different roles. Each of these expects responses to a range of varied and unrehearsed challenges as they occur in real time. These actions illustrate the fluidity and the capacity for modification of the rhizome (Deleuze and Guattari 1987: 21). Although some of these demands, through the player's level of experience of both environments, may have become more predictable and therefore required less time, thought or creativity to respond to.

As Colman (2005: 231), with a Deleuzian focus, puts it: the 'rhizome describes the connections that occur between the most disparate and the most similar of objects, places and people…the rhizome conceives how every thing and every body – all aspects of concrete, abstract and virtual entities and activities – can be seen as multiple in their interrelational movements with other things and bodies'. The dual landscape of the expert player certainly appears to be situated within a rhizomatic framing, and this mixed environment could also translate into an educational context, especially those learning conditions where there is access to a diverse range of analogue and digital resources. This could also include the fluidity of peer interaction between the diversity of students that can occur within many cohorts, including any direct or remote contact with tutors. Notably though, as the assemblage desires, or needs to change so correspondently will the layers, 'through the differentiation of several layers of difference; differences that shape and associate ideas; differences

that express feelings and forces' (Goodchild 1996:12). Therefore an assemblage could change if it seeks to move away from something that was uncomfortable, rather than just switching between relatively benign environments, or to something more appealing or productive. In this context layers could be contradictory or irrational, or even literally removed, as seen earlier in disposition and those changes in self-concept that prompted the erasure of tattoos **(**Shelton and Peters, 2006). In this sense one aspect of their identity and their disposition changed. A visible feature of identity was edited away, as the skin became a palimpsest where identity had been written and then removed to become something less explicit.

Deleuze and Guattari (1987: 88) summing up the concept of an assemblage, its relationship to layers and their notion of it having two axes comprising of the vertical and horizontal, state that on the first axis, 'an assemblage comprises of two segments, one of content, the other of expression' and on the other, 'the assemblage has both *territorial sides*, or reterritorialized sides, which stabilize it, and *cutting edges of deterritorialization*, which carry it away' (ibid: original emphasis). Therefore, as with the game player who interacts between two disparate environments where they themself are the common denominator, there is the potential for stability, variability and individual creativity within the assemblage, which is the player. Although, this could also relate to the assemblage that is the virtual world of the game, or that of the immediate domestic world.

From what has been discussed to this point, presence itself and the layers of presence that may be constituted within the assemblage of an individual, becomes a means of understanding how some individuals can function between differing contexts when one of these is facilitated through networked computers. Extending this is therefore how agents can divide themselves, or use the mobility that *layers* afford as they encounter similar or disparate contexts and environments; not least the manner in which this takes place and the events that initiate a need, or desire for change. In a classroom this could be the movement of attention between the formalities of following a curriculum, versus any informal learning activities, or off-task breaks away from learning activities.

Through the lens of Deleuze and Guattari, the formal activities of education would, by their nature, have the propensity to be arborial like and formally mapped and planned out using curriculum artefacts such as schemes of work, assignments and individual lesson plans. This would include students' work being in alignment with the tutor's aims and objectives for that session. Therefore any actions would be constrained, unless there was the opportunity within the plan for more informal and creative movement into perhaps a less constrained and rhizomatic space. This could,

using just one hypothetical example, be a student taking more control over their learning or searching beyond recommended texts and therefore drawing in alternative approaches and actions. These latter points are not dissimilar to those of the game player researched by Martin et al. (2013), who managed to function in seemingly disparate contexts through their experience and expert knowledge of both the real world and virtual conditions they engaged with. Although, the virtual game being played and the domestic environment of the player may well have had embedded, or negotiated formality within them, such as explicit or tacit rules, including some level of protocol. In an educational setting this could be representative of a proficient learner, working within the curriculum yet thinking in an open and creative way within a nurturing environment. As Deleuze and Guattari (1987: 25) add: 'The tree imposes the verb "to be," but the fabric of the rhizome is the conjunction, "and. . . and. . .and" This conjunction carries enough force to shake and uproot the verb "to be".

What particularly emerges from this section is how the development of appropriate skills within supportive conditions can facilitate functioning at a high level between multiple, and even disparate tasks. In a classroom, this may even translate into a self-policed relief break away from a period of intense studies, or a rotation between different assignments. If those skills are not available or applied, then there may emerge a conflict between tasks, due to an imbalance of attention being given to one. This notion is relative in its premise to those distractions that may occur through off-task use of digital technologies (see Section 2.3.2), and therefore how presence and attention can drift away from curriculum activities when disposition changes. Although the converse could apply if a deep sense of learning was engendered through the internal dynamic of the sessions, or other motivators that affected disposition and consequently students' level of presence being heightened.

Therefore, drawing on Riva, Waterworth and Waterworth (2004), whatever contributes to a purposeful learning disposition and an integration of layers of presence, in turn will then strengthen heightened presence in a learning context. This could surface when successful teaching and learning combine, to achieve students' interest and value in their education, regardless of whether the mode is formal, non-formal or informal learning (Colley, Hodkinson and Malcolm, 2002). The suggestion is that these modes of learning are inter-related (Malcolm, Hodkinson and Colley, 2003) and need to be considered with other factors, such as the official, or unofficial hidden curriculum (Meighan, 1997; Edwards and Smith, 2001; Beck, 2009), embedded literacies and conversely, 'hidden literacy practices' (Satchwell and Ivanič, 2007: 315). As highlighted in Section 2.1.2, there is also the consideration of the affectivity of a tutor's commitment, or emotional labour

(Hochschild, 2003; James and Diment, 2003; Salisbury et al, 2006; Robson and Bailey, 2009). Not least, and as discussed previously, there are the social and reciprocal modes of learning interaction between peers (Ashwin, 2003; Topping, 2005), including the mutually beneficial scaffolding of knowledge and learning (Vygotsky, 1978). These, in particular have potential work to counter any isolation, incurred from periods when learning is intended to involve prolonged independent evidencing.

Relative to the above sections, and how the use of particular spaces can signify how it is valued, Willis (1990) focusing on the symbolic creativity of young people identifies their investment in their practices and the spaces they occupy. For Willis (ibid: 1), 'young people's lives are…full of expressions, signs and symbols through which individuals and groups seek creatively to establish their presence and meaning'. As digital technology and media are increasingly embedded within the lives of young people, and many adults, then working between multiple activities at once whether these are all on the computer screen (see Appendix 1), or worked between several devices may just be how life is now expected to be experienced. Therefore, this level of expectation may be one of transference, with the culturally expectation of being replicated in discrete contexts, such as classrooms. Consequently drawing Willis's comments more into focus of today's digital age and this study, a student could in part signify their level of studentship, or *being* a student through how their presence was controlled and distributed within academic and digital practices.

2.1.7 IDENTITY AND STUDENTSHIP

With the diversity of students entering FE (see Section 2.1.3), concomitantly there will be the likelihood of differing approaches to studentship. The concept of studentship within this study relates to the level that a student actively engages with learning and the curriculum, and therefore this draws in their level of disposition to the learning conditions. As Bloomer (1997: 148) indicates: 'it is important for concepts of studentship, disposition and identity to be relocated within the various contexts of their evolution and unfoldment'. Bloomer (ibid: 179) adds that changes in 'perceptions, 'horizons' and dispositions' can have a profound impact on studentship, which may then have short-term or lasting implications.

For some their studentship may be fixed within certain boundaries due to unmoving dispositions to certain conditions and therefore their learning may become unresponsive to accommodating new appreciations of knowledge and learning (ibid.). In some instances this could be viewed as a

student being recalcitrant, but there may be other issues not immediately evident. For example, a dyslexic student could be resistant to answering direct questions from a tutor in a group context, or giving an individual presentation to their tutor and cohort due to poor memory and information recall affecting their confidence. This could especially be a significant barrier if they have a history of tutors unsympathetic to their needs. Bloomer's (ibid: 83) research identifies how there may occur some divergence in studentship. Therefore where some may adopt a strategic compliance to teaching, others may demonstrate retreatism, innovation and some may even rebel against it. This indicates a degree of agency towards curriculum, pedagogy, tutor behaviour to students, or conflict in views of knowledge (ibid: 96). Consequently how 'students 'acted upon' their courses' (Bloomer, 1996: 142), can be perceived as their studentship.

The differing levels of studentship, even within one cohort, could be considered as stages of *being*, or *becoming* a student, or even resisting studentship. With the latter, it is worth considering the value of Agamben's (1993) notion of a 'whatever being' who is someone with, 'neither apathy nor promiscuity nor resignation' (ibid: 9).

A whatever being, 'is able to not-be' (ibid: 35). Situating this within a student cohort it could be considered as a belonging not bounded by being a student, but more being part of the social community within the cohort, even if there is not an active learning participation. A *whatever* student, potentially, 'asserts no preferences; it neither affirms nor rejects' (Dean, 2010: 68). This can be reimagined as an, 'in-difference that resists identification while not excluding any property of the thing' (Düttmann, 2008: 34); as such it, 'does not result from a lack of belonging' (ibid: 35). Therefore, a *whatever* student can be positioned within a cohort, although they may not fully participate with the coursework. That is not to say that they lack capability, or potential, unless they are 'properly whatever' (Agamben, 1993: 35). A whatever individual lacks the identity to fully integrate into the social context they are in and the expected norms (Dean, 2010). Within education there would be no active participation and therefore in mainstream education this would be an untenable position. Therefore someone who is not properly whatever can be construed as being in a liminal state, betwixt and between, but with the potential to be awoken by a stimulus, or a need.

By discussing studentship under notions of *being* a student, there needs to be some reflection on how levels of power and identity can be shapers in students' levels of engagement with their work. To all but the most committed of students – but even they will have a history that forms this learning disposition - social and cultural factors can be posited as powerful influencers that affect

engagement with coursework and *being*, or *becoming* a student, and concomitantly those that deter or distract this from occurring.

Power within education was discussed in Section 2.1.2, relative to FE tutors' working conditions. For FE students, power will be reconsidered as more whatever it is that influences, or discourages their studentship. The result is their response to education, or some aspect of it and therefore that part of *being* a student. Giddens stresses the relevance of frames of meaning: 'we must emphasize the creation of frames of meaning occurs *as the mediation of practical activities*' (Giddens, 1993: 120 original emphasis). In a classroom context, frames of meaning for a student could be what education represents for them, or the culture within a cohort, or an individual tutor's practices, or particularly technologies and their symbolism within cultural practices. These may be rationalised and used to adjust their practices around.

For Foucault (1970; 1977), identity and therefore students identification with *being* a student can be shaped through discourse and discursive practices and may produce a subject who is either docile (Dreyfus and Rabinow, 1982), or forms a 'resistance identity' (Castells, 2010: 8). Jackson (2013: 840), with a focus on Foucauldian methodology and the spatiality of power suggests that power, 'rather than *containing* things, it *makes* things'. Again, power may be an inappropriate term to represent what it is that influences students and could be adjusted, in this instance, to whatever it is that affects identity and induces a particular aspect of it within certain conditions behaviour.

For example, a student may use a college computer to communicate with friends while they are in a classroom; they then become engrossed in a social discourse for those moments. This may be strategic, if for some reason they are not engaged with their studies and they do this because they are bored, or it may be that they just need a short break. In this sense it could be, as touched on above, that this is part of their cultural expectations when using any computer, or digital device. In these periods any notion of the formality of being in a specific place that others, expect specific behaviour, vanishes in the moment. This will be discussed further in Section 2.3, but at this point this aims to illustrate the fluid and faceted nature of identity. In this movement, or shift in presence, from one aspect of identity to another, in one place, there is a need to consider the strength of any particular anchor for identity that shapes contextual meaning. This may be what that place is identified as, and similarly for the resources available and thus what students perceive they can achieve within that context. This in turn can revert back to disposition and what can affect disposition within that environment during a particular period of time. As Rutherford (2007: 155)

comments:

> We are always in the midst of language and we are always in the process of making identity. We can speak of identity, but its passage through time, its multiplication and difference, disperses its narrative coherence. Identity begins to lose its meaning and in losing meaning it searches for new meaning. We struggle to occupy an identity in order to anchor ourselves in the world. It is the phonetics of our belonging. It demands our reflexivity…

The formation of identity, and therefore the potential for ranging levels of studentship, or *being* a student, emerge as being complex, shifting and internalised. Yet with any human trait they are open to external stimulii, and are bounded in values of being, becoming, or something altogether *other*. As Rutherford (ibid.) comments, identity is no longer static and therefore susceptible to change. As digital technologies are so ubiquitous and readily accessible, and therefore a constant in many lives, then perhaps their polyvalent nature is now becoming one such anchor for identity. If this is to be considered, then discrete places and the potential range of meaningful real and digital spaces that exist within them have representational value. These may then be identified with by whatever exerts the most value, or need at one moment of time.

Identity and culture, as formed through what changes or sustains them can consequently be viewed as heterogeneous multiplicities that are context sensitive and therefore capable of rupture and subsequent acts of repair and re-joining. A demotivated, *whatever*, student can be imagined as entering a classroom and through some distraction, or event they become estranged from that facet of their identity they had as a student. It can also be imagined that, in such an instance, if there was an active and supportive peer learning culture conjoined with a pedagogy that facilitated learning, a vulnerable state could potentially be repaired.

The affective value of communities and cultures of learning has been lightly approached in the previous sections. Community learning has been distanced from formal learning conditions, but the following section will examine this within the notion of a student cohort as a community.

2.1.8 LEARNING COMMUNITIES AND CULTURES

Establishing a culture of learning within a classroom will clearly need to be mindful of the potential diversity within a cohort. In the context of this research there is the additional factor of the duration of the sessions with students continually using computers as the main resource. Consequently spatial movement is limited and interacting with other students, aside from those sat either side,

may need nurturing to ensure there is recognition amongst students that peer interaction for learning is a powerful learning strategy.

As classrooms are formal places of learning they can be imagined as a temporal learning community, albeit one with disparate elements. For it to function effectively as this it ideally needs the participation of all members (Watkins, 2005). The goal is fostering a culture of learning where students share their individual efforts. This promotes knowledge and understanding of the subject being studied, as knowledge is elaborated through scaffolding. The term scaffold has become synonymous with Vygotsky's concept of ZPD that is explained as follows:

> It is the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky, 1978: 86)

Whereas Vygotsky offered the option of adult, or peer interaction the definition of scaffolding was initially more adult dependent and directed to young children.

> …the adult "controlling" those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate on and complete only those elements that are within his range of competence. The task thus proceeds to a successful conclusion (Wood, Bruner and Ross, 1976: 90 original emphasis).

There are models of social learning specific to the classroom, such as cooperative learning where there is structured, positive interdependence (Slavin, 1990), with individual accountability as students work towards shared learning goals (Johnson, Johnson and Smith, 1998). However, the facilitation, or guidance is through the educator that is present. Peer learning, is 'defined as the acquisition of knowledge and skill through active helping and supporting among status equals or matched companions' (Topping, 2005: 631). Where capabilities are similar, both peers find a cognitive challenge in the interaction (ibid.), and there is a stress for good communications skills to afford the crystallisation of thought into language. Many of these models are applied to the needs of young children. Tinto (2003) adds that university students engage in solo performances as isolated learners, and that establishing an effective learning community requires a course that promotes it through content and pedagogy. There is the caveat that 'some students do not like learning with others' (ibid: 6). Much discussion on peer learning appears to be formal and instructed, rather than something that occurs on a needs basis. With this in mind, Tang's (1993) reference to 'spontaneous collaborative learning', albeit from a small scale study, identified that

student-initiated cooperative learning, and therefore student centred in nature and content, 'when initiated and self-structured by students' own efforts, tends to lead to a deep approach to studying and to better learning outcomes, especially the structural quality of assignments' (Tang, 1993: 127). The study involved tertiary students in China where there is national culture of collective effort, but the examples were not unlike the self-initiated study groups that can be observed in any university library. Notably, Biggs (1987) when comparing students who studied on their own and collaboratively, identified that the majority of self-studying students adopted a surface approach to learning, thus reinforcing the value of students collaborating with peers.

An institution can aim to initiate a positive learning culture through the range of artefacts it deploys within its buildings, such as posters illustrating student work and notices of academic achievement and therefore each site can project an internal culture of learning and success. Notionally, the college can be considered as one broad 'community of practice', a concept shaped around situated learning in a colocated working environment (Lave and Wenger, 1991; Wenger, 1998). However, this type of community can become unstable if there are any variables within its formation, especially those that continually restructure a college environment (Hodkinson, Biesta and James, 2004: 9). Communities of practice gain their identity through a shared domain of interest (Wenger, 2006) and this potentially fits within a classroom context, but it would need the whole cohort to participate, even if some were on the periphery. However, with each tutor that taught the students it would change its dynamic and membership. So as a concept it is useful but at risk of being potentially unwieldy. James and Biesta (2007: 138) suggest that as a framework 'the periphery-to-centre movement at the core of situated learning' is conceptually awkward with a group that can be unstable and that instability may come through any change in tutors, or within the students themselves and their behaviour. James and Biesta (ibid: 143) adopt the use of the term learning cultures, as a means of explaining that it is not 'the environments in which people learn but the social practices through which they learn, which means they exist through the actions, dispositions and interpretations of the participants'. But, add that the diversity of FE could be reflected through different types of learning cultures occurring within one institution. For example: 'we could classify cultures according to the types of students in them' (ibid: 60), such as age, gender, educational experience and so on. When focusing on one FE cohort this could become a difficult means of classification due to the potential diversity of students that FE attracts.

When considering the learning context of a cohort of students sat down for hours at a time, each working at their computer, there is the ironic isolation that can occur, despite the proximity of

others and the social factor of one cohort in one room. When the academic tasks seem arduous and a break is needed it is reasonable to anticipate that students drift onto alternate uses for the computer, other than coursework. I have personally experienced this when working at home for long periods and a short focus on something else that is unrelated can help to re-engage with the task in hand. However, if this occurs in a classroom situation it could expose a weakness in this type of learning environment and potentially the curricula. Tang's (1993) notion of the spontaneous interaction that can occur amongst students does appear to fit as a potential strategy to nurture amongst students who mostly work independently, but in proximity to others. However, this example was set within a nation with a tradition of 'non-individual collectivistic orientation' (ibid: 119). A tutor initiated strategy for cooperative learning could be too formal and time controlled in nature for those more impromptu needs that might emerge due to the different rates of progression that can occur when students work independently on one very prolonged task. Taking into account the potential diversity of students in one cohort, a solution could be imagined as a blending of tutor led initiatives to establish a micro learning culture that would become established within a cohort and therefore transferable to other sessions, regardless of tutor change. This could afford a more spur-of-the-moment collaborative and supportive practice act as an aid in developing the level of learning cohesion within a cohort.

2.1.9 CONCLUSION

What has become apparent throughout this section are the challenges of working and learning in FE, and the paradoxical isolation that can occur. Consequently, what this section has illustrated is the demanding working conditions that teaching staff in FE can encounter and the potential opportunities available when working in computer-resourced classrooms. Learning is now a commodity, ultimately measured for success by statistics, which risks alienating any notions of quality of learning and the genuine distance travelled, even if a student may not achieve. How this is enacted in the discrete conditions of a classroom is another matter and the educator's ethic of care for themselves and students may be a factor towards what occurs within the classroom as professional and learning demands are worked out.

2.2 PART 2: LITERACIES AND NEW TECHNOLOGIES

This thesis started out with a long-term interest in how the literacy practices that students use in a classroom are being affected by their extensive use of computers. These are the literacies that encompass the range of practices that start from the sourcing of information via the Internet and

then how that information is processed and used during the different stages of progression which work towards the completion of an assignment.

Prior to the introduction of networked computers in classroom, students would have been given hard copy hand outs by a tutor and, or sourced books through the institution's library. They would have then acquired whatever information was needed by reading and making notes, developing a draft and through the processes of proofreading and editing produced a final piece of evidencing for submission. These practices do still exist, although the final piece of evidencing is now predominantly submitted in a digital Microsoft Word format. Using hard copy resources, students' literacies can be evidenced as progressive events and practices that are clearly observable: students have books on the table, they can be seen reading them, making notes and then writing and correcting drafts as part of the journey to their final draft. Other students and the tutors can view these artefacts of learning and they can become the sources of interaction where questions and ideas become shared. That is, it is the visibility of these processes to others that opens up a range of opportunities for critical dialogue and deeper learning between tutor and student, and importantly between peers. Digital practices, however, by their nature can be more discrete. Students can become more isolated from their peers, as the computer monitor becomes the primary focal point. There are no books to immediately see, as any that are used will probably be in digitalised format on a website, or be viewed as pdf files. Other online resources can be just as temporary, or elusive on the screen as students switch between tabs or windows and they may have some windows minimised or have files hidden behind others in a stack. Digital practices with text can be just as elusive to the eye: text can be entered and deleted, copied and pasted and dragged and dropped in an instant and the number of quickly applied actions can become lost in these moments. The text based sources of information can be highlighted and commented on, even tagged using a range of digital resources and any pdf resources can be managed and hidden in digital folders, or through a range of software and online resources. Amongst these are recent examples, such as Mendeley, a desktop software and online resource, which allows reading, annotating and tagging pdfs and other organising and sharing functions, or Diigo, a web browser extension for bookmarking, highlighting and tagging information on webpages. These, to name just a few, can be accessed discretely from any networked computer rather than noticeably carrying around an armful, or bag full of books and notes. A digital alternative to this analogue practice is the memory stick that many students have on key fobs, or in a bag or pocket.

A particularly significant change over hard copy practices is the already mentioned function of computers to copy and paste information. Any amount from one letter, or digit can be copied directly from the source to another document, this can then be added to or quickly manipulated as much as the user desires. Right from the first stage of copying the ownership of the text then becomes obscure, unless the user makes it apparent. The potential for questionable ownership that has emerged from these practices has been responded to in recent years with the appearance of academic plagiarism software, such as the increasingly ubiquitous Turnitin. At the time of the fieldwork for this research it was not used within the college and even at the time of writing it is predominantly only used for higher education students' coursework.

This introduction has set the context for the sections that follow, which are aligned with the subsidiary research question of: How do students use these technologies for research purposes and then the processing of the information that is sourced? As literacy skills appear as a perennial concern in both education and the workforce this, and some of the remedial strategies and the models of literacies that have emerged in recent years are examined. There is a substantial body of work on literacy studies, therefore the selection is refined to the interests of this research. This section aims to situate this research as timely in its investigation to the increasingly digitalised conditions of traditional classrooms and the minutiae of literacy practices that can occur through students' use of the Internet, computer software and other digital resources. In this environment previous conventions with text can become more fluid and subject to change and expansion through the affordance of digital technologies and practices, thus further validating this enquiry. What immediately follows presents how current interests in literacy skills stemmed from a national concern that began almost 50 years ago.

2.2.1 A CONTINUED CALL FOR LITERACY SKILLS

There has been a recurring emphasis on the need for educational and functional literacy skills amongst young people and adults. This can be adults needing the appropriate skillset of reading and writing for gaining, or sustaining employment and social functionality (NIACE, 2010), or students requiring these skills to progress and succeed in education. A key moment, and certainly an indicator of things to come occurred in 1976 when James Callaghan, then Prime Minister of the United Kingdom, emphasised in his Ruskin College speech (Callaghan, 1976) the need for education to develop basic literacy and numeracy skills, and reasoning ability in the young people who would become the future workforce. This aimed to enable the nation to remain competitive in

an increasingly global market place by producing skilled and work-flexible civic minded workers. Not only was Callaghan calling for these basic skills, as foundational for securing employment, but within the speech was a foresightful acknowledgement for the need for lifelong and self-motivated learning. This topic has been at the forefront of any discourse on skills development (see, for example, Jarvis, 2007), especially since the end of the culture of 'jobs for life'. Two decades later, in the year prior to becoming Prime Minister of the United Kingdom, Tony Blair reiterated the skills message of Callaghan (1976) by commenting that, 'the questions Callaghan posed and the issues he raised remain - remarkably - relevant today' (Blair, 1996: no page).

Three years after Blair's comments the Moser Report (Moser, 1999) announced that an estimated 7 million adults in the UK had skills difficulties with literacy and numeracy, with one in five of these being functionally illiterate. At the time these were shocking statistics and the response was the 2001 launch of the Skills for Life (SfL) initiative. This, through its high profile marketing campaign, aimed to avoid any stigmatisation amongst young people and adults that could prevent them from enrolling on the range of SfL courses that became available at all UK colleges, adult learning centres and vocational training centres. As part of this initiative, full-time college courses were expected to embed basic skills within the curriculum, or an appropriate equivalent, which was usually the vocationally contextualised Communication Key Skills. This was not a new response led action but one that had been circulating the recent history of education, as a 2006 report on key skills commented: 'The genesis for Key Skills…was concern from employers in the 1980s that their young recruits did not have the general skills needed in effective employees' (DfES, 2006). Despite the range of ways in which these courses were presented they consistently resulted in resistance from students (Abbott, 1997; Hodgson and Spours, 2002), as they were viewed as more of a remedial exercise for addressing skills deficits in lower achieving students (Hodgson and Spours, 2003), rather than strengthening existing skills (Papen, 2005). Students adopted the view that these activities were not what they had enrolled at college for; therefore there was no reason why they should need to participate. This situation was exacerbated by tutors frequently adopting an instrumental approach to key skills pedagogy, as the time constraints in delivering these programmes left little alternative options when students were so reluctant to engage with them (Hodgson and Spours, 2002).

In 2005, the 14-19 Education and Skills white paper (DfES, 2005) introduced the Functional Skills curriculum as a replacement for Key Skills, its aim was to 'give learners a focus on real-life, everyday problem solving' (NIACE, 2012). This move changed the assessment options from the

Key Skills portfolio of work and multiple-choice tests to more exam-based tests as evidencing, thus removing the need to produce written work that had needed to evidence the sourcing of information and the processes of developing it into purposeful documents. As someone who has taught Key Skills in the past this appeared to be a retrograde move in terms of literacy skills development. Casual comments from Functional Skills tutors at North Dale College indicated that they had to deliver the curriculum instrumentally and as discrete and decontextualised skills, rather than embedded skills that were relative to the student's course. From this standpoint there appears to be a reversion back to earlier autonomous approaches to literacy where it is viewed as a neutral, universal and technical skill (Street, 1984). The autonomous model viewed decontextualised text as important in its capacity 'to break free of the limits of time and place' (Brandt and Clinton, 2002: 340). In practice students can view anything not contextual to a course as superfluous, which perhaps illustrates a broad gap between theorists and some facets of education.

As these FE skills programmes are predominantly delivered in discrete sessions by specialist tutors, a danger is that course tutors then consider that any students' literacy deficits are not their concern as there are interventions in place to improve them. What all of these programmes fail to respond to, is how an increase in students' engagement with digital information can modify literacy practices and therefore indicate the need for some changes to literacy skills development. As many aspects of FE evidencing are in a formal text based format, there is arguably the need for an initial grounding in post-school academic literacy skills, which one definition offers as:

> …ways of thinking, reading, speaking, and writing dominant in the academic setting; involving ways of receiving knowledge, managing knowledge, and creating knowledge for the benefit of a field of study (Neeley, 2005: 8).

For FE students the prime need for creating work, apart from the learning that takes place, is so that their work can be assessed, and the above quote sits quite well in this context.

With the emergence in recent decades of new modes of literacies and digital information there was the inevitable response from theorists and academics offering new literacy models for the digital age. The concept of academic literacy can in itself be stretched to include everything that learning entails within the social education context of the classroom.

2.2.2 NEW TECHNOLOGIES AND LITERACY MODELS

New Literacy Studies (NLS) (Heath, 1983; Street, 1984; Gee, 1990; Barton and Hamilton, 1998) aimed to counter the autonomous, or outcomes and deficit model of literacy that treated literacies as 'a decontextualised and decontextualising technology' (Brandt and Clinton, 2002: 337). This is one model which many FE students may have negative experiences of from their time at school (Crowther, Hamilton and Tett, 2001; Miller and Satchwell, 2006; Irvine and Larson, 2007). As a social practice paradigm (Scribner and Cole, 1981) NLS is highly contextual and, 'sensitive to ideological complexities of time and place' (Brandt and Clinton, 2002: 338) by taking into account the broad range of literacies that individuals engage with in their daily lives. A concern with this model is that it situates literacy too much as a contextual skill and therefore can be lacking in the potential for agency (Brandt and Clinton, 2002). It is therefore not easily transferable from one domain to another, and carries an 'overemphasis on the "local" at the expense of the broader "social load"' (Street, 2007: viii). Despite these criticisms, the value of the introduction of NLS was that it did change how literacy was viewed and how it could have the capacity to vary across different cultural contexts. NLS was theoretically born in the age of print and its conceptual limitations of the local, or *localising*, are limiting in a digital and networked context. Although social practices do need to be considered at some levels, due to the impact that new media and digital technologies have on society and the changes in communication and engagement with new multimodal and non-linear text and images.

Education needs to, and does in many instances, respond to students' use of digital information, but the temptation can be to class anything that is literacy, but is mediated and enacted through new technologies as a new form of literacy. However, there needs to be some discretion as traditional practices of literacy can merely be replicated, even when mediated through technology. For example, reading digital text online, unless it is interactive or non-linear, does not alter how it is engaged with. Similarly, using computer software to type text on the screen, rather than writing by hand with a pen or pencil on paper are similar practices (Lankshear and Knobel, 2007), albeit with a change in the haptic experience. This challenges the broad sweep of Snyder's (2001: 118) comment that: 'the use of new technologies influences, shapes, even transforms, literacy practices'. Although, there is also a need to consider how literacies are approached even before there is any engagement with the content. For example, a student may decide to adopt an aliteracy strategy by choosing not to read texts that are for some reason unappealing to them (Miller and Satchwell, 2006). On this topic, Agee (2005: 246) comments: 'Aliteracy, in a media-rich information era, is

being discussed more frequently' and adds that, 'our world is changing so rapidly that new technologies drive the need for improvement of old skill sets such as reading' (ibid.). Agee makes a good point in indicating that there is a need for some change in skills sets but fails to clarify what aspect of new technologies needs new skills and leaves it to the imagination of the reader to consider what these skills may actually be. A hint comes from other authors. Traditional models of literacies revolved around the more linear approaches to reading and writing of texts, but with computers and the Internet there has been the emergence of new terms such as, digital literacies (Lankshear and Knobel, 2008) and cyberliteracy (Gurak, 2001). Digital literacy was first categorised as having the technical ability to work with hypertextual information, but Gilster's (1997) later approach is broader, and incorporates an ability to understand and use information gained from a range of digital sources. This model of literacy embraces the interactive possibilities of digital technologies. In some instances education, albeit predominantly at school level, draws a more participatory use of social media and technologies into the curricula (see, for example, Davies and Merchant, 2009) but there is little evidence of this occuring on any scale within FE.

Multiliteracies (Cazden et al, 1996), was a response to the digital world and called for a broader view of literacy that reflected the new and multiple modes of communication that was possible through both non-digital and the emerging digital technologies. The verification for this model was that students needed to learn the skills for work and their place in the community, which in itself was not a new proposal but it did stem from a less digitally orientated mindset. The notion was that by being critical and adaptable to the literacies encountered in both social and working lives a person's future in society and their employability can become established in an ever-changing workplace. This approach clearly resonates with the earlier calls (Callaghan, 1976; Blair, 1996) to strengthen the nation's workforce through skills development. As previously, education's remit is teaching students these skills with 'literacy pedagogy expected to play a particular important role in fulfilling this mission' (Cazden et al, 1996: 1). A critique of this approach, similar to the NLS, was that the multiliteracies paradigm was focused too much on the social practices of literacy to the detriment of the nature of learning, and agency (Street, 2007).

Derived from New Literacy Studies, but developed within a university and higher education context, Lea and Street (1998; 1999) also challenged the constraints of the deficit model of literacy. In doing this, they offered a more educationally contextualised model, entitled 'Academic Literacies' (Lea and Street, 2006). It was conceptualised as, 'three overlapping perspectives or models: (a) a study skills model, (b) an academic socialization model, and (c) an academic literacies

model (Lea and Street, 2006: 368). But surprisingly without any direct acknowledgement of students' extensive use of digital technologies, which was becoming much more prevalent.

It was inevitable that at some point there would be recognition of the impact on literacies of new media and the increased digitalisation of the social world. This change was needed, not least as the predominantly linear reading and writing on paper was competing with new and multimodal media that was often accessible in a non-linear format, such as websites. The response was the models of New Literacies (Lankshear and Knobel, 2003; Lankshear and Knobel, 2006; Coiro et al, 2008) and Digital Literacies (Lankshear and Knobel, 2008). Both situate what literacies are and what *being* literate is, within digital technologies, the Internet and social media and the novel and multimodal ways that new modes of information and technologies can be engaged with (Coiro, 2003). Of especial interest to the context of the classroom, although not explicit, Lankshear and Bigum (1999) considered that where cyberspace and physical space coexist there is a divergence into two mindsets and a fracturing of space as the world is approached through two different lenses. The implication from this is that these do not need to form distinct binaries as there is no differentiation with age, gender, level of usage of technologies and so on. As such, it can be reasonable to expect some leakage either way, which creates a far more complex situation.

With a greater academic interest in the increasing diversity of literacies due to the presence of new technologies is the relatively new concept of transliteracy. This is derived from the 2005-2010 Transliteracies Project, which focused on the different approaches to online reading, which included technological, social and cultural practices. Transliteracy (Thomas et al, 2007), contains within its parameters what were previously considered as separate literacies, for example, media literacy and digital literacy and currently has this working definition:

> Transliteracy is the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks (ibid: no page).

As a conceptual tool its focus is the need to be literate, and all that currently entails with and without new technologies (Thomas, 2010). Transliteracy's relationship between technologies and its users evolved from Stiegler's (1998) concept of a transductive relationship emerging between humans and technology. That is 'a relationship whose elements are constituted such that one cannot exist without the other-where the elements are co-constituents' (Stiegler, 2009: 2).

As transliteracy formats, both multimodality and fixed type print are no less privileged in status from each other due to the differing literacies needed to operate between each media, which exemplifies the flexibility of transliterate practice: 'a story is always still a story, whether it's told whilst walking down the street, printed in a book, or twittered across the Internet' (Thomas et al, 2007: no page). Significant to the use of digital technologies in education is the comment for the need of a, 'kind of literacy we require to be able to simultaneously attend to multiple media and modes of communication' (ibid.). Approached in this way, it is a literacy of convergence (Thomas, 2010). In many ways, it is similar to Szwed (1980: 422), who earlier, in the realm of social literacies, advocated for the consideration of, 'the varieties of reading and writing availably for choice, the context for their performance, and the manner in which they are interpreted'. Even at a functional level, the literacies now encountered through digital technologies encompass multiple modalities and cultural platforms.

The differing ways that literacies have been viewed reflects the shifting social dynamics of the modern world and the increased role that digital technologies play in communicating information to users in a more multimodal and multisemiotic way. Any previous understandings of the linear processes of reading and writing seems somewhat impoverished in respect to the increased literacy practices and events that can occur as new technologies influence, shape and even transform previous literacy parameters. Visual literacy (Kress and van Leeuwen, 2006) needs are on the rise through an increased exposure to new media and multimodal non-linear web pages as new and old media encounter each other and converge (Jenkins, 2008). With high rates of computer mediated communication (CMC), in both work and leisure, the visual has become more prominent, not least when considering the level of information that an image can offer as a more accessible medium than any singular language, when used in multicultural contexts (Snyder, 2001). In this context, literacy as an autonomous or deficit model seems impoverished, especially if viewed as a neutral and technical skill (Street, 1995; Chen, Wu and Wang, 2011).

Not all new forms of literacy are so complex and in some instances, technologies and CMC still privilege text as new literacy practices occur through digital platforms such as blogs, online social forums, or the more rapid exchanges of text messages via a mobile phone. Another burgeoning example is microblogging using social platforms such as twitter.

New technologies provide the resources for meaning making as users' practices and values encourage, 'new forms of literacy [that] do not necessarily dislodge the old' (Brandt and Clinton,

2006: 257). There is a realignment of ways of thinking and what is possible, as the affordance of literacies and technologies offer, 'a model for thinking about both human and non-human action that is neither technologically deterministic (as the autonomous model is) nor anthrocentric (as the social-practice is)' (ibid: 255-256). The argument is that, 'old and new often operate together and affect each other' (ibid: 257). The proposition has long been that the technology can determine behaviour (McLuhan, 1964), but by avoiding any limiting polar distinctions there are spaces where technology and literacies are enacted, which is currently in sway in the classroom, and seeking resolution.

What is apparent, throughout this section, is that there is a constellation of literacies, each trying to make sense of the contemporary world, not least literacy as a critical and political project (Friere and Macedo, 1987; Lankshear and McLaren, 1993). Within literacy practices are the means and the evidence of identity politics, agency and the formation of cultures and cultural practices (Merchant and Carrington, 2009). And, through a differentiation in the literacies engaged with, there is the potential for *differing* identity 'formations and deployments' (ibid: 63). Identity moves from a stable, internal state to a more fluid, generative and creative proposition, which affords a '*strategic* making and remaking of selves, identities, activities, relationships, cultural tools and resources…as embedded with relations of power' (Moje and Lewis, 2007: 18 original emphasis). With this in mind students' use of technologies and their approaches to literacies seem somewhat constrained in a restrictive and instrumental curricula.

Notably, from this review and the research focus of post-compulsory education classrooms, there is a noticeable area in the existing literature that is lacking in coverage. Throughout these new proposals on literacies the approach has predominantly been theoretical and analytical with little empirical research emerging (Livingstone, 2004). Within an FE context what recent research output there has been, predominantly offers suggestions on the need for changing practices to draw in social literacies to enable students to have more social and cultural identification with their coursework (for example, Ivanic et al, 2009). In rethinking FE literacies the notion is that, 'when students see the relationship of literacy practices to their sense of who they are or *who they want to become*, they participate in them wholeheartedly' (ibid: 187 emphasis added). The proposition from this is that formal education is, 'abstracted from contexts of use, out of touch, decontextualised, inauthentic, not relevant and so on' (ibid: 189-190). The implication is relatively straightforward: students see relevance in what they do and they can engage with it, if they view it as irrelevant they are less enthusiastic. My belief, from discussions with colleagues, is that most FE

tutors will have experienced this behaviour and many courses do adopt this approach by nature of evidencing needs that are vocationally orientated. Ivanic et al (2009), in this way partially argue a 'common sense' approach to teaching in FE. However, in the study there is scant regard to how students use computers for coursework and the complex literacy manoeuvres that are possible with digital text. The more social uses of technologies are browsed over and the focus is with the broader canvas of literacy practices.

From reviewing a range of approaches to literacies there are limitations to their application, especially as the uses of technologies in FE, and elsewhere in post-compulsory education are becoming increasingly integrated in both enquiry and evidencing as literacy processes. Some, such as transliteracies, are so broad that as a model its expansiveness is potentially its weakness. As it attempts to be all things, its specificity to the classroom and education is unworked, which seems to apply to it as a project. This applies to much of what has been discussed and therefore identifies part of the contribution that this thesis aims to offer, as an insight into student practices with digital text in a discrete academic environment.

In using computers for assignment work, the first stage of any research needy assignments is to find information online, usually through an Internet search engine, or dedicated academic search portal. For many students, and the population at large the first choice for any Internet search can typically be Google and what follows will discuss some of the critical comments on students' use of this resource over recent years. It is not only the words used as search criteria that are entered that determine the results, but also the level of criticality in the choice from the results that can determine the quality of the information that is subsequently used in an assignment.

2.2.3 TO CRICITALLY SEARCH, OR TO "GOOGLE"?

Google's ubiquity has ensured that its name has now entered the language as a verb, meaning to search online, as well as a brand name, for example, 'I Googled…', Googling or 'being Googled'. I even noticed that once on national news the term Googled was once referred to when another search engine was actually used.

Students' reliance and level of usage of Google has brought scathing comments from some academics and it has been cited as 'facilitating laziness, poor scholarship' (Brabazon, 2007: 15). This is not least pertinent when considering that the ranking of the search results can be through popularity, rather than significance or qualitative importance (Graham, Schroeder and Taylor,

2013). An online search engine 'assumes that a user has the literacy to not only utilize the search engine but the interpretive skills to handle the results' (Brabazon, 2007: 20). This is just as relevant with the online encyclopedia Wikipedia, which due to its collaborative and therefore ephemeral nature the content itself can be unstable. Additionally, as the presence of Google is dependent on their successful commercialism of the product through advertising there is 'little incentive to allow their users to understand how they structure knowledge' (Graham, Schroeder and Taylor, 2013). Brabazon, in her polemical text suggests that students enter simplistic search criteria into Google rather than engaging with course dedicated readers and other tutor accumulated resources, which can result in 'sound bite solutions (Brabazon, 2007: 22). This consequently can result in a lack of intellectual rigour. This argument is extended by the comment that the Internet, 'transforms into an information drive through [that] encourages a 'type in-download-cut-paste-submit' educational culture (ibid: original emphasis).

There is an inevitable generalisation in some of the above comments on students' approaches to finding and using information and this research aims to fill in some of these gaps by a focus on specific cohorts and individual students and how they approached these early stages of the search for information. What is apparent, as a mission for educators, is the clear need to ensure that students are equipped with the skills for online research to enable them to take advantage of the vast repository of information that the Internet offers.

> …it is the Net's astonishing ability to uncover once difficult-to-find, often relatively esoteric information in a few milliseconds […] access to Google or Yahoo can change everything-obstacles once judged too formidable to even attempt now become manageable (Weissberg, 2003: 387).

Once information is sourced it inevitably needs to be engaged with in a critical manner. If as Brabazon (2007: 22) states, software can facilitate shortcuts to be taken with digital information there is clearly a justification to research students' practices with online text and this study responds to that by casting an ethnographic eye over these processes. What follows briefly outlines a number of arguments that have been raised in recent years on how reading practices, skills and brain functions have been modified through users' engagement with online resources.

2.2.4 DIGITAL READING: CHANGING PRACTICES AND SKILLS

In FE tutors can be challenged in their attempts to motivate some students to read any form of lengthy text. In previous research (Barbour, 2005), this in particular was a point of frustration for

many tutors. In that earlier context it was hard copy texts, especially assignment briefs or handouts and in classrooms that were predominantly without computer access. This research investigates students' engagement with digital text and with this in mind what follows is an examination of literature on the changes occurring in reading practices due to increased levels of engagement with digital information. Other studies have emerged in recent years, with an interest in the changes occurring through uses of communication technologies and the synergy between these and language and how language is changing (for example, Crystal, 2006; Baron, 2008; Gee and Hayes, 2011). However, there is a paucity of research on how digital text is actually engaged with, used and manipulated.

Hayles (2010) argues that due to an increase in reading digital content, reading skills have been declining and changing and argues for a 'broader sense of reading strategies and their interrelation' (ibid: 65) and then makes the connection between this and the characteristics of hyperreading. The concept of hyperreading was introduced by Sosnosk (1999: 162) who offered a typology that included: 'skimming', where less text is read and 'pecking', which denotes a less linear approach to reading. Hayles (2010: 66) adds to these two the notion of 'juxtaposing', which she defines, 'as when several open windows [on a computer screen] allow one to read across several texts' (ibid.). This was apparent during the classroom observations when students having more than one window open on their monitor was the norm, rather than the exception. Commonly, there would be an Internet browser open, at least one Word document, whichever Adobe software was being used and often something more entertainment orientated running, such as video or audio software. These were usually aligned alongside, and in front or behind others rather than just one fully open and all the others minimised; consequently there was often what appeared to be a lot of visual clutter on the screen (see Appendix 1).

One consideration is that media induced states of distraction are not a new phenomenon. Hayles (2010) draws on Benjamin (1969) and suggests that mass entertainment can render 'distracted viewing into a habit (as opposed to the contemplative viewing of a single work of art)' (Hayles, 2010: 67). Carr (2010) situates media distraction with how users engage with the Internet, where despite its efficacy as a pool of information there is a concern that hyperreading makes sustained concentration more demanding, as our neural circuits are now more 'devoted to scanning, skimming, and multitasking' (ibid: 141). Doctorow (2009: no page), in an article entitled 'Writing in the Age of Distraction' refers to this as a 'computer's ecosystem of interruption technologies' by referencing the gamut of communication tools that are accessible, such as email alerts and RSS

feeds[2]. The more resources such as these that are engaged with, the greater distraction they offer and the reading entails accessing snapshots of information, as long as they are attention grabbing in their immediacy. Rather than bemoaning this through a haze of nostalgia Doctorow adds that, 'the Internet has been very good to me. It's informed my creativity and aesthetics, it's benefitted me professionally and personally, and for every moment it steals, it gives back a hundred delights' (ibid.). These comments illustrate the excess of information the Internet offers, and therefore its value and significance as a resource for students. However, if students do not have the experience to find and then assess the robustness of information for their academic purposes the implication is that, as a resource it can be overwhelming in its choice and therefore restrictive. Alongside this is the risk of high levels of distraction that can then jeopardise there being a deep level engagement with the content and therefore result in less criticality.

Hayles (2010), referencing Carr (2010) adds that the way our brain functions is changing due to the ways in which engaging with digital technologies differs from 'mindsets formed by print, nurtured by print, and enabled and constrained by print' (Hayles, 2012: 1). This leaves 'us in a constant state of distraction in which no problem can be explored for very long before our need for continuous stimulation kicks in and we check e-mail, scan blogs, message someone, or check our RSS feeds' (Hayles, 2010: 67). This last quote is especially pertinent relative to the potential interruptions from digital distractions when students are working independently for long periods on a networked computer.

Notably, the literature discussed at this point is generalised in its context, rather than referencing education, and in some work environments the ability to rotate between several different tasks rapidly can be a virtue and even a necessity. It would perhaps be too idealistic to expect all FE students to be highly motivated and completely focused on their work all of the time. However, what this section illustrates is the potential distractions that students can encounter when searching online for information. Moreover, with students' increased use of the Internet for accessing text based information there is a knowledge gap in how students actually engage with that digital text and the extent that the affordance of the depth of what the technologies can access can distract the user's attention away from coursework, even within such a formal and focused context. This research therefore aims to partially address that gap by observing and discussing these classroom based processes of handling digital text with students. Part of these processes is making use of the

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[2] RSS feeds offer live notifications of the latest headlines from the range of websites that a user is subscribed to and are in a concise format for quick scanning.

information that has been sourced; an orthodox approach to this has usually been through the practice of making notes and an aspect of this research wanted to investigate how, or if this had changed when computers were used extensively in the classroom.

2.2.5 NOTES AS AN ACTIVITY AND VALUE

> Note-taking is an important representation of the knowledge transaction that takes place in formal learning environments […] It is a form of record keeping and, as such, is part of the objective data related to the evaluation of experiences that occur within the total learning environment […] It is one of the few objective indicators that bears a direct correspondence to a learner's thought processes (Ganske, 1981: 156).

As the result of cognitive processing, notes are synonymous with studying and learning, whether notes are word processed, written on a sheet of paper, or even hand written directly in the pages of a book, or whatever other hard copy source is being read from, such as an assignment brief, tutor hand out or a printed journal paper. The day before typing this I was sat in a university library, watching students still enacting the practice of hand writing notes while surrounded by several hard copy books. During the same period, the student I was having a tutorial with at the time was hand writing notes on a notepad during our discussion about her digitalised and Word formatted assignment draft that was loaded on her Macbook screen.

Much of the research on students' approaches to making notes focuses on a higher education context and especially within lectures, therefore with students who are assumed to be more academically experienced than most FE students, due to the level of qualifications already attained that enable them to be an HE student. When hand written notes are made there is haptic feedback gained from holding and moving a pen or pencil on paper, or even by using a computer mouse, or through the movement of a finger on a laptop trackpad or by the act of typing on a computer keyboard, or other portable technologies with digitalised keyboards. The level of sensory feedback to the brain is considered to be much stronger through handwriting rather than typing (Alleyne, 2011), which can be heightened by the typically longer time it takes to handwrite than type (Mangen and Velay, 2010). There are further and significant haptic differences between writing when using a pen and paper to digital writing through the use of a mouse, trackpad, keyboard and computer monitor. The argument is that there is a concentrated visual attention during handwriting with a focus to the tip of the pen, or pencil. In typing the visual attention is more detached from the haptic input of the keyboard by a need to also look at the screen. Furthermore, in handwriting there is a need to graphomotorically shape each letter (ibid: 385-386). The level of attention for this is

tightly focused, whereas typing oscillates attention between 'two spatiotemporally distinct spaces' (ibid: 396). From this emerges a question of how much distraction can infiltrate during the oscillation of attention, especially if there are other activities occurring nearby, or on the computer screen itself. These are questions that are seemingly ignored by research at this point of time. Taking notes during a lecture is considered an aid for concentration due to the product, which are the notes constituting a review process (Badger et al, 2001). Students' reasons for taking notes were that they, 'aid recall of what was in the lecture, they helped with examinations and assignments and […] were educational in a more general sense' (ibid: 409). The more formal lectures that HE students experience rarely occur in FE and classroom sessions involve a greater range of interactivity between tutor and students, but there can still be the opportunity to make notes. Research has indicated that despite students valuing the post-event function of notes, there can be a lack of interest in learning the skills of note-taking through a discreet skills course (Badger et al, 2001), suggesting that learning these skills may be more appropriate within a main course session and therefore considered more purposeful to the context.

The processes of the students listening to the educator talking and making notes at the same time involves dividing attention to both listening and writing, which demands an efficient working memory and can be disadvantageous to those with, for example, dyslexia where short term memory can be challenged in these situations. Whereas, it is suggested that both educator and students prefer more interaction with the other while the educator is delivering the topic (Stefanou, Hoffman and Vielee, 2008). As such, these periods of discussion, which are typical of some aspects of FE pedagogy, could facilitate students to make more choices of what content is useful to record, as a mode of 'generative learning' (ibid.), instead of attempting to retain all the content of a tutor's dialogue and the risk of being overwhelmed with the volume of information.

The suggestion is that note-taking, when performed post-event as a generative activity, that is when the notes contain something additional to the original material (Stefanou, Hoffman and Vielee, 2008), the learning that is taking place by the student, as an active participant, is far greater than just, 'a simple abbreviated transcription of information that is heard or read' (Piolat, Olive and Kellogg, 2005: 306). Conjoined with this is the level of tutor direction at those points during a lecture when it is deemed prudent for the students to make notes. This is considered a valuable intervention by the tutor as when some students are left to their own methods they can be susceptible to compiling notes that are disorganised and hence reduced in their utility and subsequent quality of use (Kiewra et al, 1995). Although, there may be some concerns with

students becoming over-dependent on this tutor led activity and *only* making notes at these points, so there needs to be a level of judgement by the tutor throughout these processes. An argument is (ibid.) that if these principles are established in one practice, for example during seminars, or lectures, they will then be transferred by the student into other contexts, and in this research context it could be when accessing online information in more independent working conditions.

The quality of notes made is suggested as being relative to the process involved (Ganske, 1981). Enmeshed in this activity of comprehension, selection and production are the limited resources of the working memory for good temporal information management (Piolat, Olive and Kellogg, 2005), consequently the most efficient process should also be the most effective. Importantly, the perceived value of the context also appears to determine the quality of notes made, as do firm and directed prompts by the educator as a mediator in the process (Ganske, 1981).

Thus, pedagogy, metacognition and intent are important in viewing the utility of having notes. It is argued that both during the event and post-event, non-linear note-takers perform significantly better than those making linear notes in terms of increased academic performance. This is gained from a deeper understanding of the material through engaging with the activity in a 'semantically more connected and meaningful way than their peers with traditional, linear note-taking strategy' (Makany, Kemp and Dror, 2009: 633-634). Non-linear note taking involves using creative and visual recording methods, such as, clustering, concept mapping, Ishikawa diagram and mind mapping where links are formed between the notes. The benefits of using these more visual approaches is that this format reduces the cognitive load on students and hence can render it as being more effective (Piolat, Olive and Kellogg, 2005), especially to those who are more visually orientated in their approach to learning. These methods can be formed on paper, but dedicated software can be used, or through the combination of the drawing and text tools of Microsoft Word. Therefore any student using computers extensively could use these methods, if they were guided, or directed towards these strategies.

What this section has aimed to project from the literature is that note taking is certainly a productive and creative aspect of learning.   Though, learning how to make notes is most successful when it is taught in context and directly relates to the subject being studied. The literature identifies the value of this process, although there appears little research on students' use of notes when using computers as a primary resource. Hand written notes are a semiotic for an engagement with information but in the realm of digital workspaces when text can be copied and manipulated, unless

there is a trail of evidence, it is harder to identify. This has not been pursued by research and therefore forms a valuable aspect of the ethnographic enquiry into learning and literacy practices when students use computers extensively.

Once information has been engaged with at some level, and decisions made about its value, the next stage is to use it to inform the content of coursework evidencing. Digital text, especially with the level of manipulation that software can offer can disguise both its source and ownership, unless credited and therefore have an effect on the level of academic integrity. With this consideration in mind the section below approaches the academic fear of plagiarism and an alternative viewpoint of this, which is more that of 'fixable errors'.

2.2.6 OWNERSHIP AND INTEGRITY OF TEXT WHEN DIGITALLY SOURCED AND MANIPULATED

Students' engagement with online resources, their use of the Internet for research and how they process digital text is considered to have contributed to an increase in plagiarism (Park, 2003; Howard, 2007). Some academics seem to be resigned to this situation as evidenced by comments such as, 'plagiarism among students is something we have learned to live with' (Gorman, 2008: 299). Selwyn (2008) found that students' online plagiarism correlated with their levels of offline plagiarism, although there are opinions that online plagiarism is likely to become even more prevalent as the 'supply and accessibility of digital data continue to grow' (Sterngold, 2004: 18). As such the level of debate and anxiety on the topic has been likened as approaching the level of a moral panic (Clegg and Flint, 2006: 373).

Howard (1995: 788) divides plagiarism as being either 'an absence of ethics or an ignorance of citation conventions' and considers that both are negative interpretations that postulate 'an absence – of either ethics or knowledge' (ibid.). Sterngold (2004) believes that most students are aware of the disciplinary issues surrounding plagiarism and as they do not want to get caught they do aim to cite sources correctly. Although, it can appear that they can be confused with what actually constitutes legitimate research and plagiarism (Barker, 2008; Power, 2009). Countering the negative discourse surrounding plagiarism, Sterngold offers teaching strategies where the possibility of plagiarism is referred to more positively as 'fixable errors rather than fatal violations of academic policies' (2004: 18).

Of particular interest to this research is Howard's (1993) use of the term 'patchwriting', which is described as, 'copying from a source text and then deleting some words, altering grammatical structures, or plugging in one-for-one substitutes' (ibid: 233). Howard acknowledges that patchwriting would be included within the traditional boundaries of plagiarism and due to this educators do not identify its potential as a composing strategy relative to an 'entry-level manipulation of new ideas and vocabulary' (ibid.). Howard's point is that students do need to learn the more mechanical skills of accurately referencing the sources of information that they use, but that they have a greater need 'to learn how to manipulate new academic language' (ibid.). Notably, there is no reference to computers, the Internet or digital text in Howard's paper; therefore these practices are referenced as hard copy and hand written events. As will be evidenced later (see Section 7.6) patchwriting bears a remarkable similarity to some students' practices with digital text.

The volume of literature on plagiarism is principally focused in the context of higher education (Park, 2003) but as many of the FE students in this research planned to progress to degree courses their practices and considerations towards how they use and manipulate information is very relevant. Equally valuable is Howard's (1993) previous point of students needing to learn academic skills as a means of countering any risk of inappropriate practices at an early stage. Level 3 FE students, who are the focus of this ethnography, are expected to produce independent work with a greater emphasis on researching information than when they were at school. Consequently, Howards's 'entry level' notion of patchwriting becomes analytically useful, as the participating students in this research were, in most cases, yet to mature academically.

2.2.7 CONCLUSION

The paucity of research on post-compulsory education students' academic practices when using computers and the Internet serves to illustrate the timeliness and contribution of this research, within literacy and education studies. What Callaghan initiated back in 1976 by expressing his concerns over the nation's skills is now in a new phase of development. Literacy and learning practices with new digital technologies and networked computers are a relatively recent phenomenon and therefore a clear research consideration when investigating academic practices. The recent literacy, communication or English remedial programmes, such as Key Skills and Functional Skills that are aimed at post-compulsory education have little inherent consideration for the literacies that take place through digital and networked technologies. Notwithstanding this, there is also the situation that many students who could potentially benefit from developing their

literacy skills are excluded from these programmes if their GCSE qualifications are at a level which is deemed as evidence that they already have sufficient skills in place. Therefore there is the opportunity for a range of appropriate literacy practices to be embedded within course pedagogy, if they are already not there. Although I would suggest that many FE tutors, unless they have a personal interest, may be unaware of the models of literacies that exist and which would be appropriate to adapt to their courses, as these can be more in the realm of interests of literacy specialists and researchers. Despite this, many of the academic needs of FE students should be familiar to the tutors who will have experienced them when they themselves were students.

What this section has illustrated is that despite the increasingly prevalent practice of students using computers in a discrete classroom setting their literacy practices under these conditions have not been extensively researched. Many of the practices involved are aligned with those that take place when working with hard copy, however, it is the functions of the software and the affordance of the Internet, as resources that especially draw in new issues and ways of working with text that has significance for learning and the development of academic skills and practices.

2.3 PART 3: THE DIVISION OF DIGITAL CLASSROOMS

What was apparent when conducting literature searches for this thesis was that in recent decades, and even within current research, the interest in Further Education has predominantly been directed to the politics, policy and social justice concerns of the sector, together with the working conditions and practices of FE tutors. Much less attention has been focused towards FE students and even less still to their actual classroom practices. This is reduced further within the context of students' uses of computers, or other new digital technologies. Therefore, despite the increased demand for students to use digital technologies in FE learning there has been very little research into students' responses to learning in classrooms where the computer is the main educational resource. In the context of this section the research interest is in computer-resourced classrooms functioning as embodied spaces, that is, embodied when it is defined as, 'the location where human experience and consciousness take on material and spatial form' (Low and Lawrence-Zúñiga, 2003: 2).

With this in mind, this section explores the consideration that computer-resourced classrooms can become divided through the authoring of space. This is a division of space that is afforded through unauthorised, non-educational actions that are performed when using classroom computers. These spaces are unlike the division of learning spaces, which are made visible by students working

independently or in groups. Digital spaces can be the less visible, micro spaces that offer alternate social and leisure-orientated spaces while the user remains within the space of the classroom.

The interest of this focus is how spatial divisions can determine the level of attention given to learning and therefore within this, how students conceptualise the space and functions of a digitally resourced classroom when occupying it for the duration of two, or three hours. This commences with an exploration of how digital technologies can be conceived as polyvalent, that is, having more than one purpose or meaning to the user.

2.3.1 POLYVALENT TECHNOLOGIES

In this section I use the term *polyvalent* to underscore the versatility of uses, functions and capacities that modern digital technologies, especially the computer offer the user. Multivalent could have perhaps substituted as an alternative, as both prefixes mean 'many', but multi seemed limiting in that it suggests a number of 'different' forms. Using the prefix poly insinuates more malleability, not least from its extensive use as a prefix for plastic materials and when used with the base word *valency*, it indicates the potential number and type of bonds, or 'combining capacity', of technologies and the 'different valencies [of technologies] in different contexts' (Crystal 2008: 507); that is, those that technologies can form with each other and their users. In the end the choice of prefix became a decision of what seemed most fitting in this context when polyvalent is used as an adjective for technologies, not least supported by the connection between the Greek origins of poly and technology which is derived from 'technos' with similar Greek origins, rather than 'multi' with its Latin roots.

There is no denying the increasing role that computers and other technologies play as social and educational platforms. These technologies can border cross cultures with ease, according to need. In one context a computer is a professional work tool yet the same computer can be used for leisure, socialisation, communication, or keeping up with a professional workload when not at work and so on. With the increasingly diverse range of users, uses and advances in digital programming the choices for switching between activities and running several applications at once is expansive. As I type in Word, or browse the Internet I can listen to music, have a video running in a small window and even have streaming information in a sub-area of my vision. At another time the software could be reading a document to me, or I could be dictating to it as it converts my speech to digital

units of text. The variations of this and the number of applications being used at one time only reaches its limit through the available memory and processing power of the technology.

There would be some rationality in thinking that computers and other digital technologies and media are, by themselves, passive objects built by humans for humans, and as such a resource or object that responds to a user's needs according to input and resources. There is still something within that premise, as objects cannot be held culpable for any actions carried out using them, nor are they the originators of ethical actions or intentions. That is until some consideration is given to the deep entwinement that occurs between daily activities and technology, or media; not least evident through the feeling of reliance on them, or even comfort when we have access to them. This can be evident in the anxiety that occurs if one forgetfully leaves a mobile phone behind or when a work or leisure computer stops working. As Smith (2003: 184) comments objects can 'affect and alter the ways we think, act, and perceive' and therefore they become non-neutral artefacts that can shape human praxis. For Smith (ibid.) the relationships we have with objects means that they become more than passive things in that they can affect our decision-making processes, ethical or otherwise and as such there is a rejection of modernist philosophy and the subject-object dichotomy that renders the division between objects as passive and subjects as active.

Ihde (2002: 138) through the lens of postphenomenology suggests, 'we are bodies in technologies', who have 'amazing plasticity and polymorphism' (ibid.), therefore firmly identifying the capacity for humans to be extended through new technologies. Idhe (ibid: 137) considers that this is a two-way relationship: 'Insofar as I use or employ a technology, I am used and employed by that technology as well' and just as the body adapts to the technology, so the technology adapts to the body, within limitations. For Idhe (2009: 22 original emphasis) the role technologies and non-humans play in assembling the social and cultural, results in a 'multidimensionality of technologies as *material cultures* within a *lifeworld*'. Idhe argues that human experience which involves relationships with technologies has changed the landscape of the philosophy of technologies into an '*interrelational ontology*' (ibid: 23) where 'both are transformed within this relationality' (ibid.). From this, Ihde (1990: 107) posits that technology moves beyond the domain of objects through the 'existential relation which constitutes my self'.

Kember and Zylinska (2012: xv original emphasis) explore the mediation of events and life and of, '*being in, and becoming with, the technological world*', through the relationship that occurs between humans and technology. That is, the temporal aspects of media and how media and

technologies are dispersed, yet dynamically interlocked into lives and therefore have become more than things at our disposal to artefacts which are entangled with us at a sociocultural and biological level. The proposition is that '*mediation* is an intrinsic condition of being-in, and becoming-with, the technological world' (ibid. emphasis added). Hayles (2005: 7) adopts a more extensive term through the concept of '*inter*mediation' for both analogue and digital contexts where there are 'complex transactions between bodies and texts as well as between different forms of media', and draws on intermediation to denote the mediating interfaces that connect humans with 'intelligent machines' (ibid). Hayles (2007b: 101) argues that humans and computers are 'increasingly bound together in complex physical, psychological, economic, and social formations' and that through this relationship there is a re-engineering of people 'through their interactions with computational devices' (ibid: 102); therefore, how we think about and see ourselves as modern human beings. Hayles acknowledges that humans have been shaped by their technologies since prehistoric times, which is mirrored by Ihde's (1990: 72 original emphasis) comment that praxis has been embodied through technologies in 'an *existential* relation with the world. It is something humans have always….done'. Notably Hayles develops the point that the intermediating dynamics with computers has been crucial in the development of language within complex social formations and structures, both in leisure and commercial contexts. This could surely be extended to how we non-verbally communicate to others through the semiotics of the technologies we carry and use, which can signify to others what our level of commitment is to them and the values that are placed on them. I have noticed this occurring at a more discrete micro level amongst media students when they use, or attain certain levels of software actions that can gain them credibility from any observing peers, which can then initiate discussion.

The level of division within the relationship humans have to technologies, or non-human objects has intrigued research, especially since there has been a significant increase in the use of technologies across many sectors of society. The impetus of working this out occurred through opportune texts such as The Social Shaping of Technology (MacKenzie and Wajcman 1985) and The Social Construction of Technological Systems (Bijker, Hughes and Pinch 1987), which discussed the role of society in the shaping of technological systems. Emerging from this was an interest in how objects, including technologies, where situated within infrastructures of actor-networks of human and non-human symmetry and therefore how each could be located within the same conceptual framing and assigned equal levels of agency (Callon 1986; Latour 1987).

As part of the momentum of this line of enquiry Pickering (1993: 562) critiqued previous sociological knowledge, 'which accords priority to the human subject through an asymmetric distribution of agency – all to human beings, none to the material world'. That is, the premise that human effect gains no response from the material world, which Pickering found untenable. Pickering (ibid: 565) also challenged the exact symmetry of the actor-network, which 'insists, there is no difference between human and nonhuman agents'. Notably, the sticking point for Pickering was *intentionality*: 'We humans differ from nonhumans precisely in that our actions have intention behind them' (ibid.). Pickering contended that there were periods when humans exerted agency over machines and other times when they were more passive, notably when the machines captured agency and were performing as the humans intended. He referred to this asymmetry in goal-orientated practices as a 'dance of agency' (Pickering, 1995: 21). In doing this Pickering critiques any fixed notion of symmetry and instead entwines humans with material agency and extends this to the 'insistence that material and human agencies are mutually and emergently productive of one another' (Pickering, 1993: 567).

The acknowledgement of symmetry between humans and nonhumans, which dismisses any a priori distinction between the two, affords us to recognise the continuity between humans and society and non-humans rather than forming any impression of clear distinctions. That is, 'that not only humans but also things 'act'' (Verbeek, 2014: 86). However, for Verbeek (ibid.) the notion of symmetry is inappropriate and instead references 'interaction and mutual constitution', where humans and *things* constitute 'myriad 'hybrid entities'; therefore making a distinction away from any notion of a mirror like symmetry where the main characteristics of the original are imitated. Verbeek presents this argument through a focus on what role technologies play in morality, by adding that the 'mediating role of technologies in moral actions and decisions' (ibid: 87) needs to be acknowledged. This is due to the maturity of society's relationship with technologies and therefore they cannot be excluded from ethical considerations within the material world we inhabit. For Verbeek (ibid.), morality emerges through those relations where, 'objects have moral significance and subjects are engaged in mediated relations with the world'.

It is due to the close relationship that technologies now have to users, that I suggest that the computer emerges as a *polyvalent* object. As an assemblage of component technologies computers have the capacity to carry out different functions according to the context and user's needs, thus identifying 'how differently embedded in different cultures even the same technologies may be' (Ihde, 2008: iv). In each context the technology and the object itself becomes symbolically

saturated with use-value where, 'value is used in recognition of the ordinary incommensurabilities that people face in daily life' (Miller, 2008: 1124). While writing about computers, Derrida (2005: 23) states rather broadly and ambiguously: 'What rules it obeys'. There is no clarity if this is the user, the limitations of the hardware, or what the software designer has programmed in, even the addictiveness of playing a particular game, or the draw of particular websites. However, if Derrida's statement is reconsidered more towards what determines usage, this partially reflects the complexity of examining any computer-based practices especially in a discrete temporal space, such as a classroom where cultures and expectations may not be secure within the principle aim of learning. Consequently, a computer rich classroom can become a place of high-choices for students, with the resulting risks of distraction and a reduced level of engagement with coursework if learning activities become resisted. As Bijker, indicates below, although computers may essentially be inanimate objects, it is what they can provide that can afford change.

> We live in technological cultures. Today's societies are thoroughly technological, and all technologies are pervasively cultural. Technologies do not merely assist us in our everyday lives; they are also powerful forces acting to reshape human activities and their meanings (Bijker, 2009: 2).

From the outset of this section one aim was to present the value of using polyvalent as a way of conveying how technologies, especially computers, are integrated into many of the textures of daily lives and society at large. This depth of integration and the versatility of use for computers and many other new digital technologies therefore has implications for how their *use-value* may be seen within the digital classroom and their affect on praxis. The extensive interaction with technologies that users have as cultural and social artefacts which, as Verbeek (2014) indicates can develop a mutual constitution, is significant for how discrete contexts may be identified with, not least when conjoined with Smith's (2003) articulation of how they can affect those aspects of us that control decision making. This becomes aligned with Hayles (2007b) comment of how technologies can shape how we see ourselves has obvious repercussions for context appropriate behaviour. Not least how the 'dance of agency' (Pickering, 1995: 21) is situated within this as an initiative for performative actions (Pickering, 2010: 195), which Pickering (ibid: 197) sees in their ubiquity, as 'the very stuff of our being in the world', and thus how students and even teaching staff may see both themselves and the technologies within a classroom.

Within this shaping and reshaping of social actors and the role in this of digital technologies through the extensive interactions that can occur, Bijker (2009) above and others have suggested, the following section will examine how technologies, despite their undoubtedly significant efficacy

for education, can not only become a diversion away from the educational task in hand, but also within the use of them, signify a resistance to existing conditions.

2.3.2 TECHNOLOGIES FOR DIVERSION AND RESISTANCE

Drawing on a Freudian notion of primary identification, the philosopher Stiegler directs his focus to the influence a cultural commodity can have on young people.

> This process of identification is precisely what the contemporary culture industry subverts, in diverting and capturing the attention of young minds in their time of "brain availability" (Stiegler, 2010: 4 original emphasis).

Although Stiegler constructs young people as passive recipients of culture, Willis, suggests that school students, albeit with a focus on those of lower working class, mobilise the goods of popular culture as acts of resistance against school activities by suggesting that:

> …a cultural expression through commodities may supply an instant social and cultural imaginary for resistance and alternatives to the felt oppression of the school, providing, so to speak, something to resist "with". […] From this position they are likely to be inclined to exploit popular culture and other resources to embody their resistance or dissatisfaction with other status markers, mobilizing cultural "positioning goods" that they can control (Willis, 2003: 406-407 original emphasis).

Willis's reference to 'positioning goods' reverts back to Stiegler's point. Although Stiegler considers that the direction of power stems outward from the culture industry and its commodification of products that are aimed at a youth market, Willis picks this up and in extending it, suggests that as these become symbolic in their 'positioning' state they are then significant in displaying to others that the individual has a level of identification with what it is that they signify. The recognition of this is then used as a means of exerting some level of control in certain situations where this is deemed as needy. In this case young people use some commodities in a way that signifies their resistance to aspects of education. The implication is that if these goods, which are aimed at a sector of society by the 'culture industry' are not already subverted then the significance of the resistance is muted. Therefore the control of them in this way is double edged, in that others can initially direct their symbolism and meaning; therefore, they are taken up by those who they are aimed at in a state of readiness.

Students' resistance to education in this way is enacted through cultural objects that through their commodification become artefacts of youth cultures and activities. These can be mobile phones,

portable music players, a website or even a magazine or other non-digital object. This offers an indication as to why some students might draw on the use of social and entertainment technologies while being in computer-resourced classrooms and Willis frames this point:

> I argue that a social understanding of education needs to consider both top-down practices and bottom-up responses, and the ways that they interact "on the ground" to produce complex eddies, waves, and flows of modernization (Willis, 2003: 391).

Willis's theme is by no means a recent phenomenon, as there have always been students that have engaged with education less than others regardless of the environment. His reference to 'on the ground' can easily be imagined as the classroom as the significant and discrete place where education and students directly come together.

Digital technologies, whether they are personal and portable, or those of education when used covertly offer a new form of opportunities for a diversion away from studies in the classroom. Therefore, to move beyond any theoretical propositions there is a clear need for research into what prompts these actions, even if it is simply the rationale of: I can do this, so I will. Although that proposition still prompts questions of what triggers the thought and the making of that decision. Willis focuses on students' use of 'positioning goods' that have a symbolic relevance. In a computer-resourced classroom the computer is already there, and as an object it will not be dissimilar to students' personal computers, although any symbolic application will be determined by function and what can be accessed through the technologies rather than any outward appearance.

In day-to-day life the fluidity of movement between actual and virtual spaces and places is afforded with equal ease through an ever increasing range of new digital technologies whether they are portable or situated, depending on the timeliness of the needs and values. Although increasingly this can undermine any previous conventions in a social, or professional situation when the digital takes precedence (see Ling, 2008: 1). To illustrate this I will draw on an example in a setting loaded with social and behavioural norms. Whilst in a conference centre library in April 2011, over two days I heard a number of library users hold conversations on their mobile phones that were so audible it was unavoidable not to hear them. In one instance I could clearly hear someone give out their personal contact and financial details to the person at the other end of the phone connection that they were having the conversation with. This was an international practice, as the languages ranged from English to Eastern European, Asian and Russian. Clearly, any consideration to the conventions of libraries as quiet areas was not considered, as was the thought that others could

overhear. As Greenfield (2008) suggests, technology has the potential to cocoon us from our immediate surroundings. With these changes in behaviour, regardless of context, there is some indication, why, if students engage with technologies for non-educational use they may become so absorbed they can partially suspend their coursework activities.

Earlier educational research (Barbour, 2005) identified some FE students were using their mobile phones and accessing social networks on their computers in the classroom in ways that resembled ritualistic traits. They appeared to have a continual need to digitally communicate with friends, or play digital games. Rituals, taken in this context, can be both individual and cultural:

> Rituals tend to involve precise spatial arrays and symmetrical patterns, stereotyped actions, repetitive sequences, rigidly scrupulous adherence to rules (and often the constant creation of new rules) (Dulaney and Fiske, 1994: 245).

Young people's attachment to their mobile phone has been likened to these portable technological objects functioning as a protective talisman (Moore, 2009), which is distinct from the excessive rituals of an obsessive-compulsive disorder, as this behaviour appears more culturally significant.

> The participant in a culturally meaningful ritual is neither compulsive nor obsessive, because the ritual is an intentionally adopted and appropriate means to carry out some culturally intelligible goal (Dulaney and Fiske, 1994: 247).

McGuigan (2006) situates rituals as cultural acts, adding, similarly to Willis (2003), that young people are adept at reappropriating the commodities of a capitalist culture in a ritualistic behaviour to signify their resistance to the dominant culture. Depending on the commodity it can function as a carrier of cultural codes with meanings greater than any rituals that are more habits, or routines (McLaren 1999: 41-42). Ling (2008) considers that there is an ontological security gained from ritualistic action. In some cultures rituals can also be an indicator of being in a liminal state, and the ritualist action signifies a state of getting prepared (Van Gennep, 1960) for something *other* than before. Turner (1969: 95), likewise suggests rituals are acts signifying a state of 'betwixt and between'.

Accessing Facebook, or other social platforms through a classroom computer to respond to messages could be conceived as a social imperative, but also an illustration of how technologies have become so embedded within youth cultures. Away from college a networked computer performs a social and leisure function and therefore is symbolically loaded with value. Stiegler (2010: 94) argues that 'new media leads directly to the hypersocialisation of attention'.

Consequently, if classroom activities or conditions are lacking that value can become persuasive through a need for something more stimulating to new forms of attention.

What arises from this situation is the perception that technologies can be repurposed due to the ways that they can offer a means of diversion away from course activities and learning. Consequently the computer-resourced classroom can become a place where the official and unofficial affordances of technologies at times vie for attention depending on the user and the circumstances.

2.3.3 VYING FOR ATTENTION

> Attention plays an essential role in task performance and interaction. It enables us to act, reason and communicate, in physical or virtual environments that offer us stimuli exceeding, probably by several orders of magnitude, what we are capable of processing (Roda, 2011: 11)

Imagine the context of a student considering that they only use a classroom computer intermittently for an off-task break away from coursework, or have some form of media running in the background while they do their college work. Therefore they consider this way of working is deemed as being under control. This, however, raises the question of what level of occurrence it may take to then start to adversely affect attention to coursework, integrity of learning, and consequently question self-awareness and control. This section will explore these situations by drawing on a range of contemporary literature on attention, including the cultural changes to attention that are occurring as a result of an increasingly information and technology rich world.

In some working situations when there is media playing in the background, such as a radio it can be beneficial to the workers. Research (Stachyra, 2015) indicates that the sound from a radio can create an environment conducive to work duties, and in doing this it helps to alleviate the monotony of workers' repetitive tasks. The efficacy of radio is relative to the context, and one where other media such as a television or the Internet would be too intrusive (ibid.). Stachyra (ibid: 1), suggests that in this context radio in the workplace 'becomes a liminal medium, suspended between the necessary (work) and the optional (entertainment). It also becomes a repeated ritual providing 'a certain framework for work activities' (ibid: 12), but it also 'shields listeners from reality, providing relaxation instead' (ibid.). Likewise, Bengtsson (2006) argues that the switching on of a radio at the start of work mediatises the working space and frames this norm of acceptable behaviour. The

materiality of the situation is thus changed through the construction of 'everyday understanding about places' (ibid: 122).

However, when attention becomes more selective and focused on one activity to the exclusion of others, 'attention is seen as the set of mechanisms that allows the allocation of cognitive resources, which are assumed to be limited' (Roda, 2011: 14). If attention remains selective, but divided, then due to the interference from the switching process, 'attention has been shown frequently to induce errors and delays in response' (ibid: 19). Roda (ibid.) posits these last points within a focus on human-computer interaction, and by situating this in the classroom, an example could be a student alternating between several activities and working less effectively than if the number of activities were more limited. However, and rendering this more individualistic, the amount of information that can be received at any time is considered to be limited by 'processing capacity, or processing resources' (Styles, 2006: 155). Affecting the efficiency of this processing are variables that are either external or internal, such as 'physical sensations and emotional states' (Schmeichel and Baumeister, 2010: 29). This could be noise; the presence of another person doing something that is distracting, or something more internal, such as a lack of sleep. Styles (2006), paraphrasing Kahneman (1973), suggests that the amount of attention that is allocated to a task depends on the amount of effort that is applied. Importantly, this effort is relative to the level of motivation and the prioritisation of one, or other tasks above others.

> …effortless action is more likely achieved when attention is not only highly focused but also voluntary – in pursuits that a person finds intrinsically worthwhile (Bruya, 2010: 13).

However, when attention needs to be focused towards something that is not usually a stimulus - for some students this could be a coursework essay, or needing to focus on one task for hours at a time – a cost may be incurred proportional to the amount of self-control needed. However, the insinuation is that through repetition this may become less effortful (Schmeichel and Baumeister, 2010). The indication therefore is that for students to direct their attention to coursework, they are either already motivated for whatever reason, or need to *be* motivated by the learning conditions.

There is not only the distribution of attention to consider, but Hayles (2007a) proposes there is also a generational shift in cognitive styles between deep attention and hyper attention. This hypothesis is argued through the emergence of new digital media, which have a high level of visual stimuli, complex plots and less readable content. Stiegler (2010: 94) corresponds with this view, arguing that new digital media's affect on attention is to 'the detriment of deep attention'. An apt example

is video games, which offer rewards but maintain a high level of stimulation (Johnson, 2005). Gee (2003: 19), suggests that these offer a semiotic domain that is particularly relevant to today's modern world where, 'print literacy is not enough'. The products then become a 'commodification of the human capacity for attention' (Crogan and Kinsley, 2012: 3). Therefore there appears to be a consensus that these new technologies bring change, and Thrift (1996: 1463) puts this as 'simply another variant of technological determinism'. Of course, if some students are used to this level of stimulation then sitting at a computer doing academic coursework for hours at a time will not provide the devices for engagement they culturally need to remain focused on a task.

Hyper attention, needs, or expects stimulation from a range of information streams, which some coursework and pedagogy may not be tailored to offer. This is in opposition to those individuals who have the capability for deep attention and are therefore capable of focusing for a long period of time on a single object, typically a book. One report on the role of media in the lives of young people (Roberts, Foehr and Rideout, 2007) indicated that students who are heavy readers typically spend more time on their homework than those who are light or moderate readers. A significant number of the latter, multitasked and alternated homework with other social media related activities due to their penchant for high levels of stimulation. A supposition from this is that some students may expect to carry these practices over into the classroom, especially if there was a need to work independently; therefore augmenting any desocialising. An inference from this is that although students working independently may have the capacity to disengage from their work to interact with peers and to discuss coursework issues, if some of their attention is used to alternate between coursework and hyper attentive media they will be more absorbed in their individual space rather than the social learning space of the classroom. That is, unless there is a curriculum and pedagogy that recognises this and therefore offers appropriate learning activities.

Another view further develops a number of the points above. Lanham (2007) considers that the alternation of attention between different modes of information - which may include working or studying and listening to music, or watching a video playing, or even talking to someone on a mobile phone at the same time - may just be part of how different modes of information are now culturally engaged with in an information rich age.

Lanham is one scholar who analyses attention relative to the 'digital expressive space' (2007: xi) of the social and cultural world we live in, and comments: 'Everywhere we look, we find information overload' (ibid: 6). His focus is directed to the hyper-mediated lives we lead and the immeasurable

volume of information fighting for attention. Due to this overload of information available, Lanham thesis is that it is now attention that is the commodity in demand and consequently in short supply. What information there is, fights for our attention by how it is packaged. Lanham refers to this outer layer as fluff, whereas the content of the packaging, which is the information or materials, is the stuff. Alongside these terms, Lanham also uses style and substance, as 'loose and baggy categories' (ibid: 157). Style, can be represented by the frivolous toys that adults possess, such as 'an SUV with rhinoceros-guard grille and backseat TV' (ibid: 166), rather than something with the *substance* of genuine need.

The proposition is that these terms can be reversed according to context and value. Lanham use the analogy of a car designer to illustrate how, for them, the style, or fluff, of a car will be the substance, rather than what is contained within its outer shell. On a website, or in a book, for some the images or animations may hold more value than the words, depending on how they are culturally, or personally shaped and valued at a particular point in time. At times attention may shift from one to another, which Lanham refers to as *oscillatio*, or the toggling back and forth between them.

Due to the wealth of visual information available the suggestion is that, '[t]he print economy of attention has been destabilized. It is still there, but it toggles back and forth with a new one' (ibid: 48). Lanham suggests that images are now read as a single entity and not element-by-element, as words in text are, and the upshot of toggling between these is a 'bi-stable seriousness' (ibid: 86). This results in a bi-stable attention, which is particularly represented in 'the digital writing space [where] words no longer have it all their own way. They have to compete with moving images and sounds' (ibid: xii). There is a question if all images are read in the way that Lanham suggests, for example, Kress and van Leeuwen (2006: 201) discuss how the composition of images can create different information values between each element of an image. In these instances, 'salience can create a hierarchy of importance among the elements, selecting some as more important, more worth of attention than others'.

Regardless of any disparities, all modes of information in their quantities permeate our day-to-day lives, from whatever we pass by as it tries to attract our attention, to that which is more intentionally engaged with. Therefore, for Lanham, it is attention that becomes the commodity that is in short supply, rather than information. The result can then be the challenge of selecting what to read, watch or listen to, including which information source, or portal to access. Media producers have

responded to this, in some way, through resources that contain condensed snippets of accessible information. Students exist in this new information world and this may now be how they culturally and socially expect information to be packaged. This could then imply that in a learning context there might be a conflict, if learning activities and resources do not recognise, or align with this. Not only this, but their attention may now be shaped through their cultural and generational way of engaging with multiple sources of information at one time, including how these are moved between. This could be when engaging with multiplayer online games, listening to music while working, or having videos running in the periphery of vision while they focus on something else, elsewhere on a computer screen. This can therefore be considered as the way that they, and many adults now consider it as normal to engage with information. Lanham therefore suggests that a new key skill is the ability to 'oscillate', or move back and forth between this new stuff and fluff. And, the key to productivity is therefore to refine this oscillation when the demands on attention are overwhelming. What therefore may be revealing through this economics of attention are the choices that are made, relative to motive and context. And, if Lanham's proposition is used then unless there is a refining down of information whatever attracts attention first, for whatever reason, will that which is engaged with first. In a purposeful context such as education the information that is received therefore needs the key skills to filter it down to its most relevant, to ensure that the information selected maximises its utility (Huberman and Wu, 2008: 487).

Digital technologies and media, despite their substantial value as educational resources clearly present a conundrum in the computer-resourced classroom, due to their capacity for multi-purposing and therefore the challenge of attaining a balance appropriate to the context. What follows extends the effect of this digital division and examines how the classroom can exist as a self-contained place of education, yet become fragmented into more authored spaces that can reshape the social learning environment.

2.3.4 AUTHORING SPACES WITHIN THE CLASSROOM

> The space occupied by the body, and the perception and experience of that space, contracts and expands in relationship to a person's emotions and state of mind, sense of self, social relations, and cultural dispositions (Low, 2003: 10).

From Low's proposition, if a student's experience of education means that they can identify with *being* a student when they are in a classroom they will be highly likely to view their space within it as a learning space - this seems straightforward. If this state is interrupted it may modify their

level of engagement and how they perceive the space they are in, if, as Campbell (2006: 290) argues, 'learning is heavily mediated through the experience of being in the classroom'. What follows investigates through literature how the use of digital technologies by students can render a layer of complexity to this situation. The suggestion is that how students use these technologies in a learning situation may be a demonstration of the cultural tensions that can occur in discrete places, such as classrooms when increased use of technologies have resulted in broader changes in society and cultures. On other occasions, as illustrated below, the use of some technologies, even by just one person can adversely affect others nearby.

Even if a student with their phone switched on does not view the noise of an incoming call as being disturbing to others due to their cultural norms with mobile technologies, studies have shown that the noise of a mobile phone ringing in a classroom can adversely affect nearby students' cognitive performance by its distraction (End et al., 2010). The implication is that this can then be extended to the noise of a phone vibrating even when on silent, or the brief alerting noise of a text or email being received. This may be more distracting if repeated, and even more so if the room is compact in size and there are no other noises occurring. The implication from this is that not only is the initial distraction a disturbance, but also any further engagement in whatever initiated the distraction. This may even be the busy fine motor actions of someone texting, which may be in the periphery vision of others close by. From this standpoint, some off-task use of technology in the classroom may not only be a distraction for those doing it, but it also risks disturbing the focus of others nearby. It can therefore be understood if this generates a deficit discourse amongst tutors if they experience this type of disruption, as they consider it little different in effect to non-digital misbehaviour. However, other off-task uses that are not so blatantly disruptive may signify something else occurring in the classroom, and how some aspects of education may not be considerate of the learning needs and cultures of today's students.

The practice of interspersing classroom activities with text messaging is seemingly a common practice amongst some US undergraduates, 'which afforded students the opportunity for ongoing participation in social networks' (Watulak, 2010: 191). Watulak (ibid.) considers, in a similar vein to Willis (2003), that these practices provided, 'some students with a means of exercising power within the controlled space of the classroom' (Watulak: 2010: 202). As will be discussed, this exertion of agency was more than a response against being controlled and being 'shaped by classroom and institutional norms for appropriate behaviour in the classroom space' (ibid.). However, these examples from Watulak, in an educational context, offer an illustration of how,

'technologies have come to mediate human practices' (Verbeek, 2009: 241). Watulak views these acts as new literacy practices that incorporate 'new values and norms' (2010: 193); therefore they illustrate how many of us now exist in more than one space at a time (see also Section 2.3.1), due to the affordance of networked technologies. As Watulak inidcates this can give rise to the tensions that may occur between the norms of physical and digital spaces, when there is a conflict in expectations of behaviour and especially when one of these environments is a formal context.

These off-task classroom practices by students with technologies could be considered as just a new form of misbehaviour and a digital alternative to other student practices, such as passing messages to each other on paper, whispering or otherwise when the teacher's attention is elsewhere. As Watulak adds though, it is the practices and values of this 'technology-in-use within particular contexts' (2010: 193) that requires further study to identify if this perspective is too narrow. In taking this further it questions the validity of the broad sweep of deficit discourse towards students off-task use of technologies when in a formal learning situation. A part of this is the idea of constant contact, which underscores some of these new values and practices where technology is now embedded in social interaction (ibid.). In a classroom this could be considered as the boundary negotiations that opens up new spaces. Ito and Okabe (2005: 132), albeit with a particular focus on mobile phone use by young people, suggest that practices such as messaging 'can undermine certain adult-defined prior definitions of social situation and place, but also construct new technosocial situations and new boundaries of identity and space'. Rheingold (2010: 20) comments that we are seeing a change in how young people participate in society, 'yet this does not mean that they automatically understand the rherotics of participation'. Thus suggesting that these are quite raw forms of behaviour that are still being worked out and therefore potentially vulnerable.

A further argument is that rather than fragmenting social life, young people's use of technologies, 'create new kinds of bounded paces that merge infrastructures of geography and technology, as well as technosocial practices that merge technical standards and social norms' (Ito and Okabe, 2005: 132). In Watulak's research with undergraduate students, the reasoning behind some students off-task text messaging was boredom, and students thought that the professors should make more of an effort to engage them so that they could participate in their learning, rather than expecting then to be passive receptors to the professor's verbal and didactic teaching method. This is summed up by student views of, 'if we're not engaged, we're bored, and when we're bored, some of us will turn to texting, the web, email, or IM' (Watulak, 2010: 200). In this it illustrates the mismatch of cultures and modes of teaching and learning, where education appears to be not recognising the changes in

how young people engage with information in their social and cultural lives. As Ito and Okabe (2005: 132) indicate this emerges as 'sites[s] of intergenerational struggle' and therefore tensions between location and social expectations. As Massey (1994: 149), suggests: 'different social groups, and different individuals, are placed in very distinct ways in relation to these flow and interconnections….some people are more in charge of it than others; some initiate flows and movement, others don't; some are more on the receiving-end of it than others; some are effectively imprisoned by it'. In this sense some teaching conditions may effectively culturally restrain students when, for the duration of a session, they are expected to engage with and comply with the norms of what education and the tutor expects of them. Technology may therefore afford a release from that tension, which in the context of the boredom theme illustrated by Watulak, above, appears to be a reasonable strategy from the students' standpoint. As Ito and Okabe (2005: 133), comment, the 'unobstrusive nature of email on a small handset is particularly amenable to youth communication because it does not disrupt the norms of the place and can escape adult surveillance'. This further illustrates, the tensions between how educational practitioners and their students may view the discrete place of the classroom and therefore what is acceptable behaviour and use of technologies within it. It also suggests that young people are making qualitative judgements within some situations when they use their tools at hand to make their educational experience more ammenable.

As MacLaren indicates, even in a non-digital context classroom sessions are far from unified events.

> Classroom culture does not manifest itself as some pristine or disembodied, homogenous entity, but is, rather, discontinuous, murky, and productive of competition and conflict; it is a collectivity which is composed of 'contests' between ideologies and disjunctions between class, cultural and symbolic conditions. It is, furthermore, a symbolic arena where students and teachers struggle over the interpretations of metaphors, icons, and structures of meanings, and where symbols have both centripetal and centrifugal pulls (McLaren, 1999: 6 original emphasis).

The contests McLaren references could be construed culturally and spatially as establishing, or questioning identity through alternate acts. With the affordance of networked technologies allowing students to extend out digitally beyond the classroom, or simply access alternative media, alongside course resources on one computer screen then questions must arise to any insufficiency within the classroom that surfaces as a desire to be, or communicate elsewhere. Or perhaps as these technologies are accessible and as illustrated here and in Section 2.3.2, there is a shift in what is considered by some as appropriate, or inappropriate use of technologies. All these considerations

still raise familiar pre-digital issues of motivation, focus and intent within the classroom but conceptions of bounded space becomes more contentious due to new digital technologies.

Deleuze and Guattari (1983: 26) use the expression desiring-production to draw attention to the notion of desire and lack as forces emerging from an, 'insufficiency of being'.   With this in mind, questions can be formed around an insufficiency occurring within the classroom on those occasions when students use technologies to digitally escape for a moment in time. Barad (2007: ix) uses the term *entanglements* in suggesting that 'existence is not an individual affair', adding that, 'individuals emerge through and as part of their entangled intra-relating' (ibid.). An entanglement that results in technologies being used non-educationally could thus be conceived as emerging through the disparities within educational setting when significant cultural changes are occurring and some parts of education remain within a mode of teaching and learning that stems from norms prior to these changes. Therefore to return to the beginning of this section, how students see themselves functioning as *being* students may not be quite aligned with how education and tutors currently do.

Using digital technologies, off-task as a break away from studies, for whatever reason, or to communicate outside of the classroom re-creates space within the classroom, which digitally extends the room beyond its educational intent. Greenfield, an authority on human centred technological systems, suggests that 'authoring space' (Greenfield and Shephard, 2007: 35) has been the sovereign imperative of architects but suggests that personalising an experience, such as listening to an iPod while walking can 'mitigate contingency in everyday life' (ibid: 36). The argument is that these actions afford the opportunity to leave the immediate surroundings, which to an individual may not be appealing, or engaging.

> The event produces an ambiguity of scale that defies geometrical analysis. Proximity and location become ineffective measures of spatiality. Distance loses its objectivity – its edge – to pressing questions of boundary and connectivity (Barad, 2007: 223).

In the context of Barad's (ibid.) comment, for students with certain cultural expectations of technologies the physical boundaries of a networked classroom may no longer be considered as binding in what activities take place. Therefore there is the question of what type of place a computer-resourced classroom becomes, or is viewed as, and therefore the spaces that can exist within it, or emerge from it.   All this raises questions as to just what influences how this

educationally bounded space can be conceptualised by its users. Dourish (2008) believes that within the application of digital technologies there is a profound need to understand spatial identity.

> Our presence, or absence in particular kinds of places, our movements through different kinds of spaces might carry important symbolism for who we are and how we think about who we are, how we enact who we are and how we relate who we are amongst each other (Dourish, 2008: no page).

For Dourish, absence may not just represent a lack of presence, but perhaps a deficiency, or non-participation with events specific to a place.

Technicity, the technological nature of being (see Simondon, 1989; Stiegler, 1998; Mackenzie, 2002; Stiegler, 2009), encapsulates the connections within identity formation where practices and preferences are subsumed with technology as a critical element of that formative process. In a digital age where technology is a social and cultural commodity, technicity forefronts shared practices that facilitate group belonging and for some a need to sustain that through the use of resources such as social networks.

In actual, or terrestrial space, that is 'the location where human experience and consciousness take on material and spatial form' (Low, 2003: 10), and where bodies, space and culture intersect the corporeal body is firmly located. In virtual space rules can and do still exist (see, for example, Suler, n.d.; Wallace, 1999; Gackenbach, 2007; Takahashi, 2009); nonetheless, the limitations of virtual and networked space are less bounded than the space that the corporeal body exists in, and, can conceptually escape from through digital technologies. This alternate digital interaction can be causal in the user of the technology *becoming* something *other* than they were in the immediate world that they physically inhabit.

Drawing on Lefebvre, Barad (2007: 224 emphasis added) declares, 'that space and society are mutually constituted and that *space is an agent of change*, that is, it plays an active role in the unfolding of events'. Massey, captures this spatial essence:

> …we recognise space as always under construction. [It is] a product of relations-between, relations which have to be carried out, it is always in the process of being made (Massey, 2005: 9).

Space emerges as a facilitator of interrelations: it is 'both a field of action…and a basis of action' (Lefebvre, 1991: 191). Therefore, need or desire can drive the action of contesting the space that is

physically occupied. As Charlesworth (2009: 263) comments: 'Presence is mediated by value'; see also, Section 2.1.6 on layers of presence. Having presence in different spaces at the same time, or oscillating between them, suggests that the computer-resourced classroom may be conceptualised as containing spaces of hybridity within it where different cultures and activities can co-exist, even if these are in tension with each other. Jenkins (2006: 112), suggests that:

> Hybridity occurs when one cultural space….absorbs and transforms elements of another; a hybrid work thus exists betwixt and between two cultural traditions while providing a path that can be explored from both directions.

There is the question if what Jenkins describes as occurring as a convergent event accurately represents hybridity, especially when cultures interact that are in tension with one another. What it does appear to suggest is something that becomes static and a new form of space that both cultures can then access with open consent. The value of considering hybridity in the context of this thesis is therefore how education might expect classroom technologies to be used and how students may view their use as both educational and cultural artefacts. Chadwick (2013: 8) suggests that hybridity offers a powerful way of thinking about situations where there is:

> …complexity, interdependence, and transition. It captures heterogeneity and those things that are irreducible to simple, unified essences. It eschews simple dichotomies and it alerts us to the unusual things that often happen when the new has continuities with the old.

This propositon serves to highlights how different cultures may view space and resources differently, or extend them from what others may see them as being used for. Therefore offering a means to explore education at a micro level, and if the interpretation of curriculum and pedagogy may not be adapting to satisfy students who exist in a world where often disparate activities can meet and co-exist. As Chadwick (ibid.) further comments, the Greek meaning of hybrid 'questions conventional understandings and the accepted order' and therefore can serve as a metaphor to unsettle fixed conceptions.

Kluitenberg (2011: 11), offers an alternate view:

> Hybrid Space is discontinuous and volatile, always varying in density or 'thickness'….In the thickness of contemporary hybridised spaces new modes of detachment and dissociation operate in conjunction with the drive for connection.

From this standpoint, hybrid space can be formed through the meeting of disparate spaces. The hybrid space therefore contains the possibility for variability and change or modification, rather than something more fixed that produces something new and settled. In this, it is the detachment and dissociation, together with connection that may help conceptualise the movement between educational activities and others more culturally and socially located, yet accessible within the discrete place of education. Therefore it becomes some-thing where differing cultures may intersect. The unifying factor then becomes the individual actor who uses agency as a strategic instrument to initiate the hybrid space. In this sense, the tactics of spatial resistance offered by de Certeau (1984) that become temporary acts, are opened up by networked technologies. In doing this they may be considered as being more durable and repetitive, 'within which the subject can withdraw himself, temporarily, from spatial determination' (Kluitenberg, 2006: 14).

Throughout this discussion, the capacity to move into another space, more digital than the classroom, can be seen as facilitating a temporary change. In some pre-digital cultures there existed, 'dynamic relations between spatial regions and moving spatial fields' (Munn, 1996: 465). The cultural being makes their own space in the world as they themselves are conceived of as a mobile spatial field (Low, 2003).

> People not only structure spaces differently but experience them differently and inhabit
> different sensory worlds. There is a selective screening out of some types of data
> accomplished by individuals "tuning out" (Low, 2003: 13 original emphasis).

These temporal, alternate and transposable spaces and actions are established through need - and more individualist agency - are apparent in Deleuze and Guattari's diffuse philosophy of space. In their texts they do not isolate spaces but perceive them as existing in combinations that are not always symmetrical. To move from one space to another that is more preferred is conceptualised as an affective change through a line of flight (Deleuze and Guattari, 1987: 89), one that re-creates or acts against a dominant situation. There is the question though if these lines fit the oscillation between spaces that may culturally occur in classroom events when technologies are used to facilitate this movement, and if a flight is more a movement away with little consideration for return. This will now be explored further.

If this is transferred to the context of a computer-resourced classroom then acts against any norms of education have the potential to be interpreted conceptually as lines of flight that embrace, or create a moment of opportunity afforded by networked technologies. Such a line, 'involves a

deterritorialization through a movement which interrupts or suspends familiar, confining, formal possibilities and their prescribed organic and social requirements' (Hughes, 1995: 46). Thus, a deviation, or line of flight, from educational events, or practices, escapes the space of education as new, temporary spatial formations are constructed. This understanding of a line of flight could be seen as liberating, rebelling or something more exploratory, perhaps through an insecurity of identity, or wanting to establish an identity: 'the idea of unruly 'lines of flight' is used to imagine ways of escaping this and 'becoming' otherwise' (Youdell, 2011: 32 original emphasis). For Youdell (ibid.), these lines of flight seem to be more tranformative than temporal. Therefore a slippage in identity away from education, or just the need for a break to digitally visit spaces of social-leisure interests is more a moment in time than something more permanent.

Deleuze and Guattari (1987: 203), offer an alternative approach when they very lightly touch on *lines of drift*, these 'compose us, as they compose our map…and may even cross over into one another'. Drift implies a movement that is less forceful, or preplanned by events leading up to it than the notion of flight away from something that seems so abhorent that it can no longer be tolerated. Duffy (2000) contextualises Deleuze and Guattari's concept by applying it to a sense of place and how some people attach and reattach themselves to events, such as music festivals which are interpreted as framing strategies for claims of belonging. They do this, in part, through movement and the 'alter[ing of] place by recoding it' (ibid: 63). The festivals, are fitted within a greater cultural context and a 'discourse of identity and belonging' (ibid). It is worth considering that drift is also not necessarily something activated by humans but also something more environmental. So, just as a drift away from studies could be triggered by the urge to be elsewhere, and a cultural space that networked technologies and media can afford, the educational activities or environment may initiate that change in flow. In a more literal sense, a raft or boat drifting on the current of river may go with the main flow until some dynamic change alters the flow and the craft drifts with it as that becomes the easiest route of least resistance. The craft may then return to the main flow after the diversion and this may be repeated. Lines of drift are located within improvisations that form part of a journey, but adopt 'different loops, knots, speeds, movements, gestures' (Deleuze and Guattari, 1987: 312). Although the philosophy of Deleuze and Guattari, can be quite oblique lines of drift, as opposed to lines of flight can offer an alternative viewing of students use of educational spaces, both actual and digital to drift on to more cultural off-task uses of technologies. A student absconding, or withdrawing from a course can be conceived of as taking a line of flight away from education. But a drift line that returns to the main flow, can be

conceptualised as going along with the main direction of education, but for some reason needing the occasional diversion.

Moving from one space to another as a means of coping with, or avoiding a situation can be located alongside de Certeau's concept of (1984: 30) 'ways of operating', which was discussed in Section 2.1.2. Deleuze and Guattari approach a similar strategy through an analogy with music and how they conceptualise the refrain. Their use of the refrain is in how it can establish a micro-territory in places or situations when comfort, or a form of protection is considered to be something that is needed.

> …the refrain is our means of erecting, hastily if needs be, a portable territory that can serve us in troubled situations . We whistle in the dark to keep phantoms of our mind's imagining at bay…we hum as we work to lighten our burden….That territory defends against anxieties, fears, pressures we feel; it doesn't do away with them of course… (Buchanan, 2004: 16).

Such actions can be viewed as 'a form of expression (becoming)' (ibid.). Becoming, emerges as a transitional act, moving from one thing to another to counter a situation that is less than ideal, or deemed as being uncomfortable. Through these actions a mediator is used, whether it is humming a tune, or within the context of this research through the affordance of digital technologies and the networked computer. In the setting of education this is a useful theoretical and ontological concept relative to both the educator and the student and what they draw on as a means to construct a refrain, and why this action is needed. In this sense bringing in new and digitally facilitated spaces through social or entertainment technologies, whether these be music, a mobile phone, social networking, watching videos and so on, or just casually browsing the Internet can start to form some meaning making as a form of escape, or alternative to being in the classroom as an educational space. This needs to be balanced alongside students using these technologies for a brief break, or a respite from an intense period of independent work.

What this section has aimed to illustrate from a range of sources is that the classroom, as a place of education has the possibility to contain different spaces within it, and in doing that hybrid spaces can be formed through the affordance of networked technologies. Hybridity can be a contentious term, depending on how it is applied and if it is intended to represent something that has longevity, or a space that functions as and when needed. Part of this may be represented by if the drive to move into a hybrid space is deterministic, or something that is more casual, repeated and a

temporary diversion that is needed to flow around an obstacle and then return to main direction of the current.

2.3.5 CONCLUSION: A NEED TO ESCAPE

To reiterate, the focal points of this ethnography, are the computer-resourced classrooms of an FE college. As a means to understand the spatiality that technologies afford, a range of discussions that bring technologies and space together have been drawn on as a means of engaging with the paradoxes that can occur within these classrooms. In the context of classrooms being formal places of education, within the research interests is the notion that these can exist as multiple spaces, and what can cause the formation of these and what their functions are. This notion of the construction of alternative spaces extends to how the formation of these divisions may be haphazard and erratic, or timely and structured and therefore potentially defined. Additionally, can these spaces be considered as affective geographies and therefore spaces that are creative and purposeful and needed, and if so, in what way? And, is technology the prime mediator in these divisions?

Lefebvre (1991) maintained that every society constructs its own form of spatiality relative to its ideologies and economic needs. It is the fabric of social existence formed by social actors, their actions and the environment that they inhabit. However, each culture's sense of place and the spaces within a place can be different to that of another and as spatial beings individuals and groups construct their meanings of who they are through their social and spatial interactions (Tuan, 1977). Any Euclidean notion of space as neutral and homogenous can no longer be conceived of as viable in a digital age. The spatial turn (Soja, 2000) reasserted space as a pertinent aspect of social theory, rather than historicism's privileging of time and space as 'being rather than becoming' (Massey, 2005: 29). Notably, as signified by Paechter (2004: 449), 'Space is largely ignored in both the theory and the practice of education'.

Thrift (1996: 1465) argues that 'what we are seeing is nothing less than a new dimension coming into existence […] This new space', which is facilitated by new digital technologies, signifies the same thing regardless of how it is named. Thrift (ibid.) adds that the new virtual space is an information space and how it is engaged with depends on how it is manipulated and inhabited. Yet although this is now something of a dated comment, it still holds as relevant considering how these different spaces can be populated for differing periods of time, levels of engagement and made use of through a range of digital platforms. Therefore further illustrating the continued development of

digital technologies and the need for research to acquire some footing in understanding the environment of the computer-resourced classrooms.

The argument exerted here is the research value of aiming to gain some understanding of how the occupants of these classrooms conceptualise them as digitally resourced learning and cultural spaces, by being able to digitally move between education and other more culturally familiar spaces. Such a mutable state of identity has the potential to bifurcate the classroom into formal and informal actual and digital spaces, all of which have the capacity to coexist, albeit at times in tension, within the one place.

CHAPTER 3: ETHNOGRAPHY AS METHODOLOGY

3.1 INTRODUCTION

> …study of culture concerns recording and analysing the uses of, and meanings attributed to and derived from, objects, artefacts and texts within the life spaces of agents (Willis, 2000:15).

In any study the choice of a methodology is crucial in defining and underpinning how a researcher approaches and progresses with the research from the start and throughout its stages (Cohen, Manion and Morrison, 2007). Therefore the aim of this chapter is to discuss the value of ethnography as an appropriate research methodology for a classroom environment and the research questions.

Section 2.3.4 deliberated on spatial geographies in the context of this research. Relative to the research questions and an appropriate methodology, it is worth revisiting the notion of the computer-resourced classroom as a socio-spatial environment expanded by networked technologies. That is, as having the potential to be a place that is multi-functional and multi-purposeful to the practices of its users, which therefore emerges as a space of multi-choices. To draw on Massey as an apposite geographical voice: 'a notion of space as organised, not into distinct scales, but rather through a vast complexity of interconnections' (Massey, 1998: 124). These, in such a temporal environment of the classroom can become, '*constellations of temporary coherence*' (ibid: 124-125, original emphasis), as it functions as a host of expectations. To gain an understanding of the classroom under this premise it is important to recognise that a micro environment is not contained – other than existing within its physical boundaries. It emerges as a space where 'both individuals and social groups are constantly engaged in efforts to territorialise, to claim spaces, to include some and exclude others from particular areas' (Massey, 1998: 126). It is within these existing, or potential social and spatial interactions that the methodology needs to function and be durable over the research period. It needs the capacity to capture data of complex social and educational behaviour and interaction.

Any research study needs to ensure there is a robust ethical approach within its design, how it is conducted and its distribution. Therefore the next section will present the ethical framing of the research and its aim to protect the rights, safety, dignity and well-being of all research participants, both during the research and through any dissemination.

3.2 ETHICS AND ETHICAL CONSIDERATIONS

The ethical approaches and decisions made prior to and throughout this research were guided by both the Economic and Social Research Council's (ESRC) Framework for Research Ethics (2010) and the Ethical Guidelines for Educational Research of the British Educational Research Association (2011). As part of this framing, the identities of all participants and the institution where the research took place have been protected by using pseudonyms. Although the research studentship was funded, the funding came from a proposal that was submitted independently by the researcher with no financial motive driving the topic.

Prior to the research commencing, permission to conduct the research within the college had been granted by senior management and the tutors involved. The research aims and what my presence during the research would entail were explained to all involved in the research. This included the teaching and support staff that would be in the classroom sessions during the period of the fieldwork and all of the students from each cohort. For each member of staff, the research itself and the methods that would be used were discussed on an individual basis to give them the opportunity to withdraw, or negotiate access or any other matters privately. For each student cohort, and with course tutors' permission, the research and methods were explained and discussed to the cohort in rooms, other than those where they would be taught. The course tutors were not present during this time. The rooms had been selected on the basis of having the facilities to enable all, including myself, to be sat on chairs facing each other. This was to ensure that I avoided addressing the students in a manner that they may have interpreted as a display of authority, such as a tutor addressing them at the front of a classroom. Both students and staff were given the opportunity to not participate at all, or just have either their observed behaviour, or interview data recorded or participate in both of these. All were made aware that they could end their participation at any time and that they had free access to the transcripts, should they wish to see them and that during the interviews they would not asked about any potentially sensitive, or distressing matters. Following this, all staff and students participating signed written consent forms, which indicated their level of participation (see Appendix 3).

The interviews were conducted in a comfortable environment, which for the students was a nearby empty classroom and care was taken to ensure that there was no harm to the participants. I ensured that my presence did not interfere with students' studies, or waste their time and the interview times were of their choice. The students and tutors were aware that the interviews could be terminated

during the interview should they risk taking too much of the participants time, or causing any undue stress to them.

Ethnographies can be covert in nature (Calvey, 2008; Li, 2008), but the purpose of the research, the researcher's role and methodological approach were made transparent to all. There was no hesitation from any of the gatekeepers and all were very supportive and granted access to the research sites without any stipulations, and this was maintained over the duration of the research.

3.3 PRE-RESEARCH METHODOLOGICAL CONSIDERATIONS

As the methodology needed to align itself with the research questions, this is an apt moment to revisit these. The principal question is: How are computers and digital technologies shaping the social learning environment of the FE classroom, when they are used as the primary learning resource? This is followed by the secondary questions: How do students use these technologies for research purposes and then the processing of the information that is sourced? How is students' use of these resources in the classroom affected by their potential for use as a social and leisure resource? What factors, environmental, social and personal affect the way students use these technologies both within a specific session and over the academic year? Therefore to gather sufficient data to enable a response to these questions, there was a need to be a researcher presence in the classrooms during a session and over the duration of an academic year.

These questions dwell on the impact of the inclusion of technologies into the social learning environment of the classroom. There is a particular emphasis placed on this as a social and cultural space, as over the duration of the two year course the students were together within these relatively small and enclosed spaces, for two, but mostly three hours in one session and for one cohort there were two sessions in one day.

As a social place the classroom has always contained alternative educational and cultural spaces within it, even if it was just social chitchat amongst students at the back of the room. But digital technologies have the official, or unofficial capacity to expand these, especially from the terrestrial and into the virtual. Central to this are the conceptualisations of how education works at a root level in a digital age; that is, students' responses to teaching and learning while having access to technologies in a discrete environment.

Data can be acquired through observation and interpreting the behaviour of the social actors in that setting, but it was important to have more than one method of data collection for a critical analysis of such a complex environment and topic. If students were using technologies in a certain way then why was that occurring and if there were changes to this over a period of time, then why did these take place – what prompted them? Suppositions can be made through observation but it was important to hear the voices of the participants themselves in response to the research focus.

These criteria unequivocally highlight the need for qualitative observation and interview methods. Qualitative research, 'locates the observer in the world….qualitative researchers study things in their natural setting, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them' (Denzin and Lincoln, 2005: 3). A more detailed examination of the research methods will follow in Section 3.8, but first ethnography itself will be discussed to situate it as an appropriate methodology for the research environment.

3.4 WHY ETHNOGRAPHY?

Relative to the research question of how students engaged with the coursework and technologies over the academic year, time needed to be invested in the research. Education is, by nature, time bounded and especially for this research, the duration of a session and the period of one academic year. Ethnography, as a methodology, is understood as a way of understanding and describing social worlds and how they can always be under construction through how the actors interpret and engage with the place (Emerson, Fretz and Shaw, 1995).

For a student cohort, the classroom is a temporary environment but one that is reoccurring in the set pattern of a course timetable. A key component was to understand the cultures functioning within the classroom, and students' responses to education and digital technologies. As this was also a time bounded culture there was also the individual viewpoints and behaviours of its users to consider over a period of time and how that could be collected as data. Just because the students were grouped into cohorts this did not mean that they became a cohesive community. In fact, in my previous experience I found that distinct factions often formed within a cohort and these were not necessarily long lasting and often subject to fluctuation over time.

As the research was fundamentally a study of a *culture in context* over an extended period of time then without doubt the most fitting methodology was ethnography. Time is foundational to

ethnography as a method for gaining insight into the processes and meanings of 'the everyday of place-bound action' (Herbert, 2000: 550); as context dependent 'it enables an exploration of the processes and meanings through which everyday life is maintained' (ibid: 564). The academic year can be a formative and developmental period in students' lives, which influences their short, and long term progression and futures. As such, there is a significant value in observing the classroom as a social learning place, which as such is, 'always in the process of being made' (Massey, 2005: 9).

The factor of time itself spent within the research field sets ethnography apart from other qualitative research methods and is an essential element in gathering rich data. Ethnographies take time and Hammersley and Atkinson establish this point in the opening page of their book:

> In its most characteristic form it involves the ethnographer participating, overtly or covertly, in people's daily lives for an extended period of time (1995: 1).

What qualifies, as an extended period of time is never made apparent. It is perhaps something of a thorny issue with the variations that are now possible in educational ethnography being so broad (Walford, 2008).

Only time, as it progresses, can allow the ethnographer to accumulate data from the social life of a culture, and it is precisely this social life in its *context* that shapes the ethnography. Social data is one substantial element but it is also the significance of the context, and how much that is a mediator of the social and cultural actions and interactions that ethnography is concerned with understanding. The aim is therefore for detailed and context specific data and this can only be acquired from more than just the occasional observation and interview. Any time spent in the research field is cumulative and transitory, whereas later, once the data is collated and analysed it detaches itself from current linear time and becomes 'points of fixity….points of vantage and reference, places to stand from…' (Leeson, 2006: 1). Not fixed points, in a static sense, but the span of time that flows through both ethnography and anthropology and with this the need, or necessity - even expectation - for 'thick description' (Geertz, 1973). This is the rich, in-depth data that 'goes beyond mere fact and surface appearances' (Denzin, 1989: 83) and is context specific. Rich data from social contexts also offers multiple interpretations, which can 'provide critical insights into the culture being studied' (Monahan and Fisher, 2010: 363). This is the essence of ethnography, regardless of an increase in more diverse methods and application in digital and

virtual environments (see, for example, Atkinson et al, 2001; Pink, 2001; Dicks et al, 2005; Kozinets, 2009; Pink, 2009; Thornham, 2011).

Ethnography has moved on from its early roots in anthropology and ethnology where the aim was to investigate tribal communities and the cultures of exotic 'others' (Malinowsky, 1922; Geertz, 1973) in some distant land. The broader focus reflects the significant social and cultural changes that have occurred in the world since a primary focus was recording exotic cultures before they disappeared.

A significant change in its utility occurred during the 1920s and 1930s when the Chicago School of Sociology and Anthropology (see Deegan, 2001) expanded the ethnographic focus so that it became acceptable to conduct research within one's own locality (Wirth, 1928; Suttles, 1968; Bulmer, 1984). They redirected their sociological attention to their own urban society and documented the ephemeral cultures and different patterns of life in an increasingly multicultural Chicago (Hammersley and Atkinson, 1995). Now, rather than the previous need to travel and live with the 'natives' the ethnographer could visit the sites that were culturally and socially different, whenever they needed to and then return to their own lives at the end of the research day.

3.5 ETHNOGRAPHY AND THEORY

> …social processes cannot be understood in terms of some immanent, fixed pattern of causal relations' (Hammersley, 2008: 42).

> Pedagogic voices can be shockingly quiet about issues of social context, as if the four walls of the classroom, sanctuary-making as they can be, contain all that is necessary to understand and direct what goes on within them (Willis, 2003: 413).

An aim within this research is to draw a number of theoretical concepts into the ethnography, which were introduced during Chapter 2. These will serve as analytical tools with the data and this section therefore brings into the discussion some considerations towards how theory can be combined with, or developed from data.

Ethnography has broadened its capacity since its foundational periods, and this development has even extended to ethnographies of the self (see, for example, Reed-Danahay, 1997; Spry, 2001). It is from this approach to investigating the micro-elements of cultures, both terrestrial and also the

virtual (Hine, 2000; Slater and Miller, 2000; Kozinets, 2009) where ethnography can expand understandings of familiar contexts, not only empirically but also theoretically.

> …the choice of ethnography carries with it implications about theory, epistemology, and ontology. Ethnography not only implies engagement of the researcher in the world under study; it also implies a commitment to a search for meaning, a suspension of preconceptions, and an orientation to discovery. In other words, ethnography involves risk, uncertainty… (Ball, 1990: 157).

The integration of theory into ethnography has introduced both boundaries and possibilities as it intersects with diverse theoretical and analytical frames; though Hammersley and Atkinson (1995) note that not all ethnographic work needs to be concerned with the testing and refinement of theories. Although ethnography is an appropriate method for micro level theories, it can also be used to test macro level theories. Hammersley and Atkinson (ibid.) cite Willis (1977) as one particular example of this in an educational context where he observes the complex dynamics behind counter cultures and the supposed free choice of individuals, which eventually act to preserve social conditions and reproduction.

Amongst the focus of this research is an interest in students' non-academic use of technologies. This practice has been identified as being prevalent across many educational sectors and rather than just drawing attention to it, there needs to be knowledge generated about why this is occurring and what can provoke these actions, rather than responding with reactive measures, such as filtered Internet access, discipline or a resignation that this is a current and unavoidable trait. These examples are conveniently drawn on, but ethnography can investigate into social and cultural behaviour and ask questions and perhaps 'block the reproduction of the bleeding obvious, and thereby, hopefully, open new possibilities for thinking and doing' (MacLure, 2010: 277).

> Theory stops us from forgetting, then, that the world is *not* laid out in plain view before our eyes, or coyly disposed to yield its secrets to our penetrating analyses (MacLure, 2010: 278).

Importantly, within this superficially closed, yet sociocultural environment of the classroom it is what occurs and influences actions and behaviour that warrants an understanding.

Although ethnography is grounded in the social context of a particular setting the analytical gaze need not be so fixed and it can also turn outward and make broader connections (Hammersley and Atkinson, 2007). For example, the micro cultures of a gym can underline issues of race and masculinity (Wacquant, 2004). In the case of classrooms, as discussed in Section 2.3, the

performative cultures of education can result in tutors adopting an instrumental approach to their pedagogy (Simmons and Thompson, 2008). This is not to reify theory, but the thought that an appropriate choice of theory may provide a valuable lens and analytical tool, to draw on as both a conceptual and reflexive resource (Ball, 2006).

> …ethnographers should become promiscuous bricoleurs, selecting whatever techniques, theories, or insights can be best deployed in a particular project (Delamont and Atkinson, 1995: vi)

From an interview extract Willis advocates a similar approach.

> Don't be a pedant! Try and get the essence of what they're saying in practical and useable form and throw the concept at what interests *you*, and see if it sticks. If it is illuminating and interesting, fine, then remodel the concept, be a bit less of a vandal. If it doesn't fit, try throwing something else (Mills and Gibb, 2001: 412 original emphasis).

To conclude this section, an appropriate use of theory can avoid methods and even those theories 'that closes one's eyes, or […] occludes one's view of the environment around' (Thomas, 2007: 3). That is, not to over-code with theory but for the deployment of theory for interaction and engagement with the empirical data where, 'to theorize is not to leave the material world behind and enter the domain of pure ideas […] *Theorizing, like experimenting, is a material practice*. […] theorizing and experimenting are not about *intervening* (from outside) but about intra-acting from within…' (Barad, 2007: 55-56 original emphasis).

In ethnography there is also a question if the researcher has an influence on the research context, or if they can become influenced by it in some way. The following section draws into this topic the concept of reflexivity and the need for the ethnographer to be reflexively aware.

3.6 REFLEXIVITY AND THE REFLEXIVE ETHNOGRAPHER

> It is not a matter of looking harder or more closely, but of seeing what frames our seeing… (Lather, 2007: 119).

Observation can be construed as, 'always filtered through the researcher's interpretive frames' (Schensul, Schensul and LeCompte, 1999: 53). Being accurate in what is observed and recorded is considered as a 'scrupulous attention to detail' (ibid.). But is there still vagueness towards the depth of detail that the observer sees and the lens it is viewed through? As an educator in a familiar

setting, albeit in a different role, even if I was interpreting through the framing of a researcher how much of the educator would still remain?

Consequently there is the need for a researcher to practice a self-critical attention towards any of their assumptions shaping the research process (Cohen, Manion and Morrison, 2007). However, this can also be a point of dispute, where the notion of standpoint reflexivity as being able, 'to 'step back' from culturally laden prejudice, is rejected by many social and cultural analysts today' (Lynch, 2000: 31).

> No matter how epistemologically reflexive and systematic our fieldwork is, we must still speak as mere mortals from various historical, culture-bound standpoints…(Foley, 2002: 487).

As Foley indicates, there will inevitably be something of the ethnographer that encroaches into the research. Lynch (2000: 36), considers that what reflexivity does, is all down to 'who does it and how they go about it' and Wacquant adds, 'conceptions of reflexivity range from self-reference to self-awareness' (Bourdieu and Wacquant, 1992: 37), therefore raising issues of individualism. An indication is that qualitative enquiry, especially ethnography conducted by one researcher, can become, 'a journey—a complicated, self-inhabiting one' (Newman, 2011: 544) where what is seen, and how it is seen, needs to be interrogated as an iterative practice that is subsumed into the act of *being* an ethnographer. In this research, the reflexive interrogation of myself as ethnographer and also educator not only took part during the time in the field but beyond, as the data was interrogated and then as the ethnography, as thesis, was written.

Ball (1990: 159), with a focus on fieldwork, posits reflexivity as, 'the conscious and deliberate linking of the social process of engagement in the field with the technical process of data collection and the decisions that that linking involves'. St. Pierre has researched in locations where she retained a significant personal history and she confronted her memories of those places that enveloped her during the research. She emphasises that, 'we must confront the constraining framework of our pasts' (St. Pierre, 2008: 121); adding, 'one must be placed for a time in order to remap one's cartography' (ibid: 122). Therefore suggesting that going into familiar places but with a different agenda needs a reorientation of self *and* place and self *to* place.

As I always carried some part of the educator in me while in the field, despite any bracketing away, a level of familiarity was inevitable. Consequently, during the research there was always a

negotiation between my awareness of myself as an educator and all that could potentially bring into the research field and my priorities as an ethnographer. Within this proposition there is also the potential of a fine balance between reflexive limits and a working towards reflexive *self*-indulgence or narcissism (Weick, 2002; Nadin and Cassell, 2006) and the boundaries of how much an ethnographer draws on and reveals of themselves as the research progresses and moves on to the text.

Coffey (1999: 132) suggests that there is a, 'question of balance between the voices of ourselves, as knowing subject/object, and the desire to recognize and reveal the voice of others'. The implication is therefore that:

> …all ethnographic work implies a degree of personal engagement with the field and with the "data" (which are always *made* and not "given") (Atkinson, Delamont and Housley, 2008: 52 original emphasis).

Reflexivity emerges as not something that can be gauged by measurement, but more judgement as Willis, an ethnographer of education, considers that an element of the ethnographer can be drawn on to enrich the research.

> In terms of direct field relations, I have long argued for a form of reflexivity, emphasizing the importance of maintaining a sense of the investigator's history, subjectivity and theoretical positioning as a vital resource for the understanding of, and respect for, those under study (Willis, 2000: 113).

Initially, I had pondered over the point that being aware of reflexivity was sufficient preparation for the research. Was it something to be slipped in and out of quite easily? Reflexivity has been referred to as the ''unknown soldier' of social science: hats are doffed to it but nothing is done to establish its identity' (Archer, 2007: 62 original emphasis). In this manner reflexivity is positioned similarly to ethics, in that ethics can also be greeted courteously with a 'tipped…hat' (Caputo, 1993:1) and a nod and we then pass it by and carry on with what we intend to do.

The very notion of reflexivity acknowledges that there is the capacity for self-awareness; a danger then is if it becomes a complacent process. Therefore my relationship to the research sites, as an insider, which is discussed in more detail in the following sections, and particularly in Section 8.2, was a reflexive process throughout the ethnography.

3.7 INSIDER RESEARCH: THE RISK OF FAMILIARITY AND BIAS

> …research conducted from within […] forces us to ground our work in everyday issues as those involved experience them, it confronts us and others with our assumptions, perceptions and their consequences (Smyth and Holian, 2008: 34).

When the research field is a familiar setting, in my case the workplace, reflexivity can become even more multifaceted, especially when there are existing field relations and the ''ascribed' characteristics… [of the researcher]…may limit the negotiation of identities in the field' (Hammersley and Atkinson, 2007: 73 original emphasis).

The duration of the research period and the depth of engagement that this would incur raised initial concerns of the risk of becoming over-familiar, or 'going native' where a 'bias may arise from 'overrapport'' (Hammersley and Atkinson, 2007: 87) with the participants. If this occurred there could be the risk of developing a partisanship with fellow professionals (Hammersley, 2000), or even with students towards any issues that might arise. This proposition needs to be balanced against 'the longer you observe for the more your understanding should grow and develop' (Delamont, 2008: 44). The reflexive distancing from a familiar setting and context, and subsequent avoidance of what Alvesson (2003: 189) refers to as 'staying native', when researching as an insider, is understandably difficult to maintain.

To avoid overfamiliarity occurring the ethnographer is advised to approach the research context from a different perspective than before.

> Even when he or she is researching a familiar group or setting, the participant observer is required to treat this as 'anthropologically strange' in an effort to make explicit the presuppositions he or she takes for granted as a culture member. In this way, it is hoped, the culture is turned into an object available for study (Hammersley and Atkinson, 1995: 9 original emphasis).

This guidance was quite relevant during the data collection, as previously I approached FE classrooms with a different task and adopted a much different outlook towards what my priorities were. Therefore to sit and observe, or interview students was in itself disorienting and therefore rendered what I was seeing and hearing into a different perspective.

Becker (1967) suggests, as a number of the theorists in the previous section did, that research will invariably be tainted to some degree by a researcher's history. He adds, any distortions should be

limited through appropriate research strategies and deploying 'our theoretical and technical resources to avoid the distortions that might introduce into our work' (Becker, 1967: 247). Becker's paper focuses not on reflexivity as such but on accusations of bias, rather than bias itself and therefore those conditions where risks could arise. Hammersley (2000) develops Becker's argument and proposes that accusations of bias are very much the product of the situation that a researcher can find themself in where there are power issues at play, and where the researcher's findings may not align themselves with those of any superordinates. These could be from invested interests, or power differentials, in the shape of sponsors. As a term, bias is shot through with tensions and ambiguities, but where there is 'motivated bias' (ibid: 166) it has a potential to threaten the integrity of the research. Some, especially funding sources or other gatekeepers, may *expect* to see findings that are supportive to their interests. For this research, this was not a concern, as the institution funding the research and those participating had no expectations from the ethnography other than its potential for new knowledge on the topic.

To draw this section towards a close, my aim was to establish conditions where both students and tutors could be observed with as little affiliation as possible. As Becker (1967) suggests, in itself, this is a difficult position to attain. Deleuze and Guattari, drawing on perceptual semiotics, suggest that 'it's not easy to see things in the middle' (1987: 23). My resolve was that I needed to see familiar surroundings more as 'unknown lands' (Deleuze, 1995: 103) and without *some* of what I normally carried with me in this environment.

As a researcher, I needed to adjust to being an ethnographer who was also an educator. This process was not a simple transfer of how or what I observed, through the activating of some switch, but more what was being observed and how it was interpreted. I could never be what Agar (1980) terms a 'professional stranger' (Agar, 1980) due to my history in that environment but I did not view that as being unduly detrimental. As Smyth and Holian (2008) suggest any notion of insider research being totally objective needs to be surrendered. Instead, the existing knowledge of an environment can afford a unique perspective (ibid.), as long as there remains an inherent credibility to the data gathering and analysis. During the initial stages of the research my role as an educator did intrude and I noticed that I had to resist observing the classroom activities in the same manner that I would have, if I had been their tutor. For example, were all the students focused on their work, what progress were they making with their work? By looking at early fieldnotes I realised that I was viewing this from a productivity viewpoint by checking if they were making reasonable progress instead of using the lens of an ethnographer. Once I had settled in to my researcher role,

the educator in me afforded my new status a greater insight into the activities in the room, as I was aware of the learning and evidencing expectations of the sessions and what activities the students should be doing.

3.8 DATA COLLECTION METHODS

Inevitably data collection will always have some limitations. This section will focus on both observation and interviews, which were selected as being both apposite for collecting data for the research questions and for their practicality of administration by an individual researcher. Hammersley and Atkinson (2007: 3) comment on the ethnographer's methods as:

> …. watching what happens, listening to what is said, and/or asking questions through informal and formal interviews, collecting documents and artefacts – in fact, gathering whatever data are available to throw light on the issues that are the emerging focus of inquiry.

3.8.1 OBSERVATION

The most fundamental of ethnographic research methods is observing the culture that is being researched in their natural setting. Observation can record the social interactions and methods of communication amongst the participants, and the time that is spent on the range of activities available and therefore any individual and cultural patterns, or breaks in those patterns (Wolcott, 2008). It can also provide the researcher with a source of questions to ask about observed behaviour when interviewing the participants (Bernard, 2006); resultantly there needs to be some thought given to the level of participation by the observer in the research setting.

3.8.2 OBSERVER PARTICIPANT

By being present in all of the classroom sessions from the start of the academic year to its end the anticipation was that I would become accepted within the social fabric of the classroom. Participant observation is what produces rapport and to be able to see what might not be seen in other circumstances by ensuring that everyone is comfortable with the presence of the researcher (Bernard, 2006). It is defined 'by researcher presence at the event being observed' (Schensul, Schensul and LeCompte, 1999: 92). By blending into the community the participants will act naturally and as Bernard (2006: 334) comments it 'puts you where the action is and lets you collect data […] experiencing the lives of the people you are studying as much as you can'. The caveat

that Bernard draws into this participant immersion is not to get too involved and lost in the experience, as the researcher also needs to remove themselves from the immersion so that the data can be collected, 'so you can intellectualize what you've seen and heard, put it in perspective' (Bernard, 2006: 344). Alongside this viewpoint a '"prolonged engagement" and "persistent observation"' in the field is considered by Lincoln and Guba (1985: 193) as capable of producing more trustworthy findings, as there are then greater opportunities to observe and interact within the research site. Although, as indicated in the previous section this can develop the risk of 'going native' through the prolonged engagement (ibid.).

To observe without participation in this context bore the risk of being more intrusive by alienating myself from those within the room. Especially as being a tutor I presupposed that the students might ask for support if the session tutor was otherwise engaged; under such circumstances you then 'occupy the place where an act pushes you' (Lacan, 2008: 5). To resist this would distance myself from those that I was trying to understand. One outcome from this that was hoped for, was that the periodic interviews then became a less formal event and more of a discussion, and from the students' point of view just one of the occasional events of their time at college.

Therefore during the research the aim was to adopt the role of a participant observer, or more appropriately an observing participant (Alvesson, 2003: 174) with the more limited role of an academic support tutor. From the outset, it was made clear to the students that apart from my research interests I was also available to support them with any questions they had with their academic coursework, if the tutor was preoccupied. In this way it also helped in getting to know the students more and their approaches to their work and uses of technology. Although there was the potential risk that this could focus my attention too much towards students being on-task, or off-task this support role was passive and only triggered on a student's request. If students directly asked me for support I would discuss any issues with them, if the tutor was busy, but I would avoid directly asking students if they needed help if I became aware of a need through observation, or comments overheard. This situation raised the distinction between the 'participant-as-observer and observer-as-participant' (Hammersley and Atkinson, 2007: 85) and the concomitant risk of becoming too much of a participant and losing sight of the researcher responsibilities. Therefore there was a continual need to manage the primary role of ethnographer, especially as the immersion became more prolonged and there was a risk of becoming too involved in the participant identity. Although in practice, the researcher administrative routines, prior to the sessions starting, and the

subsequent observations and note making also acted as identity establishing acts for the primary purpose of being in the classrooms.

There is also an alternate way of considering how being immersed in an environment can affect and change a researcher's outlook both as an individual, and a professional. As an assemblage of many parts I am 'both effected through relations…[but] at the same time, life is not reducible to effected or actual relations' (Colebrook, 2005: 3). By engaging with the participants there was the risk, as discussed earlier, of getting to know both students and tutors more than before, with the subsequent concerns around partisanship and developing sympathies with those I was researching. This could then jeopardise the integrity of the research. There is also the argument that to try and minimise observer effects, and also the situational effects on the observer there is a risk to the rich data that can emerge from an ethnography. Therefore, to 'impose artificial constraints on the fieldwork [could] diminish the scientific endeavor' (Monahan and Fisher, 2010: 370). It is the interactions with informants that can bring the ethnographic 'rewards'. By retaining a presence with the participants, rather than forcing a distance, any 'webs of significance' (Geertz, 1973: 5) can become more apparent.

There is not only how the observer participates in the research field to consider but the effect they can have on it by actually being there, and the following section will now examine that in more detail.

3.8.3 OBSERVER EFFECT

Despite the necessity of observation in ethnography a potential weakness is the possibility of 'observer effect'. This is the effect that the actual presence of the observer may have on those being studied, which can consequently distort the context, data and subsequent research findings (LeCompte and Goetz, 1982). LeCompte and Goetz (ibid: 46) considered that, 'what observers see and report is a function of the position they occupy within participant groups, the status accorded them, and the role behaviour expected of them', with the criticism that the deeper the ethnographer participates the less they retain an objective distance and the data then incurs, 'researcher-induced distortions' (ibid: 48). An instance may be that some participants behave contra to their normal selves as they 'provide what [they] believe the researcher wants to see' (ibid: 46), or how they would like to be perceived. There is also a risk that the observer may make some participants uncomfortable and they subsequently react untypically while the observer is present. Although this

proposition is voiced as a negative element of research it is countered by the suggestion that such a performance may, 'reveal profound truths about social and/or cultural phenomena' (Monahan and Fisher, 2010: 358), as the data is there to be interpreted and it is not the actual results of the study.

My previous experiences had been that any responses to an unfamiliar adult entering a classroom resulted in an initial and short curiosity from the students then the classroom then quickly reverts back to what it had been. Students are used to this from the audit cultures that exist in education from Ofsted or internal inspections, or teacher training observations. During an ethnography, the difference is that the initial observer who may have been a stranger to the students and even the teaching staff stays for longer and then becomes a regular part of the environment even if they are not contributing to the purpose of the sessions. Even over the duration of the year I was aware that in the confines of a classroom there would always be the risk I could distract students, or cause them to become uncomfortable if my presence was too intrusive. Consequently, I was continually conscious of how I placed myself in the rooms. For example, I avoided standing directly behind, or too close to the side of students and the size and layout of the rooms meant that in most circumstances I could observe with minimum intrusion.

3.8.4 ETHNOGRAPHIC INTERVIEWS

During the research there were both semi-structured interviews in a separate room and also more informal interviews, or discussions with participants in both the classrooms and other areas, especially with the tutors. Considering my presence and the reason for being there, these informal discussions with students about their work and other research relevant issues would be inevitable and a valuable source of data. Bernard (2006: 211) posits that informal interviewing helps all parties involved to settle in at the start of the participation observation fieldwork and used throughout they can aid in building a stronger rapport with the participants. Interviews, generally, can strengthen the validity of the research by checking interviewees' comments with what might have been observed and therefore confirming, or questioning some aspects of that. As Walford (2009: 118) adds, 'one of the central beliefs of ethnography is that multiple methods should be use in an investigation and, in particular, that interviews are unlikely to be productive by themselves'.

There are some criticisms towards data obtained from interviews, not least as they are seen as co-constructed by the interviewers and interviewees and that the interviewee's knowledge may be incomplete or that their memory may be at fault (Walford, 2009: 118). Walford (ibid.) adds that

interviewees' responses will always be subjective and contain whatever the interviewee is prepared to disclose. In this research it was precisely those subjective opinions that were useful to gain some perception of how students viewed the classroom and their approaches to their coursework, including the values they gave to technologies within the classroom.

Observation is the most foundational method of ethnography. However, observation itself is limited, in that it can only retain what the researcher sees and decides to record, or even has the capacity to record. To access more hidden forms of knowledge, directly from the participants, needed the inclusion of interviews so that the participant voices could be heard. Of particular interest was to compare how students were observed interacting with the technologies, with how they themselves considered that they used them and what, if any, discrepancies emerged from this. For example, if they considered that they only occasionally accessed social networks did this agree with their observed usage? That is not to say that there was an intent to check for anyone deliberately giving misinformation, but more that there could be a misjudgement of time when engaging with social or entertainment technologies.

As such, the value of ethnographic interviews is that they can 'penetrate social life beyond appearance' (Crouch and McKenzie, 2006: 483), affording 'a means for exploring the points of view of our research subjects' (Miller and Glassner, 2004**:** 127) by 'elicit[ing] the statements to be analysed' (Crouch and McKenzie 2006: 486).   In this way the activities within the classrooms, and students responses to their time at college could be engaged with through the questions and discussion, rather than just relying on observation. Interviews offer more sensitivity to individual accounts and the multiple and situational realities of those studied (Emerson, Fretz and Shaw, 1995); not least the opportunity for any interesting and unexpected data that may emerge from semi-structured interviews. As 'friendly conversations' (Spradley, 1979: 58) with a purpose, they were just as much part of how data was accrued during the research as the observations.

> …meanings and understandings are created in an interaction, which is effectively a co-production, involving researcher and interviewees…involving the construction or reconstruction of knowledge more than the excavation of it (Mason, 2002: 63).

The role of the interview in this context is seen as enabling situated knowledge to be constructed through the researcher ensuring that 'the relevant contexts are brought into focus' (ibid: 62). Following this premise, the value of ethnographic interviews are that they can 'penetrate social life beyond appearance' (Crouch and McKenzie, 2006: 483), affording 'a means for exploring the

points of view of our research subjects' (Miller and Glassner, 2004**:** 127) by 'elicit[ing] the statements to be analysed' (Crouch and McKenzie, 2006: 486).

Interviews, offer more sensitivity to individual accounts and the multiple and situational realities of those studied (Emerson, Fretz and Shaw, 1995). As 'friendly conversations' (Spradley, 1979: 58) with a purpose, they form an assemblage of data with the observations. Not least as the interviews were periodic over the year and therefore were to prove valuable in exploring change during that period.

Although interviewing people through surveys is a relatively common occurrence in everyday life (Holstein and Gubrium, 2003), and the most frequently used method to generate qualitative data (Nunkoosing, 2005) there is some acceptance of the directive role that an interviewer plays. Through this notion, interviews can be conceptualised as operating within power relationships (Kvale, 2006; Vähäsantanen and Saarinen, 2012), even as a one-way dialogue, or asymmetric relationship (Holstein and Gubrium, 2003). However, it is not only the interviewer who can control the situation by arranging the venue, topic and questions, control can also arise through an interviewee's responses where the 'exercise of power is seen as a two-way process' (Vähäsantanen and Saarinen, 2012: 2). Indeed, interviewees can withhold information, or act in other ways that could affect the integrity of the interview (Kvale and Brinkmann, 2009). They may even have an agenda for responding in a particular way and if that can be identified then potentially deeper meanings, which are not immediately obvious may become apparent. Therefore the respondent's point of view may not be a true reflection of the *reality* of the context, or as Miller and Glassner (2004: 127) suggest, 'the culturally honoured status of reality'. This distinction can be a predicament when trying to gain meaning from data. Some issues may be clarified through observations, although it can be, as Denzin (1991: 68) comments, that 'language, which is our window into the subject's world…plays tricks…so that what is always given is a trace of other things…'. Miller and Glassner (2004) add that qualitative research fractures any stories anyway, because any narrative will always be partial.

When interviewee's responses differ from others on the same points this potentially rich collective can provide a broader narrative of the situation. The data can then be analysed for discrepancies and any implications towards the research topic. The value of this, in this research context, is that students and staff from differing backgrounds and objectives come together in a small social space for set periods, but how they respond to it will inevitably not be uniform. Consequently, the

interview data can be viewed as a valuable collective of different stories and responses to this enclosed, digital environment.

3.9 CONCLUSION

Taylor (2001) considers that due to the times that we are living in, things are changing fast and the modern challenge is now to understand the moments of complexity and even those forms of resistances that occur, especially those bounded by technology. The extensive introduction of computers and other digital technologies into classrooms is only a recent occurrence and this approach to education is still expanding. Therefore there is a need to understand the complexity of this environment, which is contained by four walls, but expanded through networked technologies and the pressures and expectations that are on that space and those that are taken in by both students and tutors.

The aim of this chapter has been to situate ethnography as an appropriate methodological approach to the research questions and the data collection methods that are fitting for the context of the research.

The following chapter will present the college sites where the research was conducted and outline the rationale behind the research sample and details of the participants. As it is a two-part chapter, the second part will focus on the collection of the data and the approach to analysing it.

CHAPTER 4: THE RESEARCH SITES AND DATA COLLECTION

4.1 PART 1: THE RESEARCH SITES AND PARTICIPANTS

4.1.1 INTRODUCTION

The aim of Part 1 of this two-part chapter is to introduce where the ethnography took place and the characteristics and differences of the research sites. The decisions behind the research sample and an outline of those who participated in the research will also be presented. This leads on to Part 2 that discusses the collection and analysing of the data itself.

4.1.2 LOCATING THE RESEARCH

The ethnography was conducted at two sites, both part of North Dale Further Education College that is situated in the North of England with one main campus and a number of satellite sites. The smaller sites were more specialist in nature and included one of the research sites, a contemporary music centre, which was located some 10 miles away from the main campus. The remainder consisted of a number of craft based sites, all situated within a 12 miles radius of the main campus.

At the time of the research there were over 2,000 full-time and 1,500 part-time students studying at the college, with the number of 16-18 year olds enrolled being almost equal to those aged 19 and above. Though within these figures the majority of the 16-18 year old students were enrolled on full-time courses and those aged 19 and above had a bias towards part-time courses. Approximately another 1,500 students were enrolled on employer provision courses, which were typically weighted at some 70% on funded Train to Gain courses, which aim to ensure the basic vocational skills development of the workforce, and the remainder on apprenticeships. The college also catered for a range of 14-16 year old students and apart from a small number who had been excluded from school and were on remedial courses, they were predominantly students who were still at school but attending the college for one day a week to experience vocationally orientated courses. The significant majority of the staff and students were of white British origin, which reflected the demographics of the local population.

4.1.3 RESEARCH SITE CHARACTERISTICS AND DIFFERENCES

The two research sites were very distinct from each other: the music centre was smaller in size and resources than the main college campus where the media students were located. The centre established a separate identity with the music students having no need to visit the main campus, as all of their needs were there. It was a similar situation with the staff, who only taught there and very occasionally needed to visit the main campus to attend curriculum area meetings, or the occasional professional development event.

Campus refectories can often be a central meeting place for both staff and students, and the main campus had a large refectory with six staff preparing hot food and snacks, whereas the music centre's provision was a small common room with one vending machine for cold drinks. If either staff, or students wanted anything to eat, they usually walked to the next street to a typical 'greasy spoon' café with limited seating space. As the surrounding area was predominantly industrial units this was the only nearby source of food, apart from those who brought their lunch with them or wanted to walk into the city centre which took approximately 15 minutes. The students frequently used the café to buy 'chip butties' or bacon or sausage sandwiches, which they then took back to the common room to eat. In some way this small café was part of a music centre ritual during breaks and lunchtimes.

The media students used the college refectory occasionally, but if the weather was conducive they walked into the town centre in small groups to buy lunch at a Tesco supermarket, or a small bakery and eat whatever they bought on the walk back. Apart from the refectory, there were no other places that the students could go to during their breaks apart from sitting on some small, grassed areas.

A common educational resource is a library, or LRC (learning resource centre). The main campus contained a small LRC in a single storey building that also housed a small number of classrooms. The LRC space had previously just been a library containing hard copy texts but much of the space had been replaced by rows of computers for students to use for private study. Surprisingly, the area was often quite noisy from student chitchat; for those who wanted a dedicated quiet study area there was no provision on the site. For the media students there was a basic range of media books but many were out of date, due to the rate of change in media, technology and software. In the very cramped media staff office there was one shelf of books that students could ask the tutors for.

These had either been brought in by staff, or borrowed from the LRC and there were also a very small number of inspection copy texts from publishers.

The music centre was very limited for space with no dedicated area for study resources. There were a small number of books and magazines on popular music that the students could access, but these were held on a shelf in a small office type room on the ground floor that was occasionally used by one tutor for guitar tuition. Most of the literature in there had been owned by tutors and then donated to the collection. The room was locked when not in use, so for the students there was no casual access.

4.1.4 THE CLASSROOMS

The computer-resourced classrooms where the research took place were all situated in converted, rather than new buildings. The media cohort only accessed one classroom, which was one of five ICT equipped rooms in a detached single storey building on the main campus. Although there were two other media classrooms for the other levels of the subject, they were not situated together. The music centre was situated in a much older detached Victorian building that had been converted into office type spaces and classrooms. On the ground floor were soundproofed music rehearsal studios and a small student common room. This floor was also shared with a small number of non-educational organisations that rented office space. The first floor held the computer classrooms and a staff office, but the classrooms were very occasionally used during the day for part-time courses that catered for professional development in the workplace. They were also occasionally used on an evening for adult ICT classes. This and the fact that the ground floor was shared with non-educational organisations resulted in a lack of any distinct identity to the building. Anyone approaching, or entering the building would have found it hard to imagine that it housed full-time music courses.

Regardless of the differences between the sites all the classrooms could have been non-subject specific computer classrooms in any location, such was their relative blandness. The rooms, although differing in size and shape all had the individual computers situated around the perimeter, which meant that the students usually sat facing the walls. In each room there was one staff computer at one end of the room and an interactive whiteboard. The classrooms used by the media department were not totally media dedicated rooms and they were very occasionally timetabled for other courses that needed access to computers. Also, at certain times of the year the media sessions

needed to be relocated to a substitute room, or move a session to another time if the room was needed for online exams for other courses. The computers and monitors in the media rooms were of a much higher specification than others in the college due to the needs of the specialist media software installed.

4.1.5 THE RESEARCH SAMPLE

Accessing a purposeful sample (Denscombe, 2007: 17) of participants was essential to the specificity of the research question and this section will present details of the students, and the staff involved in the research.

The student cohorts selected reflect the principle that the intention of the research was not to make representative, or generalisable claims about FE students use of digital technologies in the classroom, as a collective. It is more to provide an in-depth enquiry of students' practices where technology was used *extensively*, rather than intermittently, as part of their course. As Cohen, Manion and Morrison (2000: 143) comment:

> A criterion-based selection requires the researcher to specify in advance a set of attributes, factors, characteristics or criteria that the study must address. The task is then to ensure that these appear in the sample selected.

As the overall research focus was to investigate the effect that digital technologies had on students' practices in the classroom when they were used as day-to-day artefacts there was already a limiting factor in selecting a sample within a relatively small college. From a survey of the college courses and the timetables of the computer resourced rooms with the cooperation of the college estates personnel, without exception, Media and the Performing Musician courses were found to be the curriculum areas where students used computers significantly for their academic research and evidencing and also creatively with subject specific software. As media courses were based on the main college campus and music on a much smaller, self-contained site some distance away there was also the opportunity to identify if there were any disparities emerging from the data that might be attributable to this.

The media students were always timetabled in their classrooms, apart from those sporadic occasions when they needed to go into the college grounds to shoot footage for videos. This was different for the music students, as apart from their classroom sessions they also had timetabled sessions in soundproofed studios. From studying the timetables of both areas it was fortunate that logistically

there was the opportunity to be in all of the classroom sessions of a second year Level 3 media cohort and all of those of both the first and second year cohorts of the Level 3 music.

There was also a first year Level 3 Media cohort but to include these within the sample would have resulted in logistical difficulties and a subsequent dilution of rich data by losing the continuity of being with the three selected cohorts in all of their sessions.   Therefore, there was a slight element of convenience in the sampling, 'as our time and access for fieldwork are almost always limited' (Stake, 1995: 4) and as Becker (1998: 67) comments, 'we can't study every case of whatever we're interested in'. However, due to the very limited number of cohorts of students across the college who had high exposure to digital technologies the sample is very representative. What follows is a synopsis of the cohorts and staff who participated in the research.

Level 3 Media Year 2

The media cohort consisted of 15 students in total, 8 male and 7 female. Eleven were aged 17-18 and 4 were 18-21 (2 male, 2 female). Fourteen were white British and one female was of white German ethnicity. Three students (2 male, 1 female) did not take part in the interviews for reasons related to health and disability. At the start of the ethnography all of these students aimed to progress to a media related degree course.

Level 3 Performing Musician Year 1

The first year music cohort totalled 9 students, 3 female and 6 male. Six were aged 16 – 17 and 3 males were older (27, 37 and 39). All students were white British and all aimed to progress to the second year of the course.

Level 3 Performing Musician Year 2

The second year music cohort consisted of 11 students, 10 male and 1 female. Nine were aged 17-18 and 3 were 21-24 (1 female, 2 male), the two older males had already completed degrees, one in Drama and one in Sports. All students were white British and only Jenny, a female student did not take part in interviews due to part-time work hours that affected attendance.

Media Tutors

All four media tutors on the campus took part in the research. The age range was 26-38, two were full-time and two were part-time on hourly paid contracts, all were white British.

Performing Musician Tutors

Five music tutors, all male, took part in the research, with an age range of 29-55. All tutors were white British and two were full-time with the others on part-time hourly paid contracts. All were active in the local music scene and the part-time staff also had employment in music, or education elsewhere. Only one part-time tutor, James, did not take part in interviews due to external commitments, although there were a number of short informal discussions with him on the research topic.

One noticeable factor, with all the course staff was that they were very competent with ICT and other digital technologies in general. This is not always the case at colleges where some students can have higher ICT skills than their tutors (see Le Gallais 2009).

Non-Subject Specialist Staff

Four other staff from the college's Basic and Key Skills department who were in contact with these students for Key Skills and learning support also took part in interviews and observations. Their input was very useful as their contact with the students was often at a more prolonged one to one level than the course tutors.

One Key Skills tutor (female, age 58, white British), travelled from the main campus to the music centre to deliver Communication Key Skills for once a week over one term.

As the media students all had English GCSE grades of C and above they did not need to study Key Skills due to college policy at the time.

Three LSAs (Learning Support Assistant), 2 music, 1 media also participated in the research. The skills range of LSAs can vary significantly and at the college the minimum qualification required was GCSE grade C in English and Mathematics. However, due to the diversity in their backgrounds they can often be just as qualified as the tutors, and in some instances even higher, although they generally receive significantly lower pay than tutors (Robson, Bailey and Mendick, 2006).

The two music LSAs were 1male, aged 31 and 1 female, aged 35 and the Media LSA was aged 25 and all were white British in ethnicity.

4.2 PART 2: COLLECTING AND ANALYSING DATA

4.2.1 TIME: IN THE FIELD AND TWO SITES

As the research period spanned one academic year, this enabled observations and interviews to take place with the student cohorts as they progressed over the three terms. A particular value was that this period of time can be very developmental for students of all ages and therefore any changes over this period could be noted. Although the research was conducted between two sites that were 10 miles apart from each other, as discussed in Section 4.1.5 the timetabling afforded the logistics of the research to be achieved. Remarkably there was no overlapping of sessions that affected this during the research period.

Both the music and media Level 3 courses were full-time status, which meant that they were timetabled for 12 contact hours with tutors each week of the academic year. This was from the first week of September through to the first week of July with mid-term and end of term breaks. For the media students all of these hours were classroom timetabled within the one room. The music students had their hours divided between two classrooms and the music studios where they practised and were taught. There was some fluctuation in this, but it was ad hoc and usually due to the need to provide additional evidencing needs. If this occurred it could even be for individual students, rather than a full cohort. The formal timetabling for them was 8 hours in the classrooms and 4 taught hours in the soundproofed studios.

The Media classroom sessions were always of three hours duration with a midsession break, whereas the music sessions were either two, or three hours including breaks. The different periods were dependent on the units being studied and also the division of staff across the timetable. The Media students were in the classroom all day Friday for two, three hour sessions, their remaining three hour sessions were on two separate days of the week. There were mid-session breaks and a one hour lunch break on Friday.

The ethnographic observations were conducted in all of these sessions; therefore a total of 12 hours a week, over three days was dedicated to observing media students. All of both of the music cohorts' classroom sessions were observed, for each of their weekly total of 8 hours. The exception to this was during the interview periods, as with the permission of the tutors the interviews took place during the session times in the nearest vacant room. The reason being that the students were

predominantly only at college when they had timetabled sessions and therefore this was there only available time. More informal research focused discussions took place with students during the sessions.

In total, as the academic year was for 36 weeks, there were 432 observation hours with the media students consisting, as indicated above, of 12 hours per week and 288 observation hours with each of the two music cohorts for 8 hours each week. This gave a grand total of 1,008 observation hours over the duration of the ethnography. Although, as indicated the student interviews took place during session times and in another nearby empty classroom therefore this reduces the total slightly. However, the total duration of time spent out of the classrooms conducting the interviews, which involved accessing the rooms used for the interview, then settling down to the interviews, followed by the interview itself and then locking the rooms up again and returning to the sessions was not recorded as a total figure.

4.2.2 OBSERVATION DATA

Throughout the research, apart from those occasions when discrete interviews were taking place during session time, each observation lasted for the full duration of the two, or three hour session. I ensured that I was in the classroom before the students entered and left after all had gone at the end of a session; at times this gave me the opportunity to talk informally to the tutors on the research topic when the students were not present.

All the in-session fieldnotes, as 'shorthand reconstructions of events, observations' (Van Maanen, 1988: 223) were hand written using a basic observation template which recorded details of the session at the top of the page, including the date and time, location, tutor, cohort, any student absences, late arrivals and so on. Fieldnotes can be very idiosyncratic in their format (Emerson, Fretz and Shaw, 1995), reflecting the context and a personal preference in a particular situation (Walford, 2009) and it was found that anything more complex in format was a hindrance to making the notes. Depending on the circumstances at the time their format could be shorthand and brief, or contain more detail. Anything that was of particular interest at the time of making them was be highlighted with either a yellow marker pen, or some other appropriate identifier. The notes were made throughout a session and if there was the opportunity at the time anything especially pertinent to a particular research question, or connective in some way to other events during a session, was expanded on. If not, these details were added later.

As discussed in Section 3.4, the 'deep immersion-and the sense of place' (Emerson, Fretz and Shaw, 1995: 17) from data is what is contingent in providing the ethnographic 'thick description' (Geertz, 1973). Fieldnotes can record both the 'mundane activities and jarring crises' (Emerson, Fretz and Shaw, 1995: 16), with others focusing on 'record[ing] as much as possible of what is perceived to be relevant to the research project' (Walford, 2009: 127). The notes were made with the research focus in mind, so how students used the technologies, how they approached their coursework, their interactions with each other and individual activities. But as this was a social environment there were a range of other considerations, for example, traits and any changes to these were noted. There were also external factors to make a note of, for instance, sometimes students came in tired from either a late night playing games on a computer, going to a nightclub, or working a late shift at MacDonald's. At other times the classroom dynamics noticeably altered as friendships between students changed and this could have an affect on their approaches to their work, depending on whom they then sat next to. All of these shifting details were recorded, along with the repetitious behaviour, as patterns were just as valuable as incidents. If a tutor was addressing the whole cohort, the topic was noted and if the students were attentive, if some were distracted, or not engaging then were there any obvious factors influencing this at the time, or any connective ones earlier, such as being tired. A factor in how much was recorded at the time depended on the events and time it took to write the notes. If there was a lot to record, or a series of events in quick succession, or overlapping the notes were written as succinctly as possible and expanded on as soon as there was the opportunity.

With Goffman's (1974: 10) concept of frames in mind, which is that of the 'principle of organization which govern events' the notes were later be highlighted to indicate where students were using technologies for coursework or for social, or entertainment purposes. The same applied in similar events where technologies were not involved and there was a distinction between course and non-course activities. In other words how the students managed their identities as both students and young people. This was a very basic framing device but useful due to the research focus of students' use of technologies in the classroom and especially when revisiting the notes.

Initially it was considered if note making became intrusive, especially if the students responded by being more self-conscious of their behaviour. In practice, this concern of observer effect (LeCompte and Goetz, 1982) did not surface, apart from a few rare occasions when making notes a student teasingly pretended to look at what was being written and then smile and go back to what they were doing. Making notes was a common event in the classrooms by LSAs who needed to

retain a record of students' academic practices, as one of their administrative tasks and therefore these type of events were part of the classroom occurrences. The only instance when immediate note making was delayed was in those instances when a student asked for academic help with their work. If any of their practices, or comments from that interaction were research relevant, notes were made later. This decision was made under the premise that recording data during closer contact circumstances was overly instrumental and intrusive to the occasion.

As the observations were for the full duration of the sessions there were always limitations, and opportunities in what could be recorded. The considerations on how and when to record observational data are varied, as are the skills needed to produce efficient notes (Emerson, Fretz and Shaw, 2011). If the note making was too engrossing then there is the risk of being distracted from the environment being researched. Although there were long periods when the students worked independently at their computers, which allowed me the time to make any additional notes. Though, conversely during the quieter periods there were also subtleties of behaviour occurring, which could potentially be missed if otherwise too distracted. As a preliminary strategy, prior to the research commencing, note making was practised in sessions other than those I would be researching in. This experience was an opportunity to consider how data could be acquired as efficiently as possible whilst still retaining a level of awareness of what was occurring in the room.

Sustaining a focus in these sessions was at times challenging, as the events could be quite mundane and Delamont (2008: 43) warns of the danger of 'over-familiarity and boredom' occurring during observations in educational settings. This was especially pertinent, as these were quite small rooms and at times students were working independently on one topic for a number of weeks.

Post-session notes were made, to expand on any details, reflect on events and the session, as a whole, or just to tidy up those that were made hastily. In essence part of these post-event processes were what Delamont (2008: 52) refers to as 'reflections in tranquillity'. These were made as soon as was conveniently possible after a session to avoid as little loss of detail as possible and the avoidance of any potential day-to-day distractions intruding into the process.

4.2.3 INTERVIEWS

In total, there were 90 semi-structured interviews conducted with 12 staff and 31 students (see Appendix 2). The interviews ranged in duration from 6 to 24 minutes. This was due to the

circumstances of having to interview students within their session times and therefore not to take them away from their studies for too long. For the staff, sometimes they could only spare a brief amount of time due to other commitments. So the variations in duration reflected the research conditions, as described below. The interview schedules (see Appendix 4 and 5) were developed with flexibility in mind, as there was always some uncertainty about how many interviews could be conducted. The hope was for two interviews with each member of staff, but many did not have the free time for this so the questions from the two lists would selectively chosen from, dependent of what period of the academic year the interview took place. Likewise with the students, the aim was for three rounds of interviews and there was always some uncertainty if students were comfortable with one-to-one interviews or preferred to be in a small group interview. So, as indicated in Appendix 2 there was some variation in the number and type of interviews that took place. For most of the music students, only two rounds of interviews could be fitted in, as explained elsewhere. Consequently the schedules could be finely tuned moments before the interviews took place and their content needed to contain sufficient detail to afford that level of administrative adjustment.

Relative to the previous points on power differentials during research (see Section 3.8.4), there were some initial concerns with interviewing students and how they would respond to that. As I was a tutor at the institution there was the risk that I could be viewed as an authority figure and therefore students may not be open in their comments. As a measure to alleviate this, at the early stages of the research I clearly established my researcher role and this was reiterated during the first interviews. As ethnographic interviews are often conducted as part of ongoing relationships within the research field, there is more opportunity for building rapport between the researcher and the participants over the duration of the research and therefore the opportunities for the coproduction of knowledge (Mason, 2002).

Despite the familiarity with the research site and the participants, apart from any ''naturally occurring' oral accounts' (Hammersley and Atkinson, 2007: 99 original emphasis), such as informal discussions during the sessions, conducting interviews was always going to interrupt the observations. The classrooms were studied in the rhythm of their everyday activities, and the interviews then risked interrupting that cadence (Nunkoosing, 2005). Although the reality was that the students were often glad of a break away from their work and the interviews were sympathetically timed to avoid as little disruption as possible to their coursework; this was always negotiated with the tutors' permission.

For privacy, and to avoid interruptions the student interviews were held in a more discrete place, which was any convenient room that was nearby and available. They varied between one to one, or small group interviews. Some students preferred not to be in a group interview and were more comfortable by themselves; with the converse occurring and some preferred to be interviewed as part of a small group. The interviews with media students took place once each term, whereas there were only two series of interviews with the music students. The initial plan had been for three, but the extensive demands on room allocation in the smaller music centre limited this.

All of the interviews with staff were on a one to one basis with locations varying from an empty classroom to a staff office. These were conducted during administration time, or at times over a lunch break. The staff timetables were usually very demanding with little free time and even if they had some administration time there frequently were short-notice meetings for them to attend. Any notion of small group interviews, or focus groups with a range of the staff was unachievable due to the logistics of finding opportunities when any could be together at the same time. There were a small number of occasions when tutor interviews had to be rescheduled at short notice due to unexpected events that a tutor had to attend to. This was never detrimental to the research and due to this some tutors were only interviewed once and other staff up to three times. Any lack of formal scheduling was made up by more informal discussions on the research topic.

The interview schedules for both staff and students used a semi-structured format. This allowed the opportunity to extend on any of the research questions should a particular area of interest develop. Retaining that flexibility was important, as students' use of computers with this intensity was not the norm at the college and elsewhere; as such there needed to be some openness to what emerged during the interviews. Ethically, adopting this semi-structured format offered the interviewees the opportunity to tell their stories in their way (Mason, 2002).

All interviews were recorded using a digital voice recorder with any post-interview notes or reflections being either hand written, or word processed depending on the circumstances. Notes from any informal discussions in, or outside of the classroom were made after the event. This was to avoid the discussions appearing as an overtly instrumental event, despite everyone's awareness of the research and also with the concern that the rhythm of the discussion could have been disturbed. If something especially vital emerged during a discussion, then using circumstantial judgement brief details were noted down, which were expanded on later.

As the event of writing risks intruding into the flow of a discussion, these were very considered judgements. Nunkoosing (2005: 698), comments that the interviewer also needs to be mindful of 'the uniqueness of each interview encounter with different participants' and not let the technique detrimentally intrude. That is, through the sensitivity of self and context and the 'use of the self, of relationship building, of acute awareness of the flow of conversations' (ibid.).

4.2.4 DATA ANALYSIS AND CODING

Over the duration of the time in the research field a large amount of data was accumulated and there are differences in the literature as to how much of the data corpus should be coded. Opinions vary, with some considering that every detail that has been recorded should be considered (Lofland et al, 2004; Wolcott, 2008). There is also the danger of data overload (Miles and Huberman, 1994), but there does surface a general ambiguity in advice with the impression that it is ultimately the researcher's decision. No matter if every minutia of the data is scrutinised, or a percentage, the coding categories, or themes emerge through the engagement with the data (Richards, 2009). Although there are also warnings of over coding by being carried away with the process (Richards, 2009). Coding is data analysis and defined as 'tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study' (Miles and Huberman, 1994: 56). Saldaña (2009) advises that if only what appears to be the most salient portions of data are analysed there is a risk that there might be an exclusion of some, which could later make the data more cohesive, or influence the reconsideration of some of the analytical descriptors, or findings.

With these thoughts in mind all the data were engaged with, as the volume meant that any attempt at reducing it before coding, could result in the oversight of some containing a yet to be recognised value. All the data, from both hand written sources and the transcription of the interview sound files had been word processed and although possibly an unnecessary process all of this was printed out, mainly due to a preference of initially engaging with it in hard copy.

Using a range of indicators, such as circling, highlighting and underlining anything in the text that initially emerged and appeared significant, or worthy of attention was identified. This 'pre-coding or provisional coding' (Layder, 1998: 54) was to indicate any 'possibilities and potentialities' (ibid: 56) as an initial and personally beneficial method of familiarisation with the data. These 'important moment[s]' (Boyatzis, 1998: 1) were the first stage of coding and this initial working through all the

data was also a very useful process for familiarising with the data again due to the time gap from when it was first recorded. From this process some initial core themes were established.

Following this all of the data was imported into NVivo software. Using NVivo, the material was studied and coded using a thematic analysis (Flick, 2009, Saldaña, 2009) based on the themes and patterns (Aronson, 1994; Miles and Huberman, 1994) that emerged from the data using an inductive approach, and also from 'a priori' deductive themes that were formed from the research questions. A 'start list' (Miles and Huberman, 1994: 58) of a priori codes can be selected from 'theoretical or conceptual frameworks' (Coffey and Atkinson, 1996: 32), or from research literature or other readings, such as the research questions (ibid.). There was some initial tentativeness towards the use of a priori themes, which were based on the focus of the research. There was always a risk that they could direct the focus too much and in that event, perhaps not be the most effective way of differentiating between some data. Tesch (1990) advises that categorisation systems whether they are a priori, or ones that emerge from the data will, at times, need some modification in order to render them relevant. In practice the themes were refined, rather than substantially changed.

The inductive themes were identified through the interpretive process of open and selective coding, so that the thematic units that were derived from patterns were grounded in the data but analogous across the interviews and observations. As Boyatzis (1998: 1) comments, 'recognizing an important moment (seeing) precedes encoding it (seeing it as something), which in turn precedes interpretation' and succinctly adds that, 'a good thematic code is one that captures the qualitative richness of the phenomenon' (ibid: 31) which through the codes and categories then becomes 'meaningful data' (Coffey and Atkinson, 1996: 47). All these coding processes can, 'be thought about as a way of relating our data to our ideas about these data' (ibid: 30).

What follows is an illustration of how the data was typically approached and coded. For convenience, all the examples apart from one interview extract are data that has been used within this thesis.

Initially, following the transcription of this part of the interview the data was read through with a focus on how students responded to their level of computer use during the timetabled sessions, and an overarching code was *computer use*. It was then thematically coded for different responses, for example: *initial enthusiasm*, *boredom*, *duration*, *need for change, mundanity*. Within these, the data would be scrutinised for opportunities for another level of coding. So, for Emma the duration,

mundanity and boredom resulted in *demotivation*, which could be as a result of a lack of support for the affect that the duration of computer use was having on her. In NVivo 7, the qualitative data analysis software used, these would be listed using the tree node structure as child nodes, under the parent node of computer use, and also included with a parent node of perceptions of tutor and the child node of support. The advantage of NVivo in this exercise and my personal working conditions was the collation of the corpus of data and consequently the ease of selective data retrieval from one source.

Emily: *....it was real exciting when you got to go on the computers, but now it's...*

Liz: *Yeah...*

Emily: *It's just boring.*

AB: *Why is that?*

Emily: *Cos we're on them all the time.*

Liz: *Like on a Monday we're just sat on a computer all day, on a Wednesday afternoon we're just sat on a computer all day and on a Friday -*

Emma: *Yeah, we're sat on a computer all day -*

Liz: *And we don't do anything else* [Liz emphasised each of these words slowly]-

AB: *And it's all day from nine 'til four -*

Liz: *I think that's almost too long* [laughing]. *Yeah...last year we used to do like in the morning one subject and in the afternoon a different subject and like say it breaks it up a bit doesn't it ...but now we just do like the same thing ALL DAY.*

AB: *How do you cope with that?*

Emily: *I can't finish my work, I just get bored being at computers so I just stop working 'cos I can't concentrate, or anything.*

Emma: *I've, I've go to the point where I can't even start working any more...so I don't actually do anything all day.*

The interview extract below was not used within the thesis itself and is an extract from an interview with Ian, a media tutor. I was hesitant about including Ian's comments within the thesis and after some thought decided against it. I was partially letting my intimate knowledge of the context inform me, as I was aware that his thoughts towards students' approach to their work were quite idiosyncratic.

The initial coding for this part of the interview included: *literacies, skills deficit, tutor perceptions, age categorising, unsupportive, confrontational, plagiarising, problemising, superior knowledge and putting on the spot.* There was a tree node for tutors and a parent node for student academic practices and those situated within literacies was placed within a child node of literacy standards and others with tutor support.

> AB: *That was one of the questions, what are their literacy skills like?*
>
> Ian: *I would say that, I mean their literacy skills for some of them, I mean I'm aware that some of them are obviously dyslexic, erhm, or dyspraxic, in some instances…erhm…but even the ones that aren't I notice a fundamental difference in the ones that are older, like the ones in their twenties compared to the ones just in their early teens, or should I say late teens, sorry, seventeen, eighteen compared to twenty three, twenty four, twenty five whatever it happens to be. There's a marked difference in the standards there but, err one particular student in question I would say, about three days ago they came to me and they told me that they got grades Bs in their English and they got a grade in their English higher than I got when I took mine and yet their standards seem absolutely appalling.*
>
> AB: *Literacies is quite a broad term but how have you found their research skills?*
>
> Ian: *They...again, it's all dependent on age. I've found the biggest problem they have, erhm, some people just go and plagiarise and copy and paste, err with no understanding of what anything means...err…there was one prime example...they way I do it is I pick certain key words out, like for example they'll use words like ideology, which means err a belief system, or they'll use words like, erhm, cathartic, which is related to media violence, which is the quick release of strong suppressed emotion and I'll ask them if they understand this terminology or what does this mean, "you've written it, what does it mean?" and they'll be like "I don't really know" and I'll say "Well why do you not know?" and I'll be like, "Shall I tell you why you don't know? Because you cut and pasted it and you've got no understanding of the material".*

The section below is an extract from field notes made during a Friday afternoon in the media classroom, as used in the similarly named vignette on pages 153 to 157. The raw hand written notes were first engaged with as a pre-coding familiarity exercise and read through several times, before the utility of tidying them up by entering them into a Word document. In principle they would have been engaged with in a similar coding manner as the interview transcriptions. As these were made from observations there was also a deeper reading to identify the level of reflexivity in the notes, and the integrity of my interpretation of what I had observed and noted as occurring in the classrooms. Initially, I had coded some of the content of the notes below as students' *avoidance* of coursework and being *distracted* by their ability to use the computers for non-coursework use. After some reflection I realised that I was not accounting for the conditions and how the students were experiencing them, and how this related to what some had commented on during interviews,

and also situating these actions within the overall duration of the session. I realised that some of the switching between YouTube videos, was not as a distraction away from studies but more to enable their continuity of engagement with the coursework and that remembering from closer observation they were in fact focusing on coursework, rather than being distracted away from it, therefore an initial code became *media facilitation*. For other non-educational resources, such as AutoTrader, these appeared to be used as a *respite* from the conditions, and I could empathise with students' experience of the warmth of the classroom and how I was finding it hard to focus at times. My respite was a drink from my water bottle, or wiping the sweat off my face or hands, as I was uncomfortable having to sit in these conditions, although I could move around the room if needed. Initial codes were also: *pattern*, *repetition*, *switching, focus*, *attention*, *digital social needs* and *isolation* and *administration pressure* for the tutor. This was later refined to *administrative isolation* and later opened up as a code for both the tutor and for the students, as the tutor was isolated from their support and learning needs. I was aware that some tutors did take work home with them, so that they avoided any stressful confrontations with managers for not keeping up with their administrative expectations. This was discussed at a personal level and outside of any research discussion, therefore these comments were not noted and recorded as informal research discussions; hence the tailoring of the code.

> *The room is noticeably quieter now, as everyone seems to have settled down and Bob is still focused on emails and has not checked on the students at all. Scott and Ash are sat next to each other and both are concentrating on Word documents on their screens. They both have an array of other windows open, including a social messaging application with an ongoing conversation that keeps being added to by others and Scott only occasionally types in it. It's as if he just wants to monitor what friends are discussing. Both students, although engaged with the Word document are moving between other on-screen windows, such as unrelated websites, including AutoTrader and switching between numerous YouTube music videos. Not that the videos are intently watched, but more something to listen to through headphones and any videos are in the periphery of their vision. There is something of a pattern that takes place, in that there will be a few minutes of focus on the assignment in Word and then the other resources that are loaded on the screen will be quickly checked and occasionally engaged with and then the focus reverts back to the coursework.*

4.2.5 METHODOLOGICAL REFLECTIONS

The duration of the ethnographic fieldwork was always going to have a cost, both personally and professionally, as the time involved invariably resulted in a neglect of other duties over that period. As an individual researcher, the logistics were particularly challenging to sustain, not least the time needed to avoid falling behind on the administrative tasks, such as transcribing interviews, which took more time than initially anticipated. The option of using a professional transcription service

was at one point considered, but dismissed as it was found that the process of transcribing resulted in a greater familiarity with the data.

There was a constant awareness of the need to sustain a data collection momentum and the constant vigil in managing my researcher identity, especially within a familiar educational environment. The intimacy with the research field over the year, did on occasion feel exploitative, for example, a discussion with a student about a problem they were experiencing with their work was also viewed as an opportunity to engage with them on the questions that surrounded the research topic. It is these fluid in-action boundaries where there is a constant need for role management, not only as a researcher but also the ethical considerations and how participants are engaged with.

There was initially an element of disappointment in that a number of media students preferred to only take part in group interviews and not one to one interviews, but this appeared to reflect the cliques that formed within the cohort. However, the group interviews did provide some interesting data and being in groups did stimulate the topic and help to extend it through the student interaction. So, despite any initial anxieties there was some compensation with the data, and these students readily had more casual one to one discussions with me during the observation periods.

Observing in such confined spaces was physically uncomfortable at times during the warmer weather when the rooms could get very warm. This was especially noticeable on a Friday when the media students were timetabled in the one room for two, three hour sessions and there was only one small window that partially opened for ventilation. There was an air conditioning unit but that struggled to reduce the temperature of all of the room and anyone sat near it received the main thrust of the cool air. Any notion of leaving the classroom door open during these warmer days was not possible due to it being a fire door.

As Delamont (2008) comments, during observation periods in educational research boredom can become an issue to guard against and there were numerous periods during sessions when there did not appear to be much to observe. The students gave the appearance of being focused with working on their computers and there was often little noise, or activity in the room. The temptation was to carry out some research administrative duties during these periods, but there was also the risk of missing anything subtle that occurred that was worth recording. In practice it was found that these periods were useful for short tasks, such as revisiting any notes made during that day. They were also good opportunities to intensely observe and look for the subtleties of behaviour that might

otherwise have been missed, such as a student quickly checking Myspace and how that fitted in with what they had been doing previously and after that. This could occur within seconds and easily be missed and therefore it was worth understanding what affected the student to focus their attention away from the coursework. Was this just a relief break, and then a return to coursework, or did it signify something else.

The semi-structured approach to the interview schedule ensured that there was always some flexibility to the interviews. At times, during the interviews the topic deviated from the research interests into other issues of studenthood, or education as the students realised that they had a voice and that the interviews were non-judgemental and within a discrete setting. This only served to draw attention to the fact that the ethnographer is engaged in a day-to-day social context with people of differing ages and personalities, and some may want to use the opportunity to highlight other issues that they want to comment on. Such additional material is more than a by-product and more part of the journey, and without this the end product may be the less rich. By drawing attention to this, the aim is to highlight the complex and reflexive relationships the ethnographer has to negotiate and maintain during the research. There is also a need to protect the relationship with gatekeepers, at all levels, as without them there is no research and any incidents that risk a potential withdrawal, or reduction of permissions could have profound effects. Throughout the time in the field I was constantly aware of the need to manage my researcher role to ensure this balance of social relationships was maintained and not to disrupt, or disturb the conditions I was researching. If anything was learned from the methodology itself, it was this dynamic constellation of factors that are drawn into play throughout the research and the vigilance needed to manage them to the satisfaction of all.

During the research there were some inevitable timetable changes for the sessions that I observed, which always seem to occur over the academic year as new units start and teaching staff then need to adjust their timetables, according to the units and their specialisms. At times, due to the intensity of the observations I was concerned if the continuity of contact with each cohort could be maintained. Very fortunately, as one change occurred so did another and although my weekly research timetable modified, my hours of contact with each cohort remained stable.

4.3 CONCLUSION

Any research project by an individual researcher is inevitably limited, especially with time and resources. Despite this, the planned duration in the classrooms to acquire the data was successfully achieved. This was not least due to the permission of the participating tutors and students, who were generous with their time and by allowing me to be amongst them in the classrooms.
The aim of the data collection was that the observation notes and the post-event and reflective note making would remain a constant and the interviews would take place periodically over the academic year. The methodology and the data collection methods proved to be satisfactorily robust for these needs, and successful in enabling the acquisition of sufficient in-depth data for the research focus.

The following Chapter, Chapter 5, will be the first of four chapters to focus on the empirical findings of the ethnography.

CHAPTER 5: COMPUTER-RESOURCED CLASSROOMS AS LEARNING ENVIRONMENTS

5.1 INTRODUCTION

The focus of this research is how computers and digital technologies are shaping the social learning environment of the classroom, when they are used as the primary learning resource. However, due to the time students spent in these classrooms there also needs to be the thought of how the space of the classroom itself might contribute to students' behaviour and engagement with the course activities. This is pertinent to the environmental component of the secondary research question: What factors, environmental, social and personal affect the way students use these technologies both within a specific session and over the academic year?

This chapter will outline the activities the students were engaged with in the classrooms, as any workspace needs to be fit for purpose and conducive for those in it to be as comfortable as possible. Following this the environment itself will be examined, including the fabric and décor of the rooms and building and how this and other elements of a social learning environment can affect students engagement with technologies and their responses to it and therefore its conduciveness for a vitality of learning.

5.2 CLASSROOMS AS WORKING ENVIRONMENTS

The students were in the same rooms throughout their two year course and for the media students the sessions were three hours long, with two sessions on a Friday. The music students had both two and three hour sessions. There were mid-session breaks and also a one hour lunch break for those at college all day. The activities during these periods were quite typical for students who were expected to work more independently. For example, a tutor occasionally presented a topic to all the students, especially at the start of a new unit, or to recap on some elements of the unit. There were the very occasional group activities but predominantly the students worked at their computers and focused on attaining the evidence needed for their coursework. The media students produced both academic text based evidencing and also visual work using Adobe Creative Suite, in particular Photoshop for graphics editing and generation and occasionally Dreamweaver for the design and development of websites. The music students primarily used the computers for Internet sourced resources and researching for information on the Internet, together with Microsoft Word for text based tasks. The only creative software they very occasionally used was Sibelius music

composition and notation software. They did use Cubase, which was more appropriate software for audio editing but only in the music studios.

What this synopsis of student activities indicates, is that the students were sat down for most, if not all, of the time in the sessions and their attention was predominantly directed towards the computer screen. The seats were on castors and were height and back adjustable, so there was some adjustment for comfort, and the computer screen and keyboards were on fixed worktops fastened to the wall. Notably there were hot water pipes running along the bottoms of the walls and these radiated heat underneath the worktops where the students had their legs; they were out of immediate reach but they were non-insulated. If, the room was not a conducive environment for learning for the duration of these activities, then the environment itself and how it was perceived was one potential factor in how students' approached their coursework. As Low (2003: 10) suggests, a person's perception and experience of a space modifies relative to their emotions and state of mind, and other factors. At this stage of the analysis it is the factor of the comfort of the environment, which will be discussed.

To set the question of the comfort of the environment into context, at the early stages of the research the predominant focus was directed to the main research question with very little ethnographic attention, at that time, to the classroom itself. They were merely spaces to work in and it was the activities within them that were my focus. In my tutor role I was aware that sometimes the air conditioning in classrooms needed adjusting with the remote control, or if there was a window, it was opened to let in some fresh air. The students had never voiced any significant concerns, apart from occasionally asking for the temperature to be adjusted up, or down.

However, I had not previously worked in any of the classrooms where the observations were conducted and when the observations first started in the September it was a warm month. As indicated in Section 4.2.5, it was noticeable how warm all three classrooms could become, particularly the media room, which was the smallest of all the three rooms. The air conditioning unit was small and it appeared to be quite ineffective at controlling the temperature of the whole room, as it only seemed to be the area near the unit that was cooled down. One music room was larger but it only had one small air conditioning unit on a wall and one small window that could be partially opened at the top. The second music classroom had no fixed units and when it was warm portable units needed to be brought in, but again it was only the areas near to them where they

seemed to be effective in reducing the temperature. It did have windows at one end of the room though and these could be opened.

From my PGCE teacher training and a previous management course I was aware of Maslow's (1943) hierarchy of needs, especially the fundamental physiological needs and if these are not met then an individual may struggle to progress to the next levels. There are a range of factors that can contribute to a deficit in needs, but I never considered the environmental conditions of a modern classroom to be within this category. Extremes of temperature can deprive a body of its physiological needs and if it is too warm then thirst and fatigue, and so on can result. Air deprivation, or its quality can also be a factor. In his model Maslow refers to homeostasis and the need for the body to maintain a stable inner environment and the conditions of the immediate microenvironment can be an obvious factor in this.

On some of the warmer days I had noticed that when I was in the classrooms there was a layer of sweat on my face and I soon became aware how much my choice of dress for the day was determined by the conditions of these rooms. For most of the sessions I was sat down in various locations in the rooms and intermittently I walked around observing what the students were doing and monitoring their activities and progression. During these times I was aware how uncomfortable I could become due to the warmth and I also needed to drink more than usual during the breaks. When it was a Friday and there were 6 hours in total spent in the media classroom I often felt very tired during the afternoon and frequently had headaches. I reflected on how demanding it could be at these times to maintain my focus on observing and making notes. Occasionally, the sweat on my hands smudged my writing and I also needed to keep some paper kitchen towels in my pocket to intermittently wipe my hands and face with. Due to the warm weather the air conditioning units were on a lot of the time and those who were sitting near, or opposite to them, received a direct draught and became quite chilled.

If these conditions were detrimental to my comfort an obvious need was to investigate their effect on the students. In particular with the media students I did notice, especially on a Friday afternoon, that as with the effect on myself, the conditions did seem to affect their performance. Notably, my fieldnotes had consistent comments that on Fridays, especially, the students did less work and the afternoon sessions frequently deteriorated into casual chat and students had the demeanour of being tired. There may have been other factors contributing to this, such as the outside temperature, or if they had walked into the town for their lunch and they were hot and tired from this. However, they

should have recovered from this in a short period of time. There was also the fact that it was the end of the week and the students considered that it was time to start relaxing, or that as they were in the classroom for six hours on a Friday that was demanding on their ability to focus.

During one group interview with media students I asked them how they found the room to work in.

> Debbie*: But in that room on Fridays, it's about an hour and a half work solid and I'm like, "Oh, I'm getting on with it". After lunch I come and I'm like, "Uhhh"* [Debbie slumped over to imitate being worn out]. *And really warm. And I get dehydrated.*

Another student commented on the effect of being sat near to the air conditioning unit when it was trying to reduce the temperature of the room.

> Liz: *It's like that with the heating though, if it's absolutely freezing like he* [Bob the tutor] *won't…especially on a Wednesday, he never turns it down does he. If we're all sat there with like all our coats on and like saying, "Can you turn it off", he's like, "No".*

Although the air conditioning unit appeared to make little difference to making the room more comfortable, the temperature rapidly warmed up even more if it had been switched off. The concerns over these conditions had been reported to the college estates department by tutors, but apparently the provision was deemed adequate for the room sizes.

To offer a more nuanced and extended account of tutor and student practices on a Friday when the students were in the one classroom for a total of six hours, what follows is a vignette of one Friday afternoon. The content is developed from a series of field notes made throughout that session, with the aim to illustrate students' responses to the conditions. This example was selected, as it typified many Friday afternoons and the cultural, social and learning activities and strategies that took place. It also illustrates the administrative pressures on the tutor and the expectations on the students to demonstrate independent learning and how they respond to that, as they work towards the end of a long day in the classroom and their last day at college before the weekend. Student cohorts consist of individuals, who often form small groups, or at times detach themselves from those groups for individual needs and the diversity of activities that took place during that afternoon exemplify this. Some engage with social and cultural activities to cope with the drudgery of the prolonged period of individual studying on one task and the subsequent learning fatigue under these curriculum strategies, others adopt proactive methods to enable them to keep on-task. For example, Seth demonstrates his self-awareness by wearing headphones with some background media playing to

maintain his focus, and to filter out the off-task activities of peers; this also replicates the practices he uses if he studies at home.

Friday afternoon in the media classroom

It's Friday afternoon in early June and the media students are returning from their lunchtime one-hour break. They've already had a three-hour morning session in the same classroom and now they have another one of three hours duration with the same tutor. Outside it's warm and the air conditioning has been left on over the lunch period in an attempt to cool the room down. In the morning the temperature and air quality had been uncomfortable, despite the two small air conditioning units that had continuously been on their coldest settings. On most Friday lunch periods the students have a ritual of walking in small groups into the nearby town to get their lunch, which they eat on the walk back. On days like this the exercise can mean that they are very warm before they enter the classroom and it's then some time before they can settle down – today is no exception.

In anticipation of how warm I will become in the classroom I leave the jacket I have with me in my car and I wear a lightweight shirt and trousers. I have a small shoulder bag with me that I pick up each research day knowing that it contains all my ethnography resources, which consist of my Macbook, notepads, pens and pencils, a digital voice recorder and some mint flavoured sweets and a small water bottle.

I always make sure that I'm in the classroom at least five minutes before the session is due to start. As the students enter the room Bob, the course tutor for this cohort, and tutor for both of Friday's sessions is sat at the staff computer opposite the door and is engrossed in responding to a stream of college emails. He has already spent some of his lunch break in the room trying to catch up with them.

Despite the students' casual chatter that continues after they sit down, Bob gives no reaction to the students entering the room, as his focus remains fixed on the emails. Usually this level of noise will bring a sharp rebuking from Bob. The tacit message is that he intends them to carry on with the work that they had been doing in the morning. This has been well rehearsed before on those afternoons when the students have sat down waiting for instructions and then been told off by Bob for not realising that as their work in the morning had not been completed, they should have realised what they needed to do. Notably, the

work is usually the continuation of a prolonged assignment with the occasional interruption for a brief tutorial using the interactive whiteboard. Due to Bob's preoccupation, they sit down and continue to chat amongst themselves as they try and cool down.

At the far end of the room, two small groups have formed. One group that includes Ash and Debbie continue talking and the others with Scott in pull their chairs around Simon's computer and they watch a series of YouTube videos of people having accidents, such as falling off a swing into a river, or other stunts that have gone wrong and there's a lot of laughter that Bob still ignores. At other times Bob would be quite firm in his response to events like this and the students would immediately be quiet. However, Friday afternoons can often be the exception.

It is approximately 20 minutes before the two groups of students who had been gathered together chatting and joking return to their own computers and are now facing their computer screens and seemingly more focused on their work. Others, such as Emma and Liz continue to quietly chat together on casual topics but they have remained at their computers.

Seth is at the far end of the room and he has his headphones on so that he can listen to a movie video, which is in one corner of his computer screen and partially obscured by the Word document he is typing in – he seldom turns his head to view the visuals of the video. He has commented before that he uses headphones to shut out any background noise from the rest of the room, so that he can focus on his work. For Seth, these are noticeably the most effective strategies that he uses, as at other times he can be far less focused on his work. I am sat at the centre table and close to Seth and the other students who had been in the small groups. Nearer the door Emma, Liz and Emily are sat next to each other; they always sit here and they have formed a small clique within the cohort. I move further up the table and nearer to them; Emma turns around and smiles as she texts on her phone at the same time. It's not a regular classroom occurrence for any of these students to text using their phones, and often it can be a message to a parent, especially if they are picking them up in a car at the end of a session.

The room is noticeably quieter now, as everyone seems to have settled down and Bob is still focused on emails and has not checked on the students at all. Scott and Ash are sat next to

each other and both are concentrating on Word documents on their screens. They both have an array of other windows open, including a social messaging application with an ongoing conversation that keeps being added to by others and Scott only occasionally types in it. It's as if he just wants to monitor what friends are discussing. Both students, although engaged with the Word document are moving between other on-screen windows, such as unrelated websites, including AutoTrader and switching between numerous YouTube music videos. Not that the videos are intently watched, but more something to listen to through headphones and any videos are in the periphery of their vision. There is something of a pattern that takes place, in that there will be a few minutes of focus on the assignment in Word and then the other resources that are loaded on the screen will be quickly checked and occasionally engaged with and then the focus reverts back to the coursework. This typically illustrates the fleeting nature of student attention that I have witnessed over the academic year.

Helen has her notepad in front of her, with several lose pages that seem to have come from a different pad and she has now settled down after some casual chat with others nearby. She seems very focused on her assignment and actively moves between reading her notes, many of which are coded in the way they are highlighted, and typing. Katie is sat opposite Helen, and on some Fridays she doesn't return after lunch. At the moment she is typing a message in German on what appears to be a German social contact website and this continues for most of the afternoon. Despite her regular periods of off-task use of the computer tutors have commented that she achieves some of the highest grades in the cohort.

Jim sits the closest to the door, and since he arrived back he has been playing a retro style online game and the assignment he had been working on in the morning is minimised at the bottom of his screen. At the end of the day I notice that all my notes about Jim indicate that he has been playing a number of these games for the majority of the session, and there were no observation notes of him re-engaging with the work he had been more focused on during the morning.

At this point I have no intention of talking with any of the students, as they all seem to be engaged with their own activities and I wanted to take the opportunity to observe any continuities, or changes in practice.

At 2:30pm, and for the first time since the students have returned, Bob speaks to the them, but he still faces his computer as he tells them they can have a 20 minute break. Some ask if they can stay inside but Bob tells them that they need the fresh air. I have a brief informal chat with Bob after the students leave and he seems frustrated that he is spending so much time on emails, and as we speak I can see some new ones arrive from college administrative staff. At that, Bob says the he needs a break too, and we leave the room together and walk over to our cars that are parked nearby. I sit in mine with a door open and all the windows down to let the warm air out and Bob sits in his in its usual position parked under a large tree. He has a window open and is smoking a cigarette; there is a no smoking policy across the whole campus, but this seems to be his regular indulgence.

When the students return after the break they all revert back to what they had been doing before, apart from some initial casual comments between themselves. The exception is Dom who had been working on part of a research methods unit that he should have completed the previous term but he had been quite ill for several weeks and is now trying to catch up with his work. But he soon appears to have lost interest and comments: 'It's a nice warm summer's day and to do this will remind me of winter'. After less than a minute he tries to get started on it again, but frustratingly hits his keyboard with the palm of a hand and then moves on to a sport website. No one seems to pay much attention to this, apart from a quick glance at him and then everyone returns their focus to their own screens.

I note that amongst the students there is no discussion about the work that they are doing, as even though it is individual evidencing they are all doing the same assignment. After 15 minutes Bob says to me that he needs to quickly visit a college administrator and asks if I don't mind being left with the group. It's not very long before he returns and settles back at his computer and during his brief absence the only change in the students' behaviour was that they chatted slightly more actively to each other than they had when Bob was in and their body posture was more relaxed. But, this was just general social chitchat conducted quite calmly and when Bob came back in they quickly quietened down and reverted to their earlier positions of facing their computer screens. During that period I noted the resources on the students' computer screens and they ranged from assignment Word documents, several browser windows open with differing content, some of which were course related others were of a more general interest such as hobbies, YouTube and so on. There was

quite a number of the students that had a Facebook page open, or other resources for social contact, such as online messaging.

Just after 3pm, with an hour of the session remaining, the general mood changes in the room and any work that had been focused on is now largely ignored, apart from Seth who clearly wants to continue with his and he keeps his headphones on. Jim remains isolated from the others and is still playing retro games on a website; there are now two small groups of students gathered at each side of the end of the room but facing away from Bob. It's difficult for them to do this, as the space is quite limited, due to the long centre table, so they appear quite crushed together. This has become a late Friday afternoon ritual and the discussion is light hearted and social, perhaps they are aware that if it becomes too noisy or excitable Bob will tell them off, but this has never occurred. 15 minutes before the end of the session, for the first time this afternoon, Bob stands up in front of the whiteboard and the students and asks if anyone has had any problems with their work and what progression they have made. No student indicates any issues with their work and the consensus amongst the replies is that their assignment work is on track. At the point, Bob tells them that they can finish early but only if they've saved their work appropriately.

Bob will usually keep to the exact session times, but from a brief chat with him after the students leave he's clearly tired and warm and wants to go over to the media office in another building to talk to Sam the curriculum leader. I'm glad to get out of the room, as I've developed a headache and a thirst. I go to the main staff room, where I know it'll be cooler and I can go through the day's notes in more comfort before setting off for home.

For music students there were other problems to contend with and as commented earlier, one of the music rooms did have windows at one end that could be opened, but this had some disadvantages, as one student indicated.

Patrick: *Erhm, yeah they're all right, this room isn't too good because of the erhm fish factory down the street, but….*

Patrick was a year 2 music student and his comments reflected the smell of fish that occasionally permeated the room when the windows were open on warm days. These comments are quite representative from both the interviews and what was overheard from conversations between students, or students' comments to tutors. I also noticed that with the large windows open there

could be quite a lot of external noise heard, from both road traffic and nearby industrial units, but the students made no comments on this, although many of them worked whilst listening to music through their headphones. This was not only to block out some of the noise, but it also replicated their working practices outside of college and the music offered them a background sound, which enabled them to focus more on their work especially when the work was focused towards individualistic assignment evidencing with a computer.

Conversely, during the colder months the music classrooms could get quite cold at times. Hazel's response was representative.

> AB: *How do you find the environment of the classroom?*
>
> Hazel: *Too cold sometimes* [and then laughs].
>
> AB: *What about any of the other rooms?*
>
> Hazel: *They're all fine, just a bit cold.*

This was never a factor in the media room as both the air conditioning and the hot water pipes that travelled through the room seemed very effective at keeping it warm during these periods. Although again, there was a variation in temperature within the room and due to the relatively small size of the room when all the students were present the air quality seemed quite poor.

Clearly, there were some environmental issues that had an adverse effect on students. The significance was that at times these were not stable and comfortable environments to work creatively, or intellectually. Therefore, as indicated with the media students on a Friday afternoon, it was noticeable that their work rate and focus frequently deteriorated. As commented there could be other contributing factors to that, but regardless any lack of productivity during these periods meant that the students had a propensity to fall behind in their work. As the students worked independently at their computers any discomfort was even more apparent, as they were unable to move around much to get more comfortable, due to the proximity of the students sat either side of them. During these sessions I often noticed students fidgeting as they tried to readjust how they sat. The seating position was relatively fixed with students legs under the worktop, therefore a student's attention could quite easily be directed to any discomfort through the environmental conditions, especially if the activities were not engaging, not discounting the duration of the sessions.

5.3 THE FABRIC AND DÉCOR OF THE CLASSROOMS

As indicated in Section 4.1.4, the classrooms were quite bland and they were also used for other courses.   Cultures, and individuals have a propensity to define spaces and create territories within them. As these were young people who, in their homes, could be expected to surround themselves with the artefacts of their social and cultural preferences I wondered if any lack of representation to their courses could influence how they identified with being music, or media students. As with the section above, this could be one of a number of cumulative factors that could contribute to how students engaged, or disengaged with their coursework.

Classrooms are temporal and cyclical spaces, in much the same way as a commercial working space is: an employee/student enters, does their work and returns home, and the practice is repeated the next due working day. Augé (1995) refers to spaces that are intended to be functional but not appropriated which retain little evidence of any engagement with them as 'non-places' and offers examples, such as, airport lounges, or hotel rooms. My first impression, and my enduring impression of all the classrooms was of rooms that bore no personality, or ownership, due to their blandness. There was no vitality to them; they were just spaces with seats and computers. Whilst not quite non-places, as they were intended to be used and not just passed through, they still had many of the trappings of this type of space.

Some places and spaces can be accepted for what they are, others are amended by the occupants and become a compromise – a 'making do' - between what is desired and what can be achieved, under the prevailing circumstances (de Certeau, 1984). This could be achieved by including personal artefacts, such as a plant in an office, or other evocative objects, perhaps a family photograph (Turkle, 2007). These function to connect the user of that space where they need to be for a purpose, to a valued aspect of their personal life, or preferences outside of that space.

I wondered how students responded to the rooms; if they were troubled by their blandness, or even if they had considered it. These were not issues that I had heard students comment on between themselves, although I had heard some music students ask if they could put posters of their favourite bands on the walls and this was refused by the tutor who said that they were not allowed to decorate the rooms. During interviews I asked students their opinions of the classrooms.

Kev was a year 1, Level 3 music student who already had sufficient A level grades to have gone straight from school to university, but he decided that he was not quite ready for that, and performing music was his passion. He commented:

> *Erhm…I don't particularly like the way it's set round the room...it's…the whole college is a bit bare for my liking. I suppose it's because it's a shared building in't it, but just isn't a very musical environment.*

Other music students responded in similar and different ways.

> Hazel: *You don't get a choice of what's on the wall, do you* [and laughs].

Amy, a close friend of Hazel, was less concerned about the rooms.
> Amy: *Don't really…I can't say I've ever thought about stuff like that…you just go in and sit down, do your work and go home* [laughing].

Stan, a year 2, Level 3 music student, who was becoming quite a successful drummer and had toured Germany with his band during the summer break, was more forthright in his opinion.

> AB: *What about the classrooms themselves, how do you find them?*

> Stan: *They're shit and boring, look at them* [laughing]. *They're so like bland and crap and it feels real sterile as well, there's no character.*

The responses from the media students were very similar, as although they were on the main college campus they, similarly did not have a dedicated classroom.

Ash made a comment that was representative of the cohort:

> Ash: *Like the workplace* [classroom] *brings you down, it's all dull and boring really.*

From discussions with the media tutors they were quite concerned that there was no media identity on the main campus to distinguish the classrooms from any others. There were three classrooms that media used regularly, and others occasionally but they were in different buildings. The tutors wanted them to be situated next to each other, not just to give the current students something they could identify with, but also to make a good impression for potential students in the future that came to look around, or arrived for an interview for a place on a course.

As the music students were in a small and shared building, some 10 miles away from the main college campus, I was curious to extend the question of how they considered the classrooms to the building itself. On the main campus students could identify with being a student due to both the purpose of the site, which was on a self-contained greenfield site and the volume of other students on site. There was little to indicate to anyone approaching the building where the music centre was housed of its purpose, unless they looked closely at a small plaque near the small front entrance. Even once in the building, there was little indication of what it housed.

Initially, this had not been a topic for a question to ask students and it was only when one, year 2 music student was expressing his opinions of the course itself that this matter was raised.

> Al: *...I think…the only disappointing thing I think is the site, it's not…like before at the old site it was just all one building full of music students, smaller, but yeah, this one's bigger, but, ye know, ye share it with people and it's…not really a big thing to worry about, ye know, it's…erhm…a bit annoying at times...*

The previous housing of the music course had been more central to the city, and it inhabited all of the four floors of a terraced Georgian building. As soon as anyone walked through the entrance there was no mistaking that it was a music centre, due to the music artefacts that were visible and not least as the music studios were not efficient in their soundproofing. On the few occasions I had visited there I always heard music emanating from the studios, therefore the interior of the building exuded its purpose.

Before discussing these points on the environment of the rooms with students, apart from the temperature ranges that could occur, I did consider if it was really a concern for them. Their routine was they came into the rooms and then for most of the session they worked at their computers. Therefore, the room itself might have been irrelevant and being able to listen to music, or have a momentary escape into the virtual space of the computer screen, or have short social exchanges through their mobile phones or by other means was sufficient.

Clearly, the extremes of temperature that occurred over the year were a negative experience for students and one factor in how they perceived the rooms and the need to escape them, albeit digitally. Noticeably, students did less coursework when the conditions deteriorated more on warm days, and being sat at computers their focus drifted to their alternative uses. As one student, Debbie, indicates later, when the cohort were temporarily in a more conducive room for working, she could achieve more. Being able to identify with a space, or as Massey (1998: 126) refers to as

'to territorialise, to claim spaces' was not directly achievable by the students due to the rooms' utilitarian interiors. That is, apart from actually being in the room there was no identification with it. In this case the hegemonic power from the institution and the need to maintain the classrooms for other courses was constraining in how they perceived the rooms. To draw in Lefebvre's (1991) notion that space is a basis of action therefore this top down restriction may result in a 'bottom up response' (Willis, 2003: 391) from the students.

If students could not identify with the rooms as places for media or music, apart from their coursework did they draw into the classrooms their social identities through the technologies? The spatiality of the classroom then fragments. At this point, there have only been two factors of the classroom environment to be brought into a complex situation, the climate and the fabric of the rooms. The next to examine is noise within the classroom and how that affected students and if it facilitated learning, or was a distraction or anything else that the range of noise, or even silence added, or detracted to social and educational practices.

5.4 A TYPOLOGY OF CLASSROOM NOISES

Many students, and especially those at the music centre had a tendency to listen to music through earphones, or headphones when they were working at their computers. The tutors did not object to this, unless the amount that escaped from any headphones was at an unacceptable level. My initial response to this when I was first in the music classrooms was how quiet they could be. If I was talking to a student, or a member of staff I was very conscious, even when keeping my voice low, of the intrusion this made to the level of noise. This was not always the case, in any session, as at other times there often seemed to be a lot of background noise as students chatted to those sat near them. Sometimes the tutors appeared to be oblivious to this, especially if they were preoccupied working on their computer, but at other times it drew a quick and sharp response from them. As the music students listened to music much more than the media students I was interested in how they perceived this practice.

Rob, who was aged 39, was the oldest of the year 1 music students and he and Ron, who was 37, sat next to each other on the opposite side of the room from the other students. Despite not knowing each other, prior to the course, both had been working full-time, prior to enrolling on the course and they had reduced their work to part-time so that they could study. Both were aiming for a career in the music business, with the hope that completing the course would facilitate this. Both were very

attentive to their coursework and neither of them listened to music while they worked and only occasionally did they talk to each other and that was usually a discussion on a topic of their coursework. As such I was interested in how they considered the noise levels in the room.

> Ron: *But that's it, another thing is sometimes...especially in the tutorial period, on like the Tuesday, when we get the chance to do our work it can be hard to concentrate because there's too much noise going on...around the classroom, at times from other students.*

Rob's response was very similar to Ron's. There was one other older student in the year 1 cohort and Geoff at 27 had been unemployed prior to starting the course.

> Geoff: *Yeah, yeah. I felt that, especially when I first started the course, you almost felt embarrassed raising your voice a bit ye know...it's like you've got to be quiet, sort of attitude and I don't like that me cos I'm quite loud when I wanna be, ye know.*

Despite Geoff's remark, I never witnessed him being loud in the sessions.

What became apparent over the academic year of the ethnography was that especially at the music centre the noise levels differed quite significantly, particularly depending in which tutor was in the room. In Phil's session the noise levels always seemed to be higher than in Dave's. The result was that Phil often added to that noise by shouting at the students and telling them to be quiet. The students generally appeared to be more focused during Dave's sessions and only discuss things between themselves quite quietly. Though Dave did need to remind them at times to keep the noise down and get on with their work. This was common across both music cohorts. At times during Phil's sessions there were confrontations between him and some students, regarding what he considered to be inappropriate behaviour. This could be a number of students talking to each other on topics other than coursework, or not engaging in their work sufficiently through other distractions.

Understandably, as all the young music students appeared to be passionate about listening to music and performing it they consistently listened to music while working at their computers. Although, not all of them all the time and there was no detectable pattern to this. Despite all students using earphones, or headphones, occasionally there was some noise leakage from them and at times it was quite audible. If it became too intrusive the students often policed the disturbance quite effectively between themselves, unless a tutor had already asked for the volume to be reduced. What was noticeable was if any talking was purposeful and coursework related it was not commented on, but

when it was more social chitchat it was deemed as disturbing. Therefore, getting an appropriate level of noise within the classroom was continually revised.

Art was a 23 year old, year 2 music student who had a degree in Drama, but his attendance and especially his punctuality could be inconsistent. Despite Art being one of the students who had a tendency to wear earphones to listen to music while he worked at the computer, the noise levels from others could distract him.

> Art: *Sometimes I think you just got to get your head down and try to get your work done…erhm…sometimes it is hard, ye know, sometimes people have music on, or whatever and stuff, so it's hard sometimes.*

The media students only occasionally listened to music and that appeared to be when they wanted to focus on a particular task on the computer; notably the majority of the students commented that if they were working at home they would always have some form of media playing in the background. Again, cultural practices were replicated in the classroom and the students appeared to be much more focused and relaxed when working this way.

Bob, one of the Media tutors, very occasionally played music over the interactive whiteboard sound system. From observation I was unsure if the students enjoyed this, or merely tolerated it as they never commented on it between themselves and Bob was always the person who decided what music was be played. Therefore I was interested what their response was to this and the following were characteristic of other responses.

> Emily: *That awful stuff….*
> Liz: [laughs at Emily's comment]
> Emily: *It's really loud as well.*
> Liz: *It actually distracts me.*
> Emily: *But ye can't say anything, cos then he'll just have a go at ye….*
> Liz: *Yeah….*
> Emily: *For trying to talk.*

From Bob's comments to the students about the music he seemed to assume that they appreciated the music creating a more relaxed atmosphere while they worked. The students' remarks contradict this and consequently illustrate the tutor as authority in the room, as throughout the sessions they

never asked for the music volume to be reduced, or alternative music played. At times, Bob could be quite firm with the students and my impression was that they were quite intimidated by him and therefore tolerated his choice of music, unless they had their headphones with them and then they wore those to listen to their own choice of music.

At the music centre there appeared to be a realisation that music tastes varied, even into a multitude of music subgenres, as music was never played through the interactive whiteboard speakers when the students were working independently. I noticed that the students' seating arrangements often reflected a similarity in music tastes. At times students who were sat next to each shared earphones to listen to the same music, so each of them had one bud in an ear to listen from. Though if their discussions on the music they were listening to became too much of a distraction from their course activities, the tutor split them up by asking one of them to relocate elsewhere in the room.

As indicated above the noise levels from the music students could either be from the music they listened to, or social chitchat. The media students occasionally listened to music, but at times the classroom could get quite noisy from students talking to each other socially. If the level of noise became noticeably high, the tutor Bob was quite often firm in his tone when telling the students to be quiet, the students then quietened down immediately and the room was silent. Although, I noticed that he was inconsistent with this and the room became quite noisy during those times when Bob appeared to be engrossed in his own activities at the staff computer.

During a third interview with Debbie, a media student, she had appeared to develop a more pragmatic attitude to the classroom conditions. As Debbie's aim was to progress to one specific university's media course, which needed high grades, I asked her if she was doing any college work at home to help her achieve these grades.

> Debbie: *Yeah a LOT more than I would do at college because…I don't find it a good environment to be doing a course like a media one….Like we were in this room* [a room for Foundation Degree students] *at the beginning of the year and that…I found that much better to work cos there was like a divide right between…right in the middle and everyone…we had space, kind of separate. But in the room we have now it's just like a rectangle and it seems too crowded to be doing...work, and when everyone's like talking quietly it's still really loud, so I found that just going home and doing all my work.*

> AB: *So have you done that throughout the year?*

> Debbie: *Yeah, I've always done that.*

The students had only used the other room that Debbie refers to temporarily while their usual one was needed for some online exams. Debbie always had good attendance but clearly realised how and where she could work more productively. Clearly, Debbie had rationalised her decisions, partially by discussing the situation with her grandfather and her mother who both worked in education. Although this interview was late in the academic year I had noticed that Debbie had been more socially active in the sessions for some time and less attentive to her work than in the first part of the year. Many factors can affect this and when she formed a relationship with Scott, they usually sat next to each other and talked more than before and this changed when they broke up. This was not unusual amongst the cohorts, as changes in friendships, or relationships had a tendency to dynamically modify the classroom seating arrangements and noise levels.

The implication in Debbie's instance was she had realised that the conditions of the classroom were not conducive for her to engage with her coursework as effectively as she wanted to and therefore she relaxed her workload and made up for it at home. So, whereas Debbie had initially viewed the classroom as a place of study, it then became a partial study and social space.

The matter of music, and other media, as a distraction, or facilitator for students to engage with their work will be investigated later in Section 6.3, which in part illustrates the complex dynamics of this environment and what can affect students' approaches to their coursework.

Maintaining an ambient working environment was clearly an issue as the students, at times needed to tolerate less than ideal conditions. This needs to be considered with the duration of the sessions and a need to work independently over those periods. As identified, at times noise, either from other students talking, or listening to music, or even what a tutor played did become a distraction. In this sense the isolated condition of students working individually at their computer resulted in the creation of a microenvironment around them within the micro space of the classroom itself, and any noise external to that could intrude into their individual space. Therefore one student's preferred environment may impede another's. This created quite a conundrum in what ideally should be a social learning community.

5.5 LEARNING ATMOSPHERE AND VITALITY

The sessions predominantly began with some directive from the tutor reminding the students what they should be working towards during the session. This usually differed at the start of a new unit

when the tutors spent some time presenting and discussing the learning outcomes to the students. At times, there was more interaction between the tutor and students depending on the unit. As all the units had evidencing durations for at least half a term and in some instances a term, the students then worked independently for lengthy periods. The media students had an even longer final major project to complete, generally referred to as FMP. This lasted for most of their final year and was the most significant unit of evidencing for their portfolio of work.

From observation, I began to realise that apart from any social discussions amongst students there was little indication of any vitality during the sessions. This modified during those times when students were using the creative software, depending on the activity. For example, when media students used video editing and image manipulation software they were more engaged than learning the underpinning HTML code for website development. During informal discussions, or interviews with students, all were clearly passionate about their subject and aimed, after completing the course, to pursue it professionally, or at degree level. Due to the diversity of students entering FE some can lack interest in the course they are studying, as they could still be undecided on their future career (see Section 2.1.3). At the college it was not unusual for students to change course, or subject areas shortly after enrolling or even after a full year.

Perhaps, looking at the situation I was expecting too much, but I asked students their opinions.

> AB: *Do you think there's any spirit in the room, any fun to learning?*
>
> Amy: *We've had that kicked out of us* [and laughs]*... no fun and stuff. James's lessons are all right and in Mark's sessions you can have a good laugh and do your work at the same time.*

Amy was a year 1 music student and her response to James and Mark's sessions was what I had hoped to observe in the classrooms, but these were studio sessions. The tutors that Amy referred to were part-time hourly paid and highly respected by all students. The students only saw them in the studio practical sessions: James taught guitar and Mark focused on music technologies, although the students still needed to submit essays. I was unable to have anything more than short discussions with James and Mark as both worked professionally in music and once they finished their teaching they had commitments elsewhere. From these discussions, they both acknowledged that the students enjoyed the practical sessions more than writing essays. Paul was one part-time tutor that taught in both classrooms and music studios and as an interview was conducted with him his comments were valuable for the differences he perceived in students' values towards the differing coursework.

> Paul: *It's a complete different ball game…because in the studios they're doing what they really want to do. In the studios it's all about being practical, it's about playing an instrument, recording an instrument…erhm, apart from the studio where there's computer work it's different again, because..erhm, because you've got 'em straight away with an interest that they want to do anyway. The thought of doing different things doesn't enter their head. You still get them, the odd ones that again do…I mean there's rules for the studios again, like music rehearsal skills, ye know, "Before you start rehearsing make sure you've filled your log rehearsal forms in", and some do and again some don't..erhm..so the rule I've applied, which has an effect is, "If at the end of the lesson I come in and you haven't completed your log rehearsal form then the week after there's no band rehearsal", and that's the worse thing that can happen to a music student. As soon as you take away their music rehearsal session..ye know, it's like the end of the world for them.*

Paul's comments are enlightening but perhaps expected, as the students had enrolled to learn to perform with a music instrument and not for the academic elements of the course. Being aware of this, Paul had applied the strategies he found most successful for acquiring the written evidencing he needed from the students. Notably, Paul's comments identify that the students were engaged with the performance element and when they used the computers in the studios for editing music they retained that interest. For both subject areas, computers were undoubtedly a significant academic and creative resource and this was reflected in their extensive use over the academic year.

In considering the classrooms, as a working environment, the extent the students used computers and their response to that is valuable within the primary research question of how are computers shaping the learning environment.

5.6 STUDENTS' COMPUTER USE SATURATION

When I started to ask students their opinions on the amount of time they spent sat down using computers I was unsure what their responses might be, as the majority of the students indicated that they used computers and other digital technologies significantly in their leisure time. Obviously, these were more formal circumstances. As the computers were the primary classroom resource, how the students responded to them could have a profound effect on how they engaged with their course activities.

The year 2 media students used the computers in the classrooms for specialist software and academic coursework for 12 hours a week, compared to the 8 hours for music students. I did have some minimal contact with them during the initial part of their first year and I can remember their

delight when they realised they had individual computers with specialist software and access to the Internet.

> Emily: *....it was real exciting when you got to go on the computers, but now it's...*
>
> Liz: *Yeah...*
>
> Emily: *It's just boring.*
>
> AB: *Why is that?*
>
> Emily: *Cos we're on them all the time.*

What also emerged during the same interview was how these students responded to their boredom from using computers so much.

> Liz: *Like on a Monday we're just sat on a computer all day, on a Wednesday afternoon we're just sat on a computer all day and on a Friday -*
>
> Emma: *Yeah, we're sat on a computer all day -*
>
> Liz: *And we don't do anything else* [Liz emphasised each of these words slowly]-
>
> AB: *And it's all day from nine 'til four -*
>
> Liz: *I think that's almost too long* [laughing]. *Yeah...last year we used to do like in the morning one subject and in the afternoon a different subject and like say it breaks it up a bit doesn't it ...but now we just do like the same thing ALL DAY.*
>
> AB: *How do you cope with that?*
>
> Emily: *I can't finish my work, I just get bored being at computers so I just stop working 'cos I can't concentrate, or anything.*
>
> Emma: *I've, I've go to the point where I can't even start working any more...so I don't actually do anything all day*

Emma's last comment was especially concerning and coincided with my observations of her lack of progress. Despite the comments, Emma's attendance and punctuality were very good and during these sessions I noted how she had the tendency to use her time to socialise, either within the classroom or digitally, or access entertainment websites. As these were periods when they were working independently there was no need to submit work, so there was no direct indication to the tutor that she had not been working. If a tutor walked around the classroom she usually maximised

a Word document, or media software up on the monitor to give the appearance that she was working. This was not uncommon as a strategy amongst other students.

For these students the extensive use was demotivating due to the tedium of being sat at the computers for the duration of the session and they responded by reducing the level of time they used the computers for coursework. Clearly, if there had been a peer learning culture, or more group activities then this could detach students from their working isolation. In Chapters 6 and 8 there are indications from both media and music students that they wanted more teaching and contact with the tutors, again this would help to detach student from any sustained isolation. Therefore any notion of encouraging Level 3 students to work independently is something of an impoverished expectation, without an appropriate pedagogy and what surfaces as a need for greater student awareness.

Jim, who at 21 years old, was one of the older media students had reduced his working hours in a family business to study the course and he reflected on the all day Friday session. This session could at times be one continuous activity over the 6 hours, and often a continuation from previous sessions if there was a focus on one unit.

> Jim: *It can sort of get a bit monotonous...I find it can drag on a bit and…you need some sort of, something to break the day up really. You're sort of doing the same…being sat up in front of a computer…all day...erh...it basically tires me out, ye know. As well as…ye know, I get like a couple of pieces of work done and then I think…oh I've done them and then I don't have any motivation to do anymore work, it's like...*

I noticed Jim occasionally had breaks in the morning to quickly check his emails, or his Facebook page and after this activity he then returned to his work. During the afternoons Jim's pace of work altered and it was noticeable that he had slowed down significantly, often spending a significant amount of time playing online games.

Helen, aged 20, was also an older student who had already completed a lower level media course elsewhere. Amongst all the students, Helen was the most outwardly focused on progressing to a media degree at one particular university and she did indeed achieve this goal.

> Helen: *Definitely too much time. I have gone absolutely crazy this year and last year, I just couldn't...I think that's why I...I mean it's ridiculous...but last year I was hardly ever here, I just used to take time off, ESPECIALLY in Bob's lessons, because I just used to go and spend time in Liverpool with friends. But…I think it was because we was always stuck in a*

classroom, we was never out doing anything, we was never filming anything so it was day in, day out and I just got completely frustrated and bored because I didn't feel like I was, I didn't feel like....it was getting me ready for university. And this year's been exactly the same but what's keeping me sane is the fact that when I get to uni.....

Helen's comments reflect the structure of the course and that a significant amount of course resources were accessed through computers. Her response to this in her first year was to not attend and she did need to complete some of the deficits in evidencing during the second year. In the first term of the second year, Helen's attendance and punctuality were erratic, but she regained focus due to the grades she needed to attend the university of her choice. At the time she was socialising with friends who were in the final year of their degree and from informal discussions with her their level of engagement with coursework was instrumental to her changed focus.

It was not just the apparent tedium of sitting at computers for long periods, but students commented on other ways it affected them.

Seth: *Well by the time I get home, if I've been on the computer all day, I feel wiped out...cos like I get headaches quite a lot, and quite easily now, just from looking at the screen so much and just...well, mind numbing to be honest. Like the workspace just brings you down as well, it's all dull and boring really.*

Debbie: *….I went to the doctors and he said to get glasses and for a few weeks I was fine but then...cos it doesn't even matter if you have glasses on you're still staring at like a computer screen and I go home and I'm just...worn out and I've got headaches and just drained…from just staring and typing.*

Seth conjoins his comments on using computers with a reference to the fabric of the room; therefore both are a factor in how he views the working environment. At the time of the interviewing I can remember noting how surprised I was at the level of their reaction to this level of usage.

The students at the music centre echoed the media students' comments.

Amy: *It's too long to be sat in front of a computer so you start getting headaches and stuff like that.*

Pete: *Mondays, they drag on for me because it's just computer lessons, and that's all it is and my eyes start straining.*

Kerry: *Oh yeah, that's the other thing it's nice to take your eyes away from the screen and get out.*

> Stan: *I know it's just all on computers, there's nothing like...dunno it doesn't fit...really fit in...it's really sterile as well. It's boring, yeah. Get a bit sick of the sight of them to be honest. I thought there'd be more practical stuff, it's just pretty much...half, well more than half the week is sat at a computer.*

Like Seth's earlier comment, Stan also drew in his disappointment towards the rooms and similarly to Helen, he expected more time on other activities.

Pete, during the same interview, commented that he did watch YouTube videos at times when he should have been doing his college work, and I returned to this point with him.

> Pete: *Once you're constantly looking at a white screen with black writing your eyes start getting tired, so I need that relief of going on a different website....or just something else to take my mind off it.*

Colin, one of the year 1 music students, gave a somewhat contradictory comment, but one which identified his coping strategies.

> Colin: *I think the time's fine on them...everything's alright...good. A set time period in the classes....yeah. If I get bored though I talk to my mates...going on the Internet...yeah.*

Despite Colin's initial comment that the duration of the sessions was fine, he also indicated that he got bored and when that occurred he engaged with alternate activities. Like Pete, he remained using the computer but for a respite from the coursework. Alternative use of the technologies will be explored in Chapter 6 but the significance from these responses, which were typical of others was the sheer duration of time spent on computers.

When students use computers they engage with images, audio and text and also reading and writing. This is a multimodal and kinaesthetic experience; however, Mann and Robinson (2009) argue that this level of activity does not necessarily render it sufficient to eliminate any tedium that occurs from the task. Relative to computer-based learning environments, Groat and Musson (1995: 54 original emphasis) considered that 'each student's approach to learning is determined by both a relatively stable entity called *learning style,* and by more situation-specific conditions'. For some students the environment itself certainly influenced their more negative opinions of the rooms and this combined with the monotony of the long periods at computers. Not least the physical experiences that students incurred of eyestrain and headaches. Therefore the conditions within the

rooms were emerging as quite a factor to consider in how the research questions were to be responded to. Not all students were quite as negative towards the conditions.

5.7 PRAGMATISM AND EDUCATIONAL MATURITY

Max, a year 2 music student had a consistent approach to his work and rarely interacted with other students during sessions, although he did actively socialise during breaks. I asked him about the duration of the sessions.

> Max: *Erhm…I'm one of those people that just kind of gets on with the work and tries to get it done all in one go. But, erhm…yeah, it's nice to have a change of subject every now and then, so you don't get bored of what you're doing.*
>
> AB: *Do you ever find that you do get bored in a session at all?*
>
> Max: *Err, no* [laughing] *I'm a workaholic really* [and laughs again]*….yeah.*

One distinction with Max was that he had been home schooled. He mentioned that from this he had learned to focus on a task until it was completed, as then he was allowed to relax and play for the rest of the day.

William was another year 2 music student who had a degree in Sport but decided to pursue a career in music and he was actively involved in music production.

> William: *I don't think really our lessons last long enough for that to happen, I've not been aware of that anyway. No, not really.*
>
> AB: *So, are the length of the sessions okay?*
>
> William: *They're fine to be honest. I think anything over two hours is a bit much, maybe….but when you're getting on with work and things then it's fine.*

For the majority of the students it appeared to be a challenge to remain engaged for the duration of a session. But these two students were noticeably more focused on their work than the majority, although Max did indicate that at times he got bored but from observation this did not appear to detract from his focus on his work.

When the research started I had not considered if the working environment of the classrooms was affecting students' approaches to their work. As mentioned above, the only classrooms that I had

any detailed knowledge of appeared to be appropriate for the students. Consequently, what has emerged was quite a surprise and indicated a more complex situation than previously imagined.

From the data are several factors from the learning environment and the extensive use of computers that affected how students engaged with their coursework, and perceived the course. The students did, at times, find the environment of the classroom challenging to be in for the duration of the sessions. Adverse temperatures, even if uncomfortable and not extreme, can be a factor in reducing attention span and motivation. There was also the fish smell that permeated one classroom from nearby fish processing factories when the windows were open on warm days, which was quite unpleasant. Whereas a comfortable climate can increase productivity, regardless of whether it is a classroom or office environment (Jago and Tanner, 1999; Mendell and Heath, 2005; Wargocki, 2008), these adverse elements accumulate when taken as an overall impression of the working conditions. For some students there was more to consider as the time spent looking at the computer's monitor resulted in headaches and eyestrain. Seating position may also have contributed to this without the students being aware. Adding to this, was the bland fabric of the rooms and despite the computers containing all the resources the students needed for their coursework they could not form any identification with the rooms, or in the case of the music students, both the rooms and the building itself.

These working conditions for the students can be seen to emerge as a multifaceted and significant contributory factor in how they engaged with the activities and concomitantly their approach to the academic work. Even though the conditions of the room were not at an extreme level of discomfort the students did experience this for hours at a time; therefore they must be considered as one contributory element in how students behaved in that environment.

Returning to Section 5.3 and the decor of the classrooms, my impression over the academic year was that the students did accept the blandness of the environment, despite the disappointment. For the music students, being within a multi-purpose building with no clear identity of music culture was a particular disappointment especially as the building was quite small. The media students, despite being on the main campus also expressed that the building they were in had a lack of identity. By not being able to identify with the space, either by decorating it with artefacts, or other means, could this be a partial factor towards how students viewed their college experience and therefore identified with *being* a student? The closest I saw any students actualise any identification in the rooms was by the first act that they performed when sitting at their computer, which was to

place either their mobile phone, or digital audio player near their keyboard. In this way they territorialized and shaped their immediate space, together with what they accessed digitally through social, or entertainment media. These objects are portals to other spaces, experiences, even memories and through these a temporary territorialization can be formed (Macgregor Wise, 2000).

The pertinence of this analysis is that cultures are enacted and reinforced as an iterative process, not only by what the students surrounded themselves with, it can even be embodied through their clothes (Entwistle and Wilson, 2001), as many music students would noticeably dress similarly to their favourite bands. Social actors can express themselves through signs and their meanings: the semiotic mechanisms that are at work in social and cultural practices. As noted in Section 2.3.4, Deleuze and Guattari (1987) and Buchanan (2004), suggest that there is comfort attained from establishing a refrain and through this act a milieu is formed and consequently a personal space is shaped when it is needed.

5.8 CONCLUSION

To conclude, this chapter has reviewed the students' perceptions of the conditions of the computer-resourced classrooms, and the extensive periods of time that they spent working with computers. What emerged were students becoming bored and distracted, with some experiencing physical effects, such as headaches and eyestrain from the time spent looking at a computer monitor. Resultantly, this impacted on their approach to the coursework. For example, media students Emma and Emily commented that as a consequence of the conditions they were unable to become motivated to even start working, or they were unable to complete any work they had already started. Debbie suffered from eyestrain and migraines from working on the computers and these at times lasted for days, despite her starting to wear prescription glasses more in the sessions. She added that after she got home from a day at college she often sat and read a book for a short time, rather than immediately using her computer for her normal leisure purposes. Debbie likened this to detoxing and it was one of her coping strategies for spending so much time on computers while at college. Other students relaxed when they were at home by spending even more time on computers, or other technologies. The distinction was that at home they could use these devices for their own needs, when they wanted to, for as long as they wanted and have as many breaks as they needed.

What is evident is that there is a clear relationship between the conditions that students experienced in the computer-resourced classrooms and how they engaged with their coursework. Time spent working independently on computers was certainly one factor in how students considered their educational experience, as being less than ideal. The lack of course identity to the classrooms and even the anonymity of the music centre itself is open to conjecture towards how much this could adversely affect their educational experience; but these certainly did not enhance it. Therefore what the students only had to identify with the course was through the units they studied and the evidencing on the computers. In this case the media students did have some advantage over the music students due to their continual use of industry standard specialist software. Although, outside of the classrooms the music students had sessions in the music studios, where playing their instruments and using the recording and production software could underpin their identity as performing musicians.

The educational conundrum that emerges is that the students needed to spend time working on computers for their evidencing, but there were adverse physical and motivational consequences from this. Students then sought other distractions as a relief, which then added to the time they needed to complete their coursework.

The classrooms themselves and their anonymity reflect the difficulty that a small college has with resource management and using these limited assets to their potential. If a non-media course needed to regularly timetable a room for the computers those students would not want have wanted to feel that they were intruding into another department. While the students did tolerate the classroom conditions and the amount of time they used computers for during their sessions, in that there were no formal complaints, clearly, to some degree these had an effect on their perceptions of the course and how they engaged with their coursework. As some students indicated, if they wanted a break from the amount of time spent using computers for coursework, they frequently used the same computer for social and leisure activities.

This leads to the second subsidiary question, which the next chapter, Chapter 6 will direct its focus to: How is students' use of these resources in the classroom affected by their potential for use as a social and leisure resource?

CHAPTER 6: DIGITAL TECHNOLOGIES AS ENABLERS OF EDUCATIONAL, SOCIAL AND LEISURE ACTIVITIES

6.1 INTRODUCTION

One particular driver for this research was to investigate the duality of students' uses of digital technologies in the classroom, why this occurred and how it affected their engagement and progress with their academic coursework. In particular as computers were used extensively for coursework, they also had the capacity for other, more social and entertainment purposes by simply changing the criteria in a search engine, or accessing existing resources that students used in their leisure time. There was also the need to consider students' use of their own portable technologies, such as mobile phones and mp3 players while in the classroom. Importantly, why did students feel the need to use the technologies in this way? This was post-compulsory education and it was the student's decision which course they chose to enrol on and actually be in the classroom.

My previous experiences in education and from numerous anecdotal comments from colleagues was that it was quite common to see students trying to disguise their use of mobile phones during a session, especially for text messaging. Several years before starting this research I can remember one particular cohort of students where this was a widespread practice and frustrating for all the tutors who taught them. During one session, after warning one female student several times about her frequent texting on her phone I asked her why she needed to use it so much, as she could easily wait until it was time for a break and then use it, with impunity outside of the classroom. Her response was simply: "I can't help myself". If a friend sent her a message she felt compelled to respond to it, disregarding the formal situation that she was in where her focus should have been directed to her coursework. This situation echoes Ling's (2008) experiences where one, or more person's use of digital communication can be disruptive to the existing social situation. In the context of the example used, the student neglects their coursework, or does not pay full attention to what a tutor is teaching. The broader concern is the affect on the classroom, as a learning environment and if one or more students' actions do distract others, who may want to focus on their work. The example given above may be an extreme one and there were several students in the cohort who had behavioural issues, to the extend that their course tutor felt that they were getting no support in addressing this behaviour and subsequently resigned their post.

As the students in this research used the college's computers throughout the duration of the sessions, their Internet access also afforded uses far beyond their educational value. The value of

the data in this chapter is that computers and other technologies are increasingly ubiquitous in education - at all levels. Therefore it is particularly apposite to investigate the uses of technologies in a classroom and how they can be both a significant educational resource, but also an instrument for distraction and therefore detrimental to students' rate of progression and achievement.

6.2 DIVISIONISM AND THE CLASSROOM

The inclusion of the term Divisionism in the title of this section is one usually associated with the fine arts and in particular the Neo-Impressionist paintings of the Nineteenth Century. Rather than the artist actually mixing colour to achieve a visual effect, it was achieved by applying individual dots, or brush strokes of pure colour to the canvas. It was then left to the viewer's eye to combine them and render the image.

The outwardly tenuous connection of this method to the computer-resourced classroom is formed through the thought that to an observer looking at students using their computers in a classroom, there is the appearance of education and learning taking place. There can be little to suggest otherwise, as the body posture for most activities on a computer changes little. Therefore, if a student is watching a humorous YouTube video, checking Facebook messages or doing something more relevant to coursework there could be little to identify the difference unless you were next to them. For some students, they could be using YouTube, or Myspace for their research, or for both research and leisure due to the mixed content on these websites. It is only by going beyond the outward appearance of the classroom activities and looking closer at its constituent parts and their affect on each other, that it can be interrogated to gain knowledge of how computers and other technologies are actually being acted out in this social and educational context. A difference between the painting and the classroom is that the painting is fixed, whereas as what occurs within a classroom is more fluid and time based and therefore not constant, but susceptible to change. This explanation, in part refers back to the choice of ethnography as methodology, as only by being in the classroom environment itself was there the opportunity to observe students' activities and any subtleties, or changes in behaviour during a session, and over a lengthier period of time.

6.3 DISTRACTIONS, DIVERSIONS AND ENGAGEMENT

Chapter 5, in several instances, illustrated that the conditions and duration of the classroom sessions could result in some students becoming disengaged with their coursework, especially when there

were lengthy periods of working independently. The digital resources that students could engage with in the classrooms offered a respite from their work and the working conditions, especially as students recognised these as technologies that they used in their personal lives for social and leisure activities, only now they were educational artefacts in a formal classroom.

Throughout my observations over the academic year I had constantly noted how many of the students could quite easily divert from their coursework and engage with social and entertainment media, either on their computers or through their mobile phones or portable music players.

What was apparent was that some students had a tendency to engage with social media almost from the outset of being in the classroom and sitting down at their seats. It was only after this activity that they then appeared to realise that they needed to focus some attention to their work; it was as if they needed to go through, what was some form of ritual or habit, before they could then focus on their college work. Others initially engaged with their coursework and then deviated away from it at some point during the session. Sometimes this could be more in the second half of the session; at other times it was in the first part of the session, or even right throughout the session. For some, it appeared that after they had a reasonably productive amount of time on their coursework they then used social or entertainment media for a break, or to digitally communicate with friends. For others, they alternated between their college work and other media and often had a video, or an online game or some social media running alongside a browser that they were using for research and the Word document that they were writing their assignment in. There might even be some course software taking up monitor space, so that the number of activities visually occurring in the one monitor screen was substantial (see Appendix 1). At other times, and for some students the alternation between coursework and other activities could be quite haphazard and dependent on the session, the tutor and the topic. There were also those periods just before a term break, such as in December when the first term was about to end and students noticeably began to start to take a more relaxed approach to their work, even if there were deadlines.

What became apparent was there were a broad range of variations that occurred, some pattern forming and quite predictable and others more haphazard and dependent on other factors that influenced a change in behaviour. It could be if one student was absent, then another might engage with their work more than previously. Or, some students could check Facebook, or their mobile phone to find out why another student had not arrived. There could be a change in the social dynamics within the cohort, or between friends and this could modify any previous patterns that had

been apparent. The fluctuation reflected the diversity of the students themselves, and not that in their time outside of college these were technologies that they frequently used for leisure, entertainment and social communication. There were some noticeable exceptions to this, especially the two oldest year 1 music students. When they first arrived on the course both had used computers, software and Internet technologies very little before, as they had not been a priority of their working, or social lives. They needed instruction in some of the basic formatting functions of Word and the principles of more efficient searching with Internet search engines, but as these were skills needed in most sessions both learned them very quickly. There were the occasional times when they asked me if I could remind them how to do a particular action in Word, or something similar.

Across the cohort, there were some modifications in behaviour, depending on the session. As indicated previously, the students often worked independently over long periods with only a small amount of initial directives from the tutors at the start, or during a session. At other times the tutors gave a plenary presentation to the students and this then disrupted any initial activities of students checking for messages, and so on. Often the tutor needed to tell the students to leave their computers alone and switch off the monitors, so that there was a reduction in any non-academic activities.

During the interviews, the students were asked how they could become distracted from their coursework. I was always surprised how open and self-aware they were in their responses and there appeared to be no guarding of their reasons.

A year 2 music student, John, was very introspective on how he could become distracted, dependent on his frame of mind.

> John*: Well, it depends if you're in like the state of mind where you just struggle to do the work you can get distracted pretty easily, but if like you're in one of those moods where you can just carry on and carry on doing it then you can do it for a couple of hours straight and just...it depends really how you're feeling and...time of the day sometimes.*

Ash, a media student, demonstrated that he was little different to John in how he could become distracted, despite the different location and subject.

> Ash: *You get side tracked and ye, ye start to, you start to slip up a bit cos it's...it's if you're doing the same thing for hours and sitting and writing essays on Word to...presumably majority of people isn't...the most exciting thing.*

I asked Ash what distracted him, as I had noticed that over several weeks he had been looking at used cars for sale on ebay and other websites, such as Autotrader. During this period he had also been discussing the merits of various cars with other students sat near him during the sessions. His response succinctly confirmed this.

> Ash: *ebay.*

The effect on Ash of being sat down for long periods using an individual computer was certainly one aspect in influencing how he would become disengaged with his coursework. As John commented, it could just be the mood he was in on a particular day, which could be due to a range of factors perhaps not even related to the immediate classroom situation. For Ash, he was considering buying his first car and this youthful and milestone experience was dominating his thoughts over the hours that he was sat at his computer.

What was very apparent was that during the periods when students used the creative software, rather than just working in Word or researching online, many became engaged with their work for longer periods and with a deeper focus. In many ways this was expected, especially for the media students, as this was a particular reason they had enrolled on the course and they were using the same software that they would be expected to use professionally. Although even this did depend on the duration of the activity, as some tasks could just last for the one session and others, such as authoring a website, for the media students, could continue for a whole term. For the media FMP it was even longer and the students would work on this complex project, in some of the sessions, for a significant part of their final year, as it represented a large part of their portfolio of work. This variation of engagement could also be dependent on the software the students were using at the time, and therefore the activity was a clear determiner in motivation, as indicated in a media student's comments:

> Ash: *....if I'm typing on Word all day I'm more prone to getting distracted and sort of doing something else, but it's like more...boring than....I mean, you have to do it, but compared to something like doing something in Flash, or something like that it's....*

Flash, the software application that Ash refers to, is part of the Adobe creative software package that media used and it was for the authoring of animated graphics to combine into websites they

were developing. So if the students were reasonably competent with it, it could be an exciting and engaging activity. Some students could find it more demanding to use, as it relied on accurately inputting a lot of sequential actions and even the smallest error could result in an animation not functioning as intended.

From the observations, it was apparent that students had some lulls in their focus on the coursework. Returning, in part, to Ash's comment: 'You get distracted and….start to slip up a bit', and also drawing from interview data in Section 5.6 that identified students becoming demotivated due to the amount of time spent working on computers, it was apparent that this drop in focus could be due to a range of factors. This was especially apparent when Emily and Emma respectively said, '…so I just stop working' and '…I don't actually do anything all day'. These comments fully confirmed what I observed regularly amongst many students. Ash's response was quite typical of many students but Emily and Emma's less so, although they were by no means the only students to respond in this way. These brief comments discount the more consistent work ethic of a small number of students, especially two older music students who rarely lost focus on their coursework. I noticed that their strategy was often to have a short break of a few minutes and sit back and just relax, or they talked between themselves, usually on the coursework.

From the time spent sitting and observing in the classrooms, or walking around them observing, or even sitting next to students and having an informal discussion with them, I became aware of what they turned to when they needed a distraction from their work. If a tutor was walking round checking what students were doing, I noticed those who were engaged in non-academic activities quickly collapsed a webpage, or put their phone away, but when I was nearby they continued with whatever was interesting them. Therefore, my presence was perceived as non-threatening and I could gather data on the subtleties of student behaviour. Apart from what I observed, I also wanted to hear their views, to see if their perceptions of what they were doing and the duration matched my observations. It was quite common to see students relax their efforts and then to later observe them have a sudden realisation of how long they had spent away from their work and suddenly start focusing on it again.

6.4 SOCIAL TECHNOLOGIES AS WORK ENABLERS

Many students listened to music, or other media while they were working at the computers, and at times this appeared to function as an enabler that afforded them to focus on their work. The music

students especially were avid and constant listeners, using either their personal music players, or online through YouTube, or Myspace where they could attain auditory and visual stimulation through both the music and videos of artists performing.

> Hazel: *You HAVE to go on Myspace* [laughing]. *Cos you get so bogged down with coursework it's like, "I just need five minutes"* [laughing]. *I think music helps as well…if you put music in your ears while you're working. I find if I listen to music on my iPod I just….I write ten times faster and a lot more work than I would do without music.*

For Hazel, Myspace fulfilled a dual purpose; it offered her a break, when she needed one and it also facilitated her to focus on her work. Though there are parameters between the media enabling coursework and it being an alternative to it, and therefore a distraction. Hazel was asked if there were any other social websites she accessed during the sessions.

> Hazel: *MSN* [and laughs] *and I go on Flickster[3], but that's something different. Oh yeah, I did go on Facebook….*
>
> AB: *If you're using MSN, do you communicate outside the room, or within the room?*
>
> Hazel: *I sometimes talk to like people across the classroom* [laughing]… *'Is that what you're doing'* [laughing]. *You know Moodle[4]? Well you can also message people across the room on Moodle, if they're online or even if they're offline.*

So clearly if there did appear to be silence in a classroom there could still be a digital social discussion taking place. If the tutor was at the staff computer at the far end of the room, or not directly near the student there was nothing to indicate that this was taking place.

The media students generally only had their earphones in to listen to music during an extended period of working independently. I asked some of them, during a small group interview if this helped them focus on their work.

> Sean: *It does, cos I seem to be able to blank out everything around me.*
>
> Scott: *The thing is I don't, I mean I don't...I can't have music in my ear…erhm…but like yesterday there was the radio on and I could actually work well with that because it was just like kind of, ye know. I mean when I'm working at home, err, I'll…like last night I was*

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[3] Flixster is a social media platform where movie trailers can be watched and the user is updated on new and upcoming movies.

[4] Moodle was the college's online learning environment

downstairs until quite late…erhm...I'd actually just turn the TV on, just so that just basically I'd like some company, or someat [and laughs] -

Sean: Background noise.

Scott: *I wasn't, ye know, actually watching it* [a video] *I'd just had it on because I was...it's background noise and keeps me...*

Scott's comment was thought provoking as many of the students who did college work at home said that they did so with some form of background media, as the austerity of no music, or visual media seemed to be unthinkable to them. Though there is obviously a fine balance between any efficacy from media that is background comfort and its potential for too much distraction. An appropriate analogy could be someone who lives in the bustle of an inner city and then stays in the country and cannot get to sleep, as it is too quiet and this disrupts their normal pattern. Perhaps, the use of media when it functions in the background has permeated into youth cultures to the extent that, for these students, silence, with just their own thoughts, was too much. To avoid this discomfort, they needed something more familiar to add to their academic activity, and music, as part of their cultural consumption, fulfilled this. In this context it is apposite to draw in the earlier reference in Section 2.3.4 to the concept of the refrain (Deleuze and Guattari, 1987), where music could function as 'a portable territory that can serve us in troubled situations' (Buchanan, 2004: 16). Although in this context, the difficult situation was the thought of focusing on coursework, and the intellectual demands especially if the quietness was disorientating. For Sean and Scott, the music appeared to function as a culturally familiar and convenient enabler for working at what they considered to be an appropriate level of engagement. What also needs to be considered is just how much of a distraction it could be, relative to Section 2.3.3 and just how much attention is diverted to the music and therefore the level of attention to the coursework is diminished to the extent that it reduces the quality of the work, and its subsequent grading by the tutors.

6.5 DURABILITY AND STRATEGIC MEDIA

At times the discussions amongst the media students could become more obvious and persistent, especially on a Friday afternoon. Every Friday consisted of two, three-hour sessions and the afternoon was usually a continuation of the morning's activities. It was noticeable that Bob, who was the tutor for all of Friday did not discipline the students during the afternoon as much as other days if they were more socially active, or not focused on their coursework in some other way. After the lunch break, unless Bob gave some form of instruction he expected the students to continue working independently on what they had been doing in the morning session. During these

afternoons he usually worked at the staff computer for most of the session, unless there was a need for him to leave the room for some form of administrative matter. I was aware from short informal discussions with Bob that he often relied on these times to try and meet his administrative duties. His contact hours with students were a minimum of 24 each week, and these could be increased if he needed to cover for a colleague for whatever reason. Hence, as with other FE teaching staff, he could find that what management expected in his duties was a challenge to meet.

During these periods, such as Fridays, when students worked for long periods at their computers I noticed that the level of focus between students varied considerably. Those who did appear to maintain their focus on their work often had some form of visual media, rather than music, running in the background that they listened to through headphones. In one group interview a number of students highlighted the efficacy of this for them.

> Seth: *I find, I've found that, that I go on like…say on like a programme website and put it small, in the top corner of the screen and listen to it while I'm doing work I can actually get more work done, cos I'm listening to that. So it keeps like, you like…well it keeps my attention on the screen and away from like everyone else. So I don't turn around. I just kinda get on with my work, look at the screen, type, get on with it, keep listening…whatever. I find that's a better way to work. But I think if all those programmes were like…well not the programmes, all the sites were like blocked[5]…I don't think –*

> Debbie: *I think that, yeah.*

> Seth: *If they were blocked, then we'd actually get so we'd turn around so much and get distracted by everybody else…*

6.6 PRAGMATIC CHOICES: SOCIAL TECHNOLOGIES AS DISTRACTION AND FACILITATION

Helen was an ambitious media student, but as indicated earlier she did have some attendance issues. It was noticeable that she frequently accessed social and entertainment media on the college computer, especially to communicate with friends who were already at university. During one interview Helen illustrated her self-awareness of this.

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[5] During the research period the college did change some of the Internet security parameters and some websites were filtered so that students, and even staff could not access them. Some students then used proxy servers as a means to continue their access. Those students who were persistently using the Internet to access resources that were not coursework related could also have their Internet access suspended for a limited period, which could be up to two weeks, or a month.

> Helen: *I think, I think what that is, is…I mean I am…guilty of using MySpace and Facebook and things like that…during college times. But I think when you get so incredibly mind numbingly bored of something…I think you're going to jump at the chance for a distraction.*

Helen was a lively, energetic student and I noticed at times she focused for long periods on one topic, even extended over several weeks if it stimulated her, whereas at other times she became quite agitated and frustrated and needed several tasks of shorter duration during one session. During one interview Helen made the connection between using computers for lengthy periods and non-academic activities.

> '…*but I think when you're just doing it* [using a computer] *literally day in, day out for TWO years, you will just get bored….*'

Helen's ambitions and her conflicting use of technology for a distraction could be considered as a means for her to cope with the working conditions, despite taking her away from her work. Jim, like Helen was slightly older than most of the media students and during the last interview in the final term I asked him if he still felt the need to go on sites like Facebook and Myspace when he was trying to complete his work.

> Jim: *I do…I think it helps me sort of get through the day more than anything, and it sort of gives you a break from your work for a few minutes and…sort of thing. It's like now, for example, if I went back in the room now I could do more work. But, if I, if I, I can't really go for long stretches doing piles of work…cos I'll get to the point where my brain freezes.*

Like Helen, Jim appeared very self-aware of his non-academic use of technologies and he had made what he thought was the most productive use of them, as a means of coping with the workload which was limited by the duration of his focus.

6.7 SELF-POLICING OF TIME AND TIME AWARENESS

As part of their coursework media students had to evaluate the special effects used in movies, and other film making techniques. Resultantly, as indicated in the introduction to this chapter, it could be even more difficult to identify if students were doing their coursework by watching a film, or if they were just casually watching one. Using the Internet, students could access a range of websites where they could choose from a range of films to watch for these tasks, they could even search for film clips on websites, such as YouTube. For some students, even if they were doing their work they could still drift away from their schedule, as an interview with Debbie illustrates.

> Debbie: *I just sit on YouTube and like, cos for my FMP I'm doing short films, I have to watch them. So I'm like, I'm watching films or programmes and then you're watching it and then I'm thinking, "Oh, I've got like four hours until four o'clock, oh I can watch something else…I can watch something else". It's like three o'clock and like, "Okay, I've got an hour and haven't done anything".*

For the FMP, which lasted for at least two terms clearly the students ideally needed some self discipline in regulating how they engaged with their online research. There was some awareness of this that surfaced during interviews.

> Ash: *I think with the FMP…..like I'm doing, like an online portfolio…..It's like you can sit on MySpace going through, like cos you could use that almost like…an online portfolio, like for uploading pictures and stuff and it can end up being an excuse for looking at YouTube as well.*
>
> Seth: *…cos I'm doing a short film as well, like an advert. The thing is…if you choose something you enjoy to do, like your FMP, or something like that, really makes the whole subject more fun for…cos like you think, "Oh yeah, just going to research like say biking" and I can look at the new bikes, but I could review them while I'm doing it.*

From Seth's comment, he was aware through his choice of subject that he was able to combine coursework evidencing with a personal interest and therefore gain personal knowledge and coursework evidencing, and retain his interest. Ash realised the distractions that he could incur, by being on the Internet and all of its alternate resources unrelated to his immediate task.

What these comments from students identify is that there was the potential for them to become distracted while engaging with these types of activities. Some like Seth used a personal interest as the topic for a creative task and then the research and the following work could become more engaging.

What students' comments on their non-academic use of computers serve to illustrate is how much they were aware of this. Even with Seth's more considered use of the Internet, it was noticeable that at times he could spend a disproportionate amount of time on the Internet, relative to what he needed to do. Therefore, even in the most considered of circumstances the multimodality of what he was watching for his project could engage him for significantly longer than needed. For example, if he was watching a film to assess how they were achieving a particular effect in it, he could end up watching the whole film, rather than repeating the part with the effect in.

Some students were reflective on how their intentions to use social, or leisure media briefly could end up being longer than intended depending on the circumstances.

> Scott: *I used to be really bad, I mean some days I used to spend full days watching Family Guy. Then I realised, ye know, I can't do this anymore –*

> Sean: *It all depends, cos sometimes you can go on it and you've got like no messages or comments, other times you'll be havin' like ten people on to talk to always and you just get like into the zone of that, and it's like "Oh, I've got work to so, see ye", you've got to get back to the work.*

During one group interview with female media students I asked them if they could police the time spent on non-academic activities.

> Emily: *I usually just go on to check my messages, reply and then go off again.*

> Liz: *Unless you're in conversation* [and laughs].

> Emily: *Yeah, then…*[all laugh together].

> Liz: *If someone* [tutor] *doesn't notice it then I go on just to like check and then I think, 'Oh no one's noticed' so I stay on a bit longer* [laughing]*, and then I stay on a bit longer, that's it.*

It was apparent that both Emily and Liz where mindful of their tutor's presence and how he might have responded to their social activities. Through technology they escaped the confines of the classroom and maintained their contact with friends that they socialised with when not in college. It was clearly the need to maintain this socialisation that appeared to drive these actions and many of the messages that were exchanged, were quite trivial and could easily have been completed during a break, or at the end of a session. Emily and Liz seemed good friends and caught up on social events at the start of a session but this appeared to not satisfy a need for social contact over the duration of a session. When checking through fieldnotes, these were not isolated occurrences in all the classrooms, but a regular activity in each and every session that I observed. Therefore, for students it becomes a norm, rather than an intermittent activity of displacing their attention from the coursework and in some instances the space of the classroom.

During the same interview with Liz and Emily, they were asked if this break from their coursework helped them cope with the coursework.

Liz: *NO, it just distracts me* [laughing]. *If I'm like sat thinking about something* [not course relevant] *I just type it into Google* [and laughs].

All of these students were enthusiastic about their course, they were very pleasant and polite and not disruptive in the conventional sense of disruptive and challenging behaviour, which could occur with some FE students (Vizard, 2012). Despite this, they could still get distracted and thus not progress with their coursework at the pace that the tutors had allowed for. What was noticeable from observation with all the cohorts was that if one student was watching an online video, or film, and found something amusing other students stopped their work and either turned around, or moved over to watch. So, what was a distraction for one could escalate and eventually a tutor intervened and the students then returned to their work. This could be repeated several times during a session, with the tutor becoming increasingly frustrated at times.

This chapter has so far identified a range of ways that students used their computers and other technologies for social and leisure uses; this is especially germane to the overall focus of how these technologies are shaping the learning environment. The data does identify a divide between the classroom learning space, the classroom space for non-academic activities and a division where technologies enable a division between the classroom space and the social world outside. Therefore due to the technologies having that capacity many students will take advantage. Outside of the college, they use computers for the same purpose and it is the distinction between the formal and informal situation that appears to be fluid, together with technology's capacity to border cross depending on the user's command. This complex situation, so far works towards the focus of several of the research questions, including the main and the subsidiary questions, and how technologies are used academically, which will be the focus of Chapter 7.

As commented, many of the music students listened to music while they worked, and this was with the tutor's permission as it did at least reduce the social chitchat and there was a general consensus of opinion that it did afford the students to focus more on their work. It did seem to partially fulfil this purpose but I did wonder if this was at the cost of them attaining a deeper engagement with their coursework. Laughey (2006: 125), suggests that music 'consumers can become unconscious, or only semi-conscious of its presence' when it is used as background noise. In this context, this proposition is questionable due to attention capacity and its potential distracting factors under some conditions. When focusing on students' use of background music during the sessions I noticed that at times the music was never continuously acting in the background and during part of the music where there was possibly a favourite section, students stopped their work and listened more

intently. If students were sharing earphones, then this could develop into a point of discussion and any work was temporarily suspended. Roda (2011: 119) posits that selective, but divided attention 'can induce errors'. As a person's efficiency of processing information is limited (Styles, 2006), then self-selected background noise must be considered as something that contributes to the amount of attention given to an activity. That is aside from other variables, such as cognitive ability, the internal dynamics of the classroom, any direct physical noise (Schmeichel and Baumeister, 2010) and so on. This is not discounting the affordances of more emotional and communal elements of learning, which due to their presence, or absence can be gained, or lost; these can be internal learning cultures and atmosphere within the classroom, plus other more individual factors such as tiredness. These are just some of the range of influencing factors that contribute, or detract from a focused social learning context.

To add to this, I noticed that those students who worked in isolation by wearing their headphones had a tendency to academically engage less with the students around them and therefore any potential gain from peer interaction and support, not discounting potential critical discussions, was not being exploited. An argument could be that as the students were focused on their work, at these times they needed the isolation from others. Countering this was that this practice was the norm (see Section 5.4) and for a social place of education, the level of peer discussion and learning I witnessed was quite minimal. Hence, due to this, at times and as previously commented there was an unexpected quietness to the rooms. The implication from this illustrates that, 'stillness and quiet are not in themselves signs of educational 'productivity'' (Noble and Watkins, 2009: 4).

So far this chapter has focused on the students and as the practices of students were so prevalent, it is valuable to draw in the views of the teaching and LSA staff who had contact with the students. This allows for a broader view of these activities beyond observation and the voice of the students.

6.8 THE EDUCATORS' VIEWS

From my tutor role I was aware that other teaching staff were not surprised if they saw students engaging with non-academic resources in the classroom. However, I was interested in what a new LSA's impression of the students' engagement with their coursework was. Sally was new to this role and had worked at college for two terms, but only with the media students for the final term of the year. The previous cohort she had been with had not used computers, so this was her first experience of students using them as their main resource.

> Sally: *I thought they were fairly, in one way, fairly casual about it err…and obviously because it's like a whole day lesson…I never felt there was a sense of kind of urgency, perhaps because the lessons were unstructured and there wasn't really a tutor at the front ye know, kind of getting them all working on one thing, or teaching them, so I think that made the atmosphere feel quite casual. But I think they certainly all seemed to have a...be quite passionate about what they do, and interested in it.*

Sally's comments on how the students engaged with their work was insightful towards the duration of the tasks and that there were no short time-bound goals to achieve in much of the evidencing. Below, Sally confirms the duality of activities occurring within the room. Sally also identifies the difficulty in discerning if what a student is doing is for their coursework, or for pleasure as the same media resource could be used for either.

> Sally: *Always on YouTube, always on YouTube…err…and showing each other things and…so it's obviously comes from an interest in it, you know, I don't think it is always just messing around...I think they are interested in it. I think people err there's been games as well I've noticed, that they're playing err...people are bringing music and most people are listening to music and most people are listening to music while they're studying or writing err.. So there's a bit of a fine line, cos obviously a lot of their course…and the media stuff they're doing is about filming and might involve that but I think sometimes they're doing other things as well* [and then laughs].

LSAs, by the nature of their work, can have long periods working directly with students and I asked Sally if the behaviour she had commented on, in the above quote varied over the duration of a day, or session.

> Sally: *I would say there's a handful of people in the group that have it on all day* [Friday] *and they might skip in and out of work...and then there's other people that work all day. So I think…in the morning actually I'm surprised when I come in how many people have gone straight on to YouTube, or straight on to their email account rather than starting with work...err...and I do find towards the...in the afternoon things do lapse a bit and by the end of the day…err...people are watching it a bit more, but generally I've just noticed that people just seem to have it on ALL the time even if it's not up on the screen they'll have it on and maybe just want a break and switch to it.*

Ian, a part-time media tutor commented on how the students usually responded to critiquing a short part of a video that he had played on the whiteboard:

> Ian:…*if you don't tell them what to do next, or how to apply the learning outcome to what they've seen, they may go and wander on to music videos, or things like that.*

As there was an expectation for these students to work independently, this goal was clearly not being met.

Nick, an LSA at the music centre added, on the topic of students' engagement with social and entertainment media.

> Nick: *They're a distraction, definitely a distraction, yeah. They've got their videos going on and music going on; some of them they're watching a video. They're texting people and they're listening to a different tune on their ear bud as well and how they can actually get any work done while they're doing all that I don't know.*

During a more open part of an interview with Alan, a media tutor, he commented:

> Alan: *You can walk around and you see people clicking ye know and then it goes all the way around and then it clicks back on again* [laughing], *erhm yeah, it's like you're wearing something ye know and as you get into that sort of like area it shuts down zum, zum, zum, zum, zum* [laughing].

What Alan was inferring was that the students were accessing more social, or entertainment resources via their college computer. Alan had commented on this previously and the intrusion of students' use of technologies within the classroom for non-educational purposes and how there seemed to be a constant urge to digitally communicate and in the context of the previous quote he added:

> Alan: *Well you're getting this addiction, some of them can't, CANNOT leave their MySpace unchecked in case someone leaves a message, one of their friends ye know. "But she might have left a message for me" AND? "Well I've got to get back to her", "No you don't", "Pardon but I do, I've got to get back to her". It's like oh-h-h* [in a frustrated tone] *"Okay then". Ye know, there's this NEED to know, there's this fear of being left out of a circle that they don't like.*

Alan was asked if he thought that students could isolate learning time from social time.

> Alan: *I don't think they can, given the technology, if the technology's there for them to use.*

Carl, a new media tutor commented:

> Carl: *They're too much, they're too easily distracted now…all…just from the small impression of the students I've seen…at all levels, degree level and at the lower levels, it's quite scary to see HOW easily distracted they are…erhm you know all it takes is one student to see something on YouTube and then everyone's piled around them, the whole of the class is in a roar and then you've got to sort of like tell them to get on with their own work, but…it's really hard to get them to focus.*

It is apparent that the staff were very aware of how students could use technology in the classrooms non-academically. What has emerged is the level of distraction that can occur and its repetitive

nature. There are compounding factors that are at work, and apart from the most focused of students there seems to be an acceptance that technologies can be used in the classroom, for other than academic work. This can occur discretely, when students are observant and if a tutor is not watching them they will take advantage and continue their social activities. Students might be unaware of how long they spend away from their work and a significant part of the session can be lost to this. Boredom contributes, as a reason, which then questions the amount of time spent on one activity. The awarding body sets the evidencing criteria, so the tutors are quite limited in how they construct the curricula. This needs to be conjoined with the perception of the staff that the students needed to work independently at this level, but the actuality was that they found this challenging. To reiterate, these were students who were obviously enthusiastic about the subject itself.

6.9 ISOLATION IN THE COMPUTER-RESOURCED CLASSROOM

To conclude this chapter the comment from Pete, a year 1 music student was quite enlightening.

> Pete: *They can be quite isolating as the teacher kind off isolates himself from the students and doesn't really go around as much as they should do. I mean me myself, I'm admitting this openly, I'm like constantly going on MySpace and YouTube and I get distracted from my work and I need that pressure to be there...*

What Pete refers to as 'isolating' has two connotations, firstly, tutors being sat at the staff computer at the furthest end of the room and secondly he clearly needed more support and as he said, 'I need the pressure to be there'. Noticeably, the tutors had other duties that intruded into their contact times with students, as identified earlier with Bob. At times the tutors also had a significant amount of marking, or feedback on draft work that students had emailed through and the only way they could manage this load was by balancing their activities in the classroom in what they considered to be the most appropriate way.

6.10 CONCLUSION

Whatever an analysis, or range of opinions and expectations of students are posited, if there is some sort of deficit in the classroom, there is a probability that under these technology rich conditions students will signify their response by drawing on their cultural practices with the available technologies.

As Stiegler (2010: 4 original emphasis) comments contemporary culture can capture 'the attention of young minds in their time of "brain availability"'. Ideally, classroom activities should fully occupy students for the duration of the session, or at least that was from the standpoint of the lesson plans that were produced for the few teaching observations that took place during the time of the classroom research. And, from the tutors' position on a day-to-day basis where it seemed that the onus was on the students to remain engaged as part of their capacity for independent learning (also see Section 2.1.2). As indicated in Section 2.3.3, students have grown up in an age where attention has been socially and culturally shaped to engage with ranging modes of information, often simultaneously from different sources. As Lanham (2006) argues, in a media and information rich age, it is attention as a commodity that is in shortage and fought over by all the 'fluff' around us. Therefore for students, to sit down at a computer focused on one task for hours at a time, may seem to be a disjuncture, between educational expectations and students' attention and learning preferences, especially if this is repeatedly re-enacted. Classrooms then risk becoming sites of mundanity and therefore out of context with student needs for teaching and learning to be engaging and stimulating.

The polyvalency of computers renders them to be imbued with meaning from both education and students use of them of social and cultural objects; therefore it can be understood if an off-task use of them may seem more appealing at times than coursework. However, education pathologises students' use of digital technologies for anything other than educational tasks. It was viewed as misconduct and students would be threatened by loss of Internet access for a period of up to two weeks if this became a consistent *offence*. It is worth reiterating that none of the students involved in the research had behavioural issues and all viewed the course subject as something to do beyond education; therefore consistent off-task use indicated something other than mis-conduct occurring.

If classroom activities are limiting in their engagement for students whose culturally formed attention needs are shaped through multimodal stimulation and rapid exchanges of information then there clearly will be a misaligned between curriculum, or the pedagogical interpretation of it and what would satisfy students preferred way of learning. It could be argued that student attention is ephemeral in nature as it works its way through the 'fluff' (Lanham, 2006) that new media and technologies continually surround us by in our daily online and offline lives and therefore education needs to adapt to that, otherwise interest and intention can move to whatever provides the most stimulus.

It can therefore be understood how networked technologies can facilitate a movement away from the challenges of education, however temporary or iteratively this is performed. To draw on Deleuze and Guattari's (1987) spatial concept of a line of flight this movement away from one context, to another can be conceptualised as becoming an agential act of deterritorialization from education's activities and space to then reterritorialize on to another activity, or digital space. As Youdell (2011: 32 original emphasis) indicates, referencing Deleuze and Guattari, it can be imagined as, 'escaping this and 'becoming' otherwise', although in this context still within the frames of a faceted identity   Notably, as a concept within this context, a line of flight opens up opportunities for conceptualising this behaviour but it is limiting and this is explored more intently in Section 2.3.4. This is especially pertinent as a line of flight is singular in direction and aim, whereas as illustrated in Section 2.1.6 and 2.1.7 attention and identity have the capacity for fluidity and presence can be achieved simultaneously within different settings. Consequently, there can be an oscillation of attention and presence between differing contexts and activities, and therefore intentions.

The next chapter, Chapter 7, extends the research focus from the computer-resourced classroom itself, as an environment, and how students could be distracted by technologies to how students approached their academic work during the sessions when the computer was the predominant educational resource. This directly draws in the research question: How do students use these technologies for research purposes and then the processing of information that is sourced?

CHAPTER 7: ACADEMIC LITERACIES AND NEW DIGITAL TECHNOLOGIES: RESEARCH, INFORMATION PROCESSING AND SUPERFICIAL LEARNING

7.1 INTRODUCTION

As computers were the primary educational resource in the classrooms this chapter will focus on one of the research questions, which was to investigate how students used these technologies for research purposes and then process the information that they obtained. Using data from the ethnography this chapter aims to present the practices the students applied to their coursework from the initial stages through to its final submission. This offers an insight that is frequently absent in education research, which was gained by a prolonged immersion in the research field with students and tutors.

As commented in the stimulus for this research in Section 1.2 there had been a frustration amongst FE tutors in how students were failing to engage with course literature, even the assignment briefs that identified to students what evidencing they needed to submit to pass a course unit. I can remember at that time I used the term one-shot culture, as all tutors were generally receiving work from students that had little evidence of any corrections being made, or evidence of any thought to other basic principles, such as a clear structure or to the presentation of the document. I can also recall observing students starting to write an assignment on a computer and continuing in one stream of thought that was externalised in a Word document. When they got to the end of the writing there was little attempt to read what had been written and consider any changes that were needed, as it was considered as complete and then submitted. These were not localised occurrences, as colleagues from other institutions offered similar accounts of their students' practices.

At that time computers were not so accessible and in some FE classrooms there were a small number that students could use when they were available. Those that were available were often not connected to a college network, or the Internet. Any sources of information were course core texts, tutor handouts or from the institution's library. What was noticeable in teacher training courses, professional development events and professional discourse were frequent references to the surface, or superficial learning practices of students and that staff saw little evidence of deep learning, resulting from student motivation and applying their knowledge and understanding to the

evidencing. Some of this emerged from some students lacking an interest in their course and applying an aliteracy approach to the assignment materials.

As indicated in Section 2.2.2, over recent years a range of literacy models have emerged; these have an emphasis on social literacy practices (Heath, 1983; Street, 1984; Gee, 1990; Barton and Hamilton, 1998) and multiliteracies (Cazden et al, 1996) and respond to the range of modes of communication that digital technologies have afforded. Amongst others are digital literacies (Lankshear and Knobel, 2008) that reimagine what it is to be literate now that there are new modes of information and technologies, which need new skills. Transliteracy (Thomas et al, 2007) adopts a broad standpoint of the need to be literate across all the platforms and media now available in digital, or hard copy format. Academic literacies (Lea and Street, 2006) is close to the interests of one of the research questions, which is, how do students use digital technologies for research and then process that information until it is ready for submission. But within this model there is a deficit in how it does not align itself with the extent that students now use technologies in the processes of their assignment work.

To address the research questions, the rationale for spending the amount of time in the classrooms was, apart from the other questions, to directly observe the students' practices and their approach to their academic evidencing when they predominantly used computers for coursework. Through observation I could notice what they were doing, while they were doing it, not just momentarily but throughout the duration of a 2 or 3 hour session and repeatedly over the academic year. When appropriate, the students could also be asked questions that enquired deeper into the processes they were using. Although existing models of literacies give some insight into how they can be conceptualised the research interest of this study was to see the actuality of students' academic practices for their coursework when using computers and what students prioritised and valued, both in action and on reflection. No literature appeared to approach this in a classroom setting and over a period of time, especially when computers were the main resource.

What also needs to be considered, as indicated in the previous two chapters, is that when considering students' academic use of technologies there is also a need to consider levels of attention. This is due to some students alternating between different educational and non-educational activities that divide their attention. Here there may be priorities of both the short and long term according to the value at the time (Bruya, 2010); for example, the short term gratification of social contact, or a leisure activity on the computer against the longer term need of an

assignment. Pertinent to this is Hayles (2007a) notion of the generational shift where, due to the influences of new media, attention can occur at a deep level; or when the level of stimulation is high, such as during the playing of a video game when hyper attention can be attained. Therefore, if a student was rotating their attention between coursework and social or leisure technologies the latter could be more attention demanding but this then declined when returning to coursework, which in contrast could appear less stimulating. So the level of attention and motivation for any deep learning with coursework could be challenged by these alternate activities. These are not the only considerations though.

> These approaches are expressed through an interaction between factors that students bring with them to the learning context (e.g., motivation, ability, prior knowledge, interest, time), the learning context itself (e.g., the way material is presented to students by teachers and text), and, importantly, how students interpret the way that material is presented (Platow, Mavor and Grace, 2013: 272).

Some of these points can be traced to the classroom environment, as discussed in Chapter 5 and if the conditions are less than ideal then motivation and interest can diminish. If students are distracted by this together with an alternate use of technologies, their time to spend on their coursework is reduced. As such, 'the deep/surface dichotomy does not characterise a stable characteristic of the student, but rather describes a relation between the student's perception of a task and his approach to it' (Laurillard, 1984: 136).

As the students used computers as polyvalent resources they functioned in whatever way the user commanded them to; this could be educational, cultural or social, or just as a diversion, or procrastination from a coursework task. From this there emerges a constellation of factors that potentially hinder any deep engagement of learning.

7.2 THE RANGE OF EDUCATIONAL RESOURCES ACCESSED

As indicated in Section 4.1.3, due to the limited hard copy texts that students had, access to the Internet became their primary research source. Each of the classrooms had long tables in the centre that were almost the length of the room and tutors occasionally left books, or subject relevant magazines on them for the students to read. However, very rarely did I see any students use them. A small number might have an initial quick skim through one, or two but this often lasted for less than a minute and then they put them down. I never saw any students actively use the texts, or borrow them; as one media tutor comments:

Alan: *Books, pfff..WHOA. […] …we've got some really interesting books, we subscribe to some really interesting magazines that are really good for the course: Digital Arts magazine, Computers Arts, loads of technology stuff, tutorials etcetera err...but they tend not to use 'em.*

Alan's comments also refer back to earlier comments on students not accessing text in the media office, or those placed on the table in the classroom. Alan, in particular was very active in doing this, but if the students do not engage with them then this could discourage the tutors to continue this practice. Indeed, towards the end of the year it was noticeable that the tutors reduced the number of times they brought texts into a session.

Apart from the Internet the only other resources that students accessed were their assignment briefs. These were available through the college's online Moodle system in either Microsoft Word or Adobe pdf format. Hard copy course artefacts were at a minimum and if students wanted a brief, or any other assignment or unit resource in hard copy format they were expected to print it themselves from their limited printing credits. However, these were used carefully, especially the media students as apart from their digital copies, the students needed to submit hard copy versions of their portfolio of work at the end of each unit. Within these, all their images, including those that they had created themselves, or used for reference needed to be in colour. The colour printing was expensive so the students were mindful of how much they printed at other times. The music students always submitted work by email to the tutor and received feedback the same way, the same applied to draft work. Notably the culture in the music centre was that drafts were frequently submitted, whereas this was a rare event for the media students. These students would not usually receive any formative feedback until after submission; they then had the opportunity to improve it for a higher grade. The evidencing for the music students was usually in a report, or essay format. Media students also did this, but they also needed to produce evidence of how they used the specialist software and submit this in the format of a sequence of software actions visualised through screenshots, together with an explanatory text.

7.3 ONLINE RESEARCHING: CONSERVATIVISM AND THE FAMILIAR

During discussions and interviews with students they often felt that they could not meet tutors' expectations in their search results and the time it took them to find anything that was task relevant. As two media students commented during separate interviews.

Debbie:…*we haven't actually been taught different research techniques, we've had the unit in front of us and like, "Alright, go do it. Get some books, go online, do it"* [mimicking a tutor].

Sean: *He'd* [tutor] *say Google it.*

The comments reflect the expectations by the tutors for the students to work more independently, especially in the second year of the course where this strategy was intended to prepare them for their progression to a university course.

What was noticeable from observing was the propensity students had for using Google and Wikipedia as their main research resources. During separate interviews I asked students which they preferred, without any indication of my observations.

Colin: *I've found Wikipedia's pretty helpful, Wikipedia's pretty damn good.*

Jack: *Wikipedia, yeah it's a pretty easy one to go on isn't it.*

Oliver: *Wikipedia is the source of all knowledge, I think* [laughing]. *It knows everything.*

Kerry: *I usually go to Google if I'm doing research and I do use Wikipedia a lot, 'cos it's probably the best website for straight facts….*

Hazel: *Wikipedia…*

AB: *Do you use more than one website when you're researching?*

Hazel: *Rarely* [laughing].

Amy: *Wikipedia, it's like God to us people* [laughing]…*I think Wikipedia's all you need, unless there's certain time there isn't stuff on there but most of the time everything's on it.*

There was some pragmatism to using Google, as Ron an older year 1 music student who was still developing his ICT skills commented.

Ron: *I tend to use Google as a search engine, cos I just find it, ye know…a good one, a reliable one.*

Max, a year 2 music student summed up the general approach of the music students.

Max: *I usually just, for general information I use Wikipedia, err…that's quite helpful and for other less mainstream information, like little snippets, I'd either go search Google for it, or if it's an artist I'd go on MySpace to get what they're saying about themselves.*

I occasionally noticed some students using other search engines, such as Dogpile, or Ask Jeeves but by far Google was the dominant choice. Wikipedia was frequently used for information, as noticeably that was usually towards the top of the first page of the search results.

The tutors across both subjects often advocated the use of other resources, but as already indicated the choice was limited especially at the music centre. The access to the books and magazines needed the student to ask a tutor to unlock the room that was on another floor to the classrooms; therefore there was little opportunity for any casual looking at these texts. There was slightly more choice for the media students, but the responses to this indicated the centrality of the computer for their work.

> Scott: *But it's like if we're supposed to be like, erhm, finding information about stuff, they tell us to use stuff like…books and stuff. But I always end up using the Internet cos it's just so much easier.*
>
> Sean: *Yeah, it's just in front of us, we don't have to go to the library…*

For the students these were rational reasons and therefore they saw no reason to look elsewhere for information, despite prompts from tutors and even if the books were on the nearby table. To compare to the music students' choice of online search resources, I asked the media students what their preferences were.

> Scott: *Wikipedia.*
>
> Simon: *Yeah, Wikipedia.*
>
> Sean: *Google, Ask.*
>
> Katie: *Dogpile.*
>
> Scott: *Wikipedia, I just go on Wikipedia and type in whatever I'm trying to find all about and then I just look at it and then try and summarise it into something. Like with my research pretty much all of it has been off Wikipedia.*

Across the cohorts there was little difference in what they used to search for information. The comments indicate a practice that over the year rarely changed, as once the students found a resource that functioned to what they considered to be an acceptable level they continued using it. With Wikipedia and Google these were in the everyday vocabulary and therefore reflected the students' dependency on them to reveal the information they needed.

With these practices I was interested to have the tutors' opinion, as they were teaching the students and marking their work. Alan a media tutor commented:

> Alan:…*it's a major issue actually with us, because you tend to get…okay, you say "Go and research this" and you tend to get all the same research back cos they've just used Google, ye know.*

I asked Alan if he thought they ever used more than one website, or other resources.

> Alan: *Well again, that's difficult as well I find for them to do. Why I don't know, maybe…I don't know, maybe it's this loyalty thing, they know the sites they want to go to and that's it, that's like, "I can trust this". You research on the Internet and there's just millions and millions of alternative and you can go anywhere and it can be…there's too much sometimes. I think you can be overwhelmed by that.*

Of note from this data is students' preference for Wikipedia, as well as Google. It was noticeable that some students used it a lot and others not as excessively. Without exception, all the tutors expressed an aversion to students using this online encyclopaedia as a resource. Primarily, it was considered to be unreliable in its quality of information and not the primary source of that information, and it was too easy to find information and therefore prevented the students from undertaking more complex searches. Some of these beliefs remain prevalent today, along with comments for educators not to assume that students know how to conduct proper research (Turnitin, 2013: 11), albeit directed towards HE students' skills. Noticeably, if students were using Wikipedia and a tutor was walking around the room and approached them they quickly minimised the webpage.

7.4 SEARCHING AND LEVELS OF CRITICALITY

The time students spent using search resources was often quite lengthy and disproportionate to the limited resources used. The task was seen as quite tedious and many drifted away from it and looked elsewhere for non-relevant material. Due to this there was always time to observe what students were doing during these periods. I sometimes talked to them about what they were particularly looking for and what they had found and its usefulness to them. What was noticeable was that, generally the first result was the one that they immediately selected; at times this could extend to a choice between the first two, or three. There was a question therefore on how critical students were about the search results and any perception of extending them to see if any others

offered more information. The comment from John, a year 2 music student, was very typical of all the other students.

John: *I just start at the top* [of the Google search results].

One year 1 music student was the exception in how critical she was with her searching for information.

Kerry: *Erhm, it depends how I feel about what comes up first, if there's nothing there then I will keep going until I find something that I think is useful, cos if you're not getting the right information then you're not going to be doing your work.*

Kerry's literacy skills were noticeably a lot higher than most students and she had exceptionally good GCSE grades, with many at A*. She had not been taught how to search effectively by anyone, but it just seemed logical to her to keep on searching until she found what she wanted.

When asking tutors their opinions of students' use of search engines, the response from Bob, a media tutor reflected a general response by tutors.

Bob: *Google everything…Wikipedia, or Google and the first result.* […] *I mean most of them will straight away go to the Internet and they'll Google and go for the first few. They'll not bother to go to Google, the first link, read something in there that maybe, might get them a search for something in there. It is literally the first result…stop…and maybe two, or three results, if that. There'll be no information trail, there'll be no…right that site took me to that website, took me to that book, took me to that website. It's literally that website and that'll do.*

For some students the searching could be a disappointment and this was perhaps revealing of their limited search skills, as identified by Liz, a media student's comment.

Liz:*…you can't always find everything on the Internet…not what you're wanting.*

For Debbie, another media student, the time spent on computers had an adverse effect on her online searches.

Debbie: *…because three days of the week you're on a computer and your days off you're on a computer* [at home] *because you've got so used to just going on Google, or something. Now I've started, especially in this second year to detest going on so many websites…*

Debbie's comments also denotes the amount of time that some students spent using their computers at home and for her the usage in the sessions was reaching saturation point. Therefore, from this and other discussions with Debbie, she did the minimal amount of searching and used whatever she could access quickly and seemed to be reasonably appropriate.

From the tutors' comments there was a disappointment in how students approached this part of their work, which identifies an area where some of their literacy skills could have perhaps been tutored to a higher level. Despite this frustration there were no remedial measures, apart from the occasional comments to the cohort that they need to try other resources and extend their searches. The situation was that many students seemed to consider that their practices were sufficient, but this did not align itself with the tutors' expectations. As Debbie commented earlier, 'we haven't actually been taught different research techniques'. The distinction appeared that the tutors offered broad advice, rather than offering examples of good practices through demonstration.

From this initial literacy practice of accessing sources of information the next stage for the students was to critically engage with it to decide what was useful for their evidencing. Expectedly, students' practice was to read directly from the screen, especially considering that any print outs reduced their limited printing credits. This reinforced even more the centrality of the computer as a resource.

7.5 NOTE MAKING PRACTICES

As part of their research the students needed to source both images and text-based information. However, during the time in the field I only observed a small number of students who occasionally made notes from what they sourced. Once students have a source of information then how they engage with that, in reading and then the critical selection of useful information can be a determiner for levels of deep, or superficial learning and consequently the standard of the work that is produced for the learning outcomes. As indicated in Section 2.2.5, tutors expected students to use note making by promoting the practice, yet they were expected to have these skills already as there were no skills development periods during the sessions.

While in the classrooms I seldom observed students making either hand written, or word processed notes from the information they had sourced. This was noticeable in other instances where notes might have proven valuable for students. Although the focus was on how students used online

information, if tutors were giving a presentation to the whole cohort, which ranged from the evidencing they needed to produce on a new unit, or how to use some software it was uncommon to see anyone make even the briefest of notes. Some students can find this challenging due to the load placed on the working memory of listening and selectively writing down information (Piolat, Olive and Kellogg, 2005). Ganske (1981) posited that the making of notes and their quality is relative to the value placed on the topic, which are facilitated by clear prompts by the educator when it was appropriate to make notes. Apart from occasionally at the start of a presentation, tutors did not prompt students at any points when it could have benefited to them to make notes, so any limited practices could be due to students' lack of recognition of their utility.

There were only a very small number of students who did make notes from the information they had sourced by research, but these were the exception. From this situation, I was interested in how, or if, the students retained what they considered to be valuable for their assignment if they were not visibly identifying what they could use from the digital source of information.

One music year 2 student commented that he made notes in both formats but he predominantly typed them in Word and he was asked how he differentiated between these practices.

> Jacob: *I don't really write on paper in these lessons.*

Jacob offered no further explanation on his rationale, but he further expanded on his practice.

> Jacob: *I don't want to go through my bag and get out a piece of paper and keep reading on screen and the piece of paper and then switching back to the other. I just click on…like I can just have it at the bottom of the screen, bring it up and read it and then put it back down and carry on writing.*

For Jacob, this was a convenient practice that he had worked out was the most efficient for him. I noticed that at times he had forgotten his bag and left it at home with things in that he needed that day, so perhaps his awareness that he might lose any notes determined his choices for some sessions. As I was unsure of what Jacob's actual practice was, I spent some time observing him and he had the webpage he was sourcing information from open and also his assignment in Word. He tended to look at the webpage and read from it momentarily and then minimise it and start working in Word; exactly how much he was using of the content was indiscernible.

When students did use a lot of notes, it was very apparent in the sessions, as it was unusual for students to have anything next to their keyboards, apart from perhaps their mobile phone, or mp3 music player and small personal objects such as keys. In particular, one media student started to use hand written notes on print outs much more than previously.

> Helen: *I just print the webpage out. I work better reading from paper than I do reading from a computer screen, because with the paper I've got in front of me I can write notes on it.*

Helen had commented during a session that writing notes also gave her a break from working at the computer, it was her, "little escape for a moment, or two". Her instinctive multisensory approach was working towards what other students were potentially missing through the act of generative note making where deeper learning can take place (Piolat, Olive and Kellogg, 2005; Stefanou, Hoffman and Vielee, 2008). I asked her if the act of making notes was also important to her.

> Helen: *I also, as I'm writing things down I'll talk, I'll speak them out loud as well, as I'm writing. So, it tends to help me take in something….So, I probably do, that's why I make notes cos it's the physical act of picking up the paper and writing it. Ye know, it's in there rather than typing it…I'm constantly typing, so half the time I can be having a conversation and type what I need to type err because I know what I need to do, whereas writing, I need to focus and concentrate and stuff like that to do it.*

Helen also added that one weekend she did try hand writing a lot of notes, rather than only as comments on her print outs.

> *But it didn't work…I could just not do it. After about five minutes my hand, my wrist ached and I was quite bored, whereas I type quite fast….like my notes to be quite, set out quite nice with limited corrections made to them, whereas in a Word document you can delete whatever mistakes you've made. So I tend to err just write notes and things like that.*

For Helen, she had clearly refined her literacy practices and for her, hand written notes were more comments on text and what she referred to as typed notes were the start of her draft assignment. During this period Helen was very focused on attaining high grades for her work so that she could progress to the university of her choice.

Another media student's approach differed again, and I noticed that she made no notes at all and asked her how she retained the information she needed from her research.

Debbie's approach was to rely on her memory to retain information during the next stage of processing it into assignment evidencing in Word, and also being able to find what she had previously considered as valuable from a website. Therefore she was placing quite a load on her short term memory, but by revisiting the website for information, the practice was little different to if she had been using a textbook. I was curious about Debbie's practices and some time was spent observing her and the process was, as she said, to read through the text and then start typing, but the information was not retained as notes, it was the start of her evidencing document. So what Debbie was doing was missing out the process of recording notes, apart from her reliance on her memory being efficient. Certainly, she had worked out a structured practice but by not interrupting these stages with other practices, such as visual methods of mind mapping, or clustering (Makany, Kemp and Dror, 2009) she was not benefiting from practices that she could then use with her work at the time, but also when she progressed to university. Her practices were not dissimilar to Jacob's although he did not appear to read as intently as Debbie.

7.6 COPYING, PASTING AND EDITING

A particular interest of the research was to investigate how students' use of digital technologies affected the ways in which they engaged with coursework and text itself. That is both from observation and from the students' perspective of the practices they used with the Internet, as an information source and software, such as Microsoft Word. Due to the relatively small size of the rooms, there was the opportunity to keep a discreet distance from students; yet still observe their computer screens and the processes they used. On some occasions, such as when students were not under pressure to meet a deadline they were quite comfortable if I sat closer to them to observe them working, and even have an informal discussion about their practices. This gave an indication of their overtness towards the practices they used.

From observational notes, it always seemed that the most activity with text would occur around the mid point of each half of a session. Generally there would be an initial period of warming up, or settling down, to a task and then as the time approached the mid session break, or end of session, students would noticeably reduce their level of focus on work. Depending on the individual there

would also be periods of off-task activity, but the main focus on coursework would remain around that central core of time, which would expand or contract relative to the individual session.

The dominant source for accessing information for an assignment, across all the cohorts was the Internet and a small number of students would also print off webpages to read and at times highlight pertinent sections. Without exception, the common practice would be to have a Word document for the assignment and the Internet browser next to each other on the screen; occasionally there would also be the assignment brief with its learning outcomes that the students would use to reference what they had to do. Although some would paste these at the top of the Word document they were using for their assignment. Amongst the screen space would usually be a range of other resources, some course related, others less so.

Debbie's process of working directly into Word, discussed in the previous section, was a common practice across the cohorts and one media student adopted a similar approach.

> Jim: *I take like…I take phrases and things like that and then reword them.*

The difference was the time gap in the processing, as Jim indicated that he did this over shorter intervals, such as read a short section and then consider how he could rewrite it. I asked him if he did this through copying and pasting in Word.

> Jim: *I don't see the point of copying and pasting and not actually rewording it, cos you don't take any of it in. The only way I learn is actually rewriting it, the only way it sinks in'.*
>
> AB: *How do you do that?*
>
> Jim: *What I do is read it…and take it into my head and then rewrite it afterwards, while it's in my head really, rather than copy and pasting it.*
>
> AB: *So you rewrite it in a new page of Word?*
> Jim: *Yeah, yeah. I mean I copy and paste like phrases and things like that…but I wouldn't go copying and pasting like a paragraph of work and then pretending it's mine.*

Obviously Jim had not explained his literacy practices clearly at first, but what emerged was that he did copy and paste directly from the source of information, but only small amounts; exactly what his parameters in the quantity of text he accessed was slightly vague but became clearer from observing him working. Clearly though, Jim was working using strategies that he considered to be acceptable, which he also considered countered any issues over the potential risk of plagiarism.

Shortly after this interview with Jim, I observed his practices with text, as he would sit at the computer nearest the door and if I was sat at the end of the central table I could clearly observe him without being too close to him. Like most of the students, when Jim worked with text it was rare that there would be any brief, or even lengthier discussions with peers about the work - this was a solitary process. Fridays were often good days to observe students' responses to long periods of independent study, as the media students would be in the same classroom for two, 3 hour sessions and usually focused on one aspect of coursework evidencing. One Friday morning, I noticed that Jim had an assignment Word document open and he appeared to just focus on this piece of work. I realised it was an opportune moment to primarily focus on observing him for the period leading up to the break. As he was slightly older than most of the cohort I was interested if his practices would vary from others, as he had been in full-time employment and therefore had a break away from education.

Initially, Jim seemed to scan read a webpage on the subject of the assignment and then drag the cursor over a particular section and copy it and paste it into the Word document he was using for the assignment. As with other times that I observed him, the focus would just be on the one webpage with no reading or selecting of text from others. Each time he was observed copying text, it would be a section of either a sentence, or a short paragraph. He then spent some time looking at the copied text and would start to change it at word level. At times this would be typing a new word, next to a pasted one and then, some time after he would delete the pasted one. Another strategy, he used was to highlight one word and then type a new word within the highlighting, to replace it.

Jim's pace was relatively slow in that over the whole day Jim was still working with one small paragraph of pasted text. Each sentence he focused on was separated from the others by adding a line space above and below it. What I did notice was that there was a repetition of sentence structure, as he was only working on the one word at a time. As the pasted text was just from one source there was also no evidence of synthesis, or any summarising of information. Therefore his practice could be considered as a form of paraphrasing, but without any evidence of synthesis expected within the Level 3 course. Although, during all the time in the research field I never heard the tutors refer to the term synthesis, or describe it in any other way to the students.

Paraphrasing for Crystal (2008: 350 original emphasis) is, 'the result or process of producing alternate versions of a SENTENCE or TEXT without changing the MEANING'. It seemed that

Jim's way of working with text was indeed paraphrasing, but more that of a prolonged step-by-step and word-by-word process. There seemed to be little consideration given to how a phrase or sentence would read until one word was swapped for another and then read again. There was no restructuring of the text, and much of the processes involved appeared to consist of Jim either thinking of a different work to replace one in the copied text, or using the synonyms facility within Word. So, it seemed that he was changing the text to ensure that he was avoiding submitting a verbatim piece of text from his website source. From this view it was change, to avoid what Jim considered to be plagiarism, without realising that he was in fact still plagiarising.

McCarthy, Guess and McNamara (2009: 682) suggest that, 'Paraphrasing can be used to aid comprehension, stimulate prior knowledge, and assist in writing-skills development'. Jim appeared to avoid any 'restating of ideas….so that the reformatted language may better suit a voice, flow, or line of argument' (ibid.).

I was able to write down one sentence in the original form that Jim had copied from a website, and then pasted into Word as there was a time gap of several minutes before he started to engage with it.

> In fact, the phenomenon of *persistence of vision* (it was first described to some degree in 1824 by British physician Peter Mark Roget) is the reason why the human eye sees individual frames of a movie as smooth, flowing action when projected.

By the end of the morning session, Jim had changed it to:

> The marvel of *persistence of vision* is why the human eye can see each movie frame as a smooth and elegant action when it is projected.

Jim had deleted the text within the parentheses and then replaced some words with alternatives and added others, such as 'it is' between the original 'when projected'.

These are certainly practices that a student could achieve without access to the Internet and software, by hand copying text from a hard copy source on to a sheet of paper and then make the changes by crossing out, or erasing words, or rewriting it. The work involved would certainly be more laborious than using the functions of a networked computer with an Internet browser and Word software. In this way, and in this context there is the convenience, ease and relative speed that the technology affords in handling and manipulating text in a way previously unavailable to students.

The cognitive processes Jim appeared to use at his word level approach to change, could be considered different, if he had been acknowledging these sources as part of a piece of work of his own, and thereby not plagiarising. Jim's pace of working was also interrupted by his frequent engagement with a range of music-orientated websites, and these reflected his interest in playing and composing music, as a solo artist. By the end of the morning, Jim had only completed change to that one sentence.

Clearly, what Jim wanted to avoid was plagiarism, but there was no evidence that he developed the text beyond what it already was; it just had some of the words changed for alternative ones. The digital technologies facilitated the ease of this through the copy and paste function, and the replacement of words without having to retype them using Word's synonyms facility. Jim's cognition was used to identify that the word changes had no effect on the meaning of the pasted text. Therefore what he was writing was an alternative set of words, without changing the meaning. Jim's off-task engagement with the music websites and the frequent oscillation between these and the assignment could be considered to be one factor that contributed to the step-by-step and word-by-word changes he made. That is, that the frequency may not have allowed him the time needed to think about the work as a whole rather than a bricolage of quotations. What could have contributed to his approach may have been the tedium of the task and the necessity for frequent breaks from it, especially as these off-task breaks would often become more prolonged in the afternoon sessions. Jim's engagement with the text at word level, rather than content level appeared to be consistent, as during all the times Jim was observed he never appeared to alter this.

At Level 3 the students were not expected to reference their sources in the text and a basic bibliography at the end satisfied the tutors; this also needed to include the sources of any images used in the text. So although a bibliography could look as though they had used a range of sources, it was unclear how many actually were used for information.

A year 1 music student's method with text was different again to those above.

> Geoff: *I'll read it and then maybe copy and paste some into Word and then change it into my own words.*
>
> AB: *Do you change it much?*
>
> Geoff: *It depends really on how much I know about the subject.*

Geoff's comments were quite revealing and if he thought he did not have the knowledge he needed, he included part of someone else's work as a substitute. Geoff was open about this practice and the suggestion is a naivety towards academic conventions. There were no measures that the tutors had for checking for this, or more deliberate plagiarism, so the onus was on tutors to check for any questionable authenticity in students' submitted work. Usually this was assessed through the level of language used and a familiarity with students' capabilities. Some of Geoff's practices were similar to what Howard (1993) termed 'patchwriting', which involves copying from the source of information and then modifying the content, but the principle of this practice is within the boundaries of plagiarism.

Colin, a year 1 music student, read directly from the monitor and I asked him how he retained the information he thought was useful for the assignment.

> Colin: *I copy and paste it into Word and save it.*

I asked if he then modified the content.

> Colin: *I copy and paste it and then what I tend to be doing recently* [Term 2] *is printing it out, then going through it and getting like a highlighter pen and going over the bits what I need the most…*

During a later interview it seemed as though Colin had changed some of his practices.

> Colin: *I copy and paste it into Word and then like I write around it as well; I put my own words in and then delete the old ones, so it's kind of in my own words.*

I had observed Colin doing this in most sessions during this period and his process was different to Jim's in that the changes were less specifically at single world level. Colin's description above is quite accurate to what was observed and he would paste paragraphs of text, sourced from websites into his assignment Word document and then spend some time reading them quite intently. This would not be interrupted by any other activity during this period unless it was time for a mid-session break. Colin's approach was to paraphrase predominantly at sentence level, but I never observed him use more than one source of information. So there was little evidence of summarising, or synthesis from a range of sources occurring during the drafting processes. Consequently, Colin was not using the source material to develop his own thinking, but simply translating it at sentence level. Colin did have self-regulated breaks away from this work and he would spend time watching and listening to YouTube videos of musicians performing, or engage

with music focused websites, which varied from music news to online shops that sold music instruments. So although this could be considered as off-task behaviour when the tutors expected the students to only be focused on coursework for the duration of each session, it was vocationally appropriate. It appeared that this occurred when Colin had reached a point of working independently where he needed a change of focus away from reading and manipulating text. His response was not disruptive to others, and it was also a way of updating himself on the latest music news and prices and availability of those musical instruments he favoured.

I asked Colin if this approach to coursework had changed due to the pressure on him to submit some work.

> Colin: *Err…I've been doing that quite a bit more, yeah.*
>
> AB: *Do you think it's taken the load off you a bit?*
>
> Colin: *Yeah, it has helped me quite a lot, yeah, but it's bad form really.*

He was then asked if he had retained more of the content from the websites.

> Colin: *I have been holding more, I've been changing the odd word because sometimes I don't know what they mean, so I'm going to have to put it in my own words, so it's like I have still wrote it'.*

Certainly Colin's methods are similar to Jim's and reflect widespread practices amongst the students that took advantage of the speed and ease of copying from a website and then pasting that text into a Word document. The pressure to complete appeared to affect the level in which this occurred, which will be discussed further in the next chapter. Notably, Colin viewed his practice and its 'bad form' not as a new way of working, but one situated within a deficit model located within educational discourse and not one that reflected the cultural changes and uses of new technologies with textual information. Although, when Colin was uncertain of a word's meaning he did not use the Internet to find it out, or ask another student or tutor, reflecting in some way the isolated practices of students working at computers with headphones on and a need for skills development.

Howard (1993) suggests students need to learn the skills that would enable them to avoid this type of practice occurring in their text. As many students were not used to working at the tutors' expected standard of Level 3, Howard's comment of patchwriting being evidence of an 'entry-level

manipulation of new ideas and vocabulary' (1993: 233) is certainly something to consider in this context.

The interview comments from these students and data from observations certainly identified this approach to working with text as a widespread study strategy amongst all three cohorts. It therefore illustrates ways of working that may have emerged from their own cultural practices with technologies, or just a making do, within the conditions. From this context, there not only appears to be a lack of understanding of the material that some students are reading, but also a skills deficit. Colin's approach also seems to suggest that at times he does not really know, and therefore understand what he is copying. This suggests something deeper than not just having appropriate study skills in place and more a lack of comprehension and the ability to develop an argument. The evidence suggests superficial learning demonstrated through the practice of information reproducing (Marton and Säljö, 1976; Biggs, 1987). There is also a need to consider the deficit that stems from education. This is the expectation for Level 3 students to demonstrate independent learning, which indicates that they were expected to already have these study skills and strategies in place prior to arriving on a Level 3 course.

Apart from the limited Key Skills sessions with tutors from another department there was no evidence of any focused study skills interventions. And, those students that recounted on their Key Skills sessions perceived them as a mechanical, rather than a contextualised learning process. Therefore they were viewed as lacking relevance and thus resented for the intrusion into their schedule. Certainly the indication is that there is a need for study support to develop a more sophisticated and skilled approach to understanding effective methods of working with text. This would be especially beneficial to those students with the aim to progress to degree level courses. One approach to this could occur through contextualised study skills embedded within the course sessions and coursework by course tutors, rather than the discrete Key Skills sessions that the students resented.

The range of interview data in this chapter reflects the practices observed during my time in the classrooms. Constant fieldnote references were that students frequently had the webpage that they were using for information, open alongside their assignment Word document. Their practices were to either read and then type, or copy text from the webpage into Word. If the text was pasted they reformatted it into Ariel, or Times New Roman, as websites use different fonts that tutors could easily identify. They then either worked into it and changed words, or wrote above, or below the

pasted text. If I casually discussed this with students while they were working, a not untypical answer was that they could not consider doing their work in any other way and it was the only way they could work. As already indicated, this is not dissimilar to students reading from textbooks and highlighting the text, or making separate notes, or notes on the page. A distinction is the ease in which the text can be manipulated by dragging and dropping and replacing parts of text with a student's own and therefore how much cognition there is applied towards the content. Certainly, there was no evidence of any more complex thinking behind the sourced information through the use of mind maps, or similar, or making connections between multiple sources of information and summarising, or synthesising the content. Indeed, I was unaware of any tutorials on these processes. In a sense, the students were doing what they thought was the best and most appropriate practice under these conditions by utilising the efficiency of the resources they had to hand.

During the second half of the final term for the media students, Ian a part-time hourly paid tutor was covering one session and Seth, one of the students asked Ian why he had to resubmit one assignment and Ian replied saying because it was copied and pasted. As the college was not using any plagiarism detection software I spoke to Ian about the incident during a break. He commented that he was initially suspicious due to the style of the writing and by copying and pasting some of the student's evidencing into Google he could identify where he had acquired some of the text.

Nick, an LSA at the music centre, had similar music qualifications to the tutors, a degree in computer science and was also a practicing musician. He worked very closely with the students on a one to one basis and I was interested if he had any comments on how students manipulated digital text sourced from the Internet.

> Nick: *There was three students* [year 1] *who just really expected that cut and pasting was all that they was going to have to do and they were actually quite surprised that when they got their assignments back and said, "That's not a pass".*
>
> AB: *Because it's plagiarism?*
>
> Nick: *Yeah, basically some of them hadn't even bothered to change the font, or text size* [laughing].
> AB: *That's a give away, isn't it.*
>
> Nick: *Yeah, yeah…well, they didn't realise that they were cheating…they thought that that was their research…ehm…obviously they've been put straight on that now, that was like early teething troubles. But I think they're still doing the bare minimum to get by. You know, maybe changing a couple of words in a sentence, or just retyping it.*

Other staff seemed very aware of the level at which students engaged with text based information, as one new media tutor comments.

> Carl: *From what little I've seen there doesn't seem to be much continuity in the paperwork skills and I think it's very evident that they bypass all sort of preliminary investigations in the work.*

From this data there have emerged a range of academic considerations regarding how students assess what is appropriate information for their coursework and then how they engage with and manipulate it, when predominantly using the facilities of a computer. The next section will continue the momentum on analysing students' literacy practices when developing their assignment evidencing and discuss the drafting and levels of criticality as students worked towards a final piece of work.

7.7 ASSIGNMENT PLANNING

During the observations it was noted that there was little evidence of any initial planning, or thought given to a progressive structure within any work to be submitted. Even when I discussed this with students, either casually during a session, or in an interview these practices were never considered as a preliminary event before starting a draft. Typically students started their evidencing and expected the structure to be actualised as they worked, although there were some exceptions.

Ron, an older music student, did use one strategy.

> Ron: *...it's like the unit requirements, I'll copy and paste that and put it straight into the Word document and then I'll type my text in between...*

I did see other students copy and paste the learning outcomes of their units at the top of their Word documents, so that they could refer back to them without having to open a separate document but it was not a structural strategy more one to check against. Used in this way technology offers an easy, but limited approach to planning and structuring an assignment through a few seconds of using the copy and paste function in Word. The student then progresses linearly through each learning outcome. Arguably the ease of this for students negates any reasoning for further planning. Therefore the process becomes quite mechanical and instrumental, but puts at risk skills development in planning and a more creative and individual approach to the assignment. There is

the argument that an alternate approach could be more stimulating and create peer interaction through the comparison of approaches amongst students.

By observing the sessions in small rooms I was able to see if the students made any deliberate attempts to consider how to approach the initial stages of an assignment, other than starting and continuing until it was considered to be in some state to submit. It was hard to find any clear evidence of this occurring and Art, one of the music students who already had a degree commented:

> Art: *I don't ever really draft on paper really. I used to, but erhm…I just tend to just do it straight away now, just on Word*.

Art said that this was easier for him, but some of the assignments could develop into thousands of words, due to the range of content they needed to include over the duration of the assignment. For Art, the convenience of the computer appeared to have taken him away from previous drafting practices.

Max, a year 2 music student, was very focused on completing his work and progressing on to university. From observing him working and his comments from an interview reflected the practices of a number of students.

> Max: *What I usually do is I get out the unit specifications, put them at the top and then tick them off as I go along and just get those pieces of information and then expand on it*.

From a student's standpoint, Max's approach was quite logical and he always passed the units. Another year 2 music student, William, already had a degree and was a student who was usually focused on his work in a relaxed and balanced manner and I asked him how he first approached a new piece of coursework.

> William: *I rarely plan it to be honest. I just start writing and sort of change things as I go along, if necessary*.
>
> AB: *Do you ever plan it out in your head though?*
>
> William: *Err, well…I say I don't plan but I go through the specification…like you know, the specification we've got and I'll sort of generally look. But as far as writing a plan down or anything like that, I don't do that, but I'll make sure I try and include it. Like I'll set out, make sure the introduction's in and stuff and make sure..erhm.. I know what I'm doing before I start, rather than just writing*.

I was surprised that having been at a university for three years and then returning to education, but at a level lower than a degree, William might have applied more obvious planning to his work, as he had the experience of writing a BA dissertation. But perhaps he felt confident from this experience and as the work was at a lower level he could cope without a firm plan.

A comment from Oliver, a year 2 music student was indicative of the majority of approaches that I witnessed amongst most of the music and media students.

> Oliver: *...I just go straight into Word and type it out*.

Despite Oliver's brief comment, he would have given some thought to what he was typing, but this would have been as he was typing as an 'in action' process, rather than considered forethought and planning. I wondered during these periods and when reflecting, if the periods that they disengaged from their work was when that flow of typing had ceased and they were unsure of what to do next and had no planning to refer back to.

There was a lack of planning in both students text based work and their more creative work, as one media tutor highlights in his expectations from students.

> Carl:*...I want to see them PLANNING...and rough planning...and working in a regular procedure. Whereas the way it's going now is more a case of...they'll sit at a computer, they'll have one idea, they'll work up that idea but they won't change that idea. They won't have ten different rough ideas and then work them up into their own...ends. They're quite happy...it, it's...computers are making students lazy...and there's no written, no hand written, so there's no roughs, there's no drafts, there's no proofing...in terms of written and in design terms*.

Clearly, this was a point of frustration and one replicated amongst the media tutors and to some extent the music tutors. The students used the technology for a basic approach to an assignment and there was a dearth of any attempts from them to try anything different than what has been outlined. At times I did wonder how much being sat at a chair with other students both sides, and not much space to the side of the keyboard was a physical preventer from students progressing beyond what was on the screen. Could the physical confinement render a cognitive confinement? For sure, there are numerous ways in which to use a range of software for planning and structuring. Word itself has complex functions and surprisingly the media students were as conservative in their approach as those in music.

7.8 PROOFREADING AND FEEDBACK

As the students approached their work with a linear progression and only the learning outcomes to refer to for support of what needed to be included next, any deficits through a lack of planning were then only highlighted from either proofreading, or tutor feedback. Therefore, how much did students proofread and correct their work, or did the digital feedback act as a proxy for this? The students had the facilities to plan through the functions of the computer, and at the time there was also mind mapping software installed on all college machines and there were functions in Word that could have been used to graphically format a plan.

It was noticeable that towards the submission deadlines at the music centre the tutors constantly sat at their computers adding feedback to work that students had sent them and then emailing it back to them. One of the tutors, Phil likened this to a game of tennis and the essay was the ball going to and fro the networks. The email system allowed this to occur with ease as all the students needed to do were attach the files and send them without moving from their seats. Therefore the ease of function facilitated the rapid exchanges that might not have occurred with hard copy text and while the tutor was feeding back on the document the student could continue on another part of it due to digital replication.

> Phil: *Some students will send sometimes seven, or eight times. It's like a game of tennis, ye know, until the teacher had to sort of write their writing frame for them and just, ye know, you almost have to do the unit for them...*

I had noticed that when Dave was discussing work with music students he called them over to sit next to him at the staff computer and he had their work on the monitor with the feedback, so that the sight of their work and feedback was supported by Dave's verbal reinforcement. I asked Dave if he considered that the students were becoming reliant on him identifying the errors in their work.

> Dave: *Yeah, I think so, yeah.*

Mark, a music tutor, only taught in the studios but students still needed to complete written assignments for him. When asked if the students submitted drafts for feedback, he commented.

> Mark: *Some do, yeah, yeah, others just hand it in and see how it goes.*

One media tutor was asked about students' responses to his feedback and if they tried to improve their work following his comments.

> Bob: *Some do, some don't, it depends on the student....Most students are just "I want a pass" and that's it...they don't care...from there on in, some will say "I need, I want a merit", so you know they'll work towards it and really it depends on the maturity of the student, or how focused they are about going to university.*

There is a variation in how students responded to feedback, according to need, and therefore its value to them, but certainly it appeared as though any improvements to work were predominantly reliant on tutor feedback, rather than submitting a reworked draft. From this there emerged an element of frustration from the tutors and a divide amongst the students where there was something of a dependency on the feedback, but also an indifference towards it. If checking on the progress of work and proofreading by sending to the tutors, appeared to be the dominant method of ensuring that a piece of work fitted the evidencing needs and made sense, then how did the students view it as a literacy strategy?

Some students had changed their practices from the previous year. Seth, a media student, said during the first group interview that in the first year of the course he did not check his work at all, but that had now changed.

> Seth: *I think I've started paying a bit more attention to my grammar, cos I've noticed, like reading through some of my last year's work, there was quite a lot of errors in it....*

When asked how he checked his work, Seth added that he used the spelling and grammar function in Word but he also checked it through himself as he had a propensity to repeat words and phrases occasionally. The functions of Word could perform these checks in seconds and therefore the student was relying on the accuracy of the software, but what it changed, in both spelling and grammar might not have been appropriate in the context of the assignment. During the same interview, another student linked proofreading to the duration of time spent using computers.

> Ash: *You get sidetracked and ye, ye start to...you start to slip up, cos it's...it's if you're doing the same thing for hours and sitting and writing essays on Word to...presumably majority of people isn't...the most exciting thing.*

Seth agreed with Ash on this point, and the suggestion from this is that for some students the attrition of working for long periods on computers directly affected their criticality towards the level of quality of the final stages of their work. Their attention could not retain its focus for these periods of working independently and therefore, as Ash commented, they get sidetracked. Some students had said that when they worked at home on their computers, they only did so much and

then had a break and played games, or went on social networks or other activities and they seemed to be replicating this in the classroom, except that these conditions were more formal.

One media student had recognised that some tutors were focused on correcting, or commenting on submitted work and these practices clearly affected his approach to his work at times.

> Jim: *Well sometime I can totally forget about it and then err…it depends what tutor's marking it really…cos certain tutors…I don't know, they like to correct things and stuff…*

When tutors were feeding back to students there were time pressures for students to complete their work, therefore if there were minor corrections needed the tutors often did these simply to ensure that a student's work was correct. In a digital environment this is clearly a change in how work is developed towards its final stages where the functions of the computers allow this collaborative development of a student's work. I asked Jim if he thought this encouraged him to be a bit lazier.

> Jim: *It can do, sometimes…yeah.*

Due to the occasionally intensive feedback exchanges between students and tutors at the music centre I was interested in how the students viewed this facility. I asked a year 1 student how critical about his work he was before he emailed it for feedback.

> Geoff: *Not I'm not* [and laughs] […] *but yeah, I find it easier to send it to Dave* [tutor] *and say, "Oh, tell me what I've done wrong here", yeah know.*

Another student in the same cohort had a similar approach.

> Kev: *No, I tend to rely on tutors to, to tell me what to do on it. What I do is I do a little like draft and send it and then send it back with amendments…and then keep doing that until it gets good enough.*

As tutors viewed Level 3 as an opportunity for the students to work more independently it seemed as though many still relied on the tutor feedback rather than developing a more critical approach to their own work. Due to this the tutors were pressured to complete a lot of formative feedback and this reactive iteration to the situation was therefore repeated over the year as a resignation towards getting students to complete on time and successfully. Therefore the tutors seemed complicit in developing this situation, rather than initiating any remedial study strategies. I asked Stan, a year 2 music student, how much he checked his work before submitting it for feedback.

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Stan: *No, he* [tutor] *does it for us…he could be a bit more snappy for the replies, to be honest. I've waited like weeks sometimes, but I do understand he's got a lot of work to do.*

During these periods I noticed that Stan often relaxed and waited for the feedback, rather than trying to address any needs in the work himself. Stan was therefore operating within a culture that illustrated a cycle of dependency that was mutually constructed. As he was a drummer, he would often spent time looking on websites that sold percussion instruments, or watched videos of musicians performing, or he would talk quietly to a friend who sat next to him. At times I asked Stan if there was anything he could be getting on with and his response was that he had nothing to do, as he was waiting for feedback. Therefore, illustrating the culture of dependency on tutor feedback that had become an established practice and Stan was demonstrating his way of operating within that. His cycle was to do some work, send it for feedback, wait and then when he received the feedback he would start to work again. The tutors wanted to students to submit work for feedback, to ensure that they all produced work to a passable standard, yet within this process this passive student role emerged. It became what one tutor, Phil referred as a game of tennis (see page 219), where the student work was the ball digitally going to and fro between student and tutor.

Some media students asked friends, or relatives to check their work for them.

Helen: *I get my Mum to check it* [and laughs]*, cos I think by the time I've got it done I'm incredibly bored of what I'm writing…*

Scott: *…if I'm at home I normally get my parents to read through it….*

One music student used an online friend for support.

Rob: *…I've had a friend that's got erhm…that chats on the Internet and he's…I'll get him to…I'll ask him questions, or paste him stuff and he'll like proofread it and say, "Oh yeah that reads fine" and stuff like that. So you're using that social thing as well to help, help yourself as well as …being sociable.*

Asking parents, or friends to check work can be expected, although not many students indicated that they did this. Surprisingly there was little evidence of any peer support in the classrooms, despite the proximity of students to each other. As indicated earlier some students asked others for advice about evidencing needs, based on the learning outcomes, but this was more on what needed to be done rather than a discussion on the actual content that had been already written.

Notably in this section students found emailing work to tutors for feedback easy. It is an efficient process but it encouraged a lot of emails and students would do a little bit and then send it back and wait for feedback and then do some more. Feedback itself is a positive process, but the volume that occurred illustrates a dependency culture, rather than the development of student skills. Not least the weight of work on the tutor, which then kept them sat at their computer. I cannot imagine this occurring if the work was in hard copy and the student had to walk to see the tutor. This is not to disparage anyone, but the process facilitated the situation.

7.9 PEER SUPPORT

Students did need to formally peer review each other's creative work, especially in media, as a form of evidencing needs but this was very much tutor directed and it never overflowed into their day-to-day practices as a learning culture.

The media students occasionally helped each other very briefly with the creative software, but this was more how to do a particular action with it, or to find out where a function was located. However, from observation or discussion there was no actual checking of each other's work, or for problem solving issues other than identifying the learning outcome needs. Perhaps even more surprising, was that this was never promoted by any of the tutors either, as a form of peer learning and interaction with the potential to encourage a learning culture within the cohort. As with any 'tool', or 'non-embedded support device' (Clarebout and Elen, 2006: 390), which arguably can be how to research online; how to work towards a completed piece of evidencing through the progressive stages of literacies, or in this instance peer learning, they are not used and applied if students are 'unsure how to use them' (ibid: 407).

Peer discussion and interaction on an educational topic, is a key social interaction and learning mechanism for the processes of learning and developing skills (Bandura, 1986, 2002; Vygotsky, 1978; Piaget, 1995). This form of peer support, as learning scaffolding (Vygotsky, 1978), can be a tool, strategy or guide that supports students attain a higher level of understanding than if they worked on their own (Brush and Saye, 2001). However, Johnson, Johnson and Smith (1998) argue that the skills of working together need to be accrued through training and guidance and that 'students must be taught the interpersonal and small group skills needed for high quality cooperation and be motivated to use them' (Johnson and Johnson, 2002: 97). The educator can initiate such learning strategies, but they can also emerge as informal and ad hoc cooperative

learning groups on a needs stimulated basis (ibid.). In these instances the tutor can then circulate the room and monitor any student interaction to ascertain their direction and insights on the topic (ibid.). As an active strategy this was not apparent in the classrooms, especially with the isolation that appeared when students used the computers. Although, if there was something non-educational of value, for example, a video or music of interest then there was some interaction between students that was focused on this. So evidently, there was no culture of peer support within the classrooms.

It is known that assessment feedback can be intrinsically motivational and encourage deep learning (Higgins and Hartley, 2002). Tang (1993) also makes the connection between peer led cooperative learning and deep learning (Biggs, 1987; Marton and Säljö, 1976). Importantly, this is further enhanced 'when initiated and self-structured by the students' own efforts' (Tang, 1993: 127). The notion is that if students view being a learner as 'simply involving working on their own then they are unlikely to see interaction with others as important in learning' (Ashwin, 2003: 13).

There were other potential opportunities for academic skills development with the year 1 music students who needed to complete a Key Skills Communication Level 2 portfolio. These portfolios can contain within them, as part of the evidencing examples of researching, proofreading and correction, but frequently this was an instrumental, rather than learning practice. These programmes were not embedded into courses and the tutors were often very time limited for acquiring the evidence from the students.

7.10 KEY SKILLS VALUES AND PRACTICES

Phil, a full-time music tutor, had delivered Key Skills in the past but his workload no longer permitted it and therefore Julie, a tutor from the Key and Basic Skills department, with no knowledge of music, had to sporadically travel over to the centre from the main campus. Consequently there was a loss of opportunity for an embedded mode of delivery within a course session that could have developed students' academic literacy skills.

Julie accrued the evidencing by using existing work that had already been completed and the only dedicated Key Skills element of the sessions were when the students needed to complete a brief presentation to their peers. Although Julie had limited contact with the students, I asked her how she found the students' approach to their academic work.

> Julie: *I didn't have a lot to do with the academic work, except that I was using one or two of their assignments as key skills evidence….I found…most of them weren't particularly focused…struggled to put things in any sort of logical order. Their basic things like spelling, grammar…poor, for most of them erhm…and would also plagiarise quite a lot…there was a lot of plagiarism going on.*

For the evidencing of proofreading and correction, Julie used examples of student work before they had feedback on them from the tutors and then the final submissions after tutor feedback.

No observations took place during the key skills sessions, as they were fitted in with students' studio time and there was no free time in the research timetable, but the students were asked some questions about what they did in the sessions. The students viewed it as taking time away from their rehearsal periods in the studios with some friction at times between Julie and the students.

> Colin: *She hasn't actually told us why she's actually there, we know she's a key skills tutor but don't know what key skills is about.*

> Rob: *It wasn't really explained what all the units were supposed to be, or what's it all about.*

> Ron: *Well, personally I felt a sort of duress towards it from the start because I thought, "Why are we doing this….".*

Almost unanimously, the students resented the intrusion of the Key Skills and this is typical of student reactions throughout the history of Key Skills (Abbott, 1997; Hodgson and Spours, 2002). They did not see its value, and it was judged as an intrusion when they could have being doing other work. Yet the skills for developing the planning, structure and content of their coursework,including research and proofreading could have formed part of the Key Skills sessions.

7.11 CONCLUSION

The aim of this chapter has been to present an ethnographic view of students' academic practices when using computers. What emerged was a culture of reliance on tutor support, through feedback, to indicate where improvements were needed in draft work. What was surprising over the duration of this period was that despite the close environment of the classrooms and students sitting next to each other there was little evidence of active peer support. Arguably the isolation of working on computers for two or three hours was a factor to consider, but students did socially engage on other non-educational topics during these periods. This illustrates any absence of any communal, or peer learning initiatives within the rooms. In the development of text based work limited resources were

used and the software allowed text to be manipulated where authenticity could be questionable as some students typed into text copied from online sources. Patchwriting (Howard, 1993) is an apt descriptor for this, although there were differing levels and some text was less modified than others. All students used a linear approach to an assignment with many of the cognitively valuable processes missing, such as notes and considering how to structure a document. These critical interactions with text can lead to deeper learning taking place, rather than the more superficial learning that was apparent.

CHAPTER 8: ENCROACHING DEADLINES, CHANGING VALUES AND WORKING PRACTICES

8.1 INTRODUCTION

As the ethnography took place over an academic year, this chapter focuses on the final of the three terms and the pressure on students to complete their work and the factors that influenced how they responded to that. As students reflect on their progress and use of technologies, together with comments from the tutors on students' engagement in course activities and pedagogy, the complexity of the situation within a computer-resourced classroom emerges along with the cost for some students as they realise that they should have used their time more productively. Coupled into this significant period were the heightened reflexive challenges of being an ethnographer in a familiar environment and ethnographic interpretation, which is discussed in depth below.

The duration of the ethnography was not only to capture a depth and richness of data but also to identify if there were any dynamic changes occurring over this period, especially when final deadlines for submitting work were approaching. From observation, especially over the first and second terms there seemed to be little drive towards achieving submission deadlines and student practices were predominantly stable over this period. The impression over these periods was that the majority of the students had little awareness of any need for urgency to enable them to complete the full course, or the first year. All the first year music students wanted to progress to the second year of the course and in the past other cohorts, including the second years that participated in this research had to continue working past the final deadline and into the summer break to complete all their work at a pass level. For those media and music students who wanted to progress to university degree courses, they needed to gain the requisite merit and distinction grades that allowed them to achieve that.

Even when deadlines were imminent these frequently became more fluid as the tutors had no option but to extend the submission dates. Across both the music and media courses, the tutors were resigned to there being no alternative but to offer the students more time if they had not produced the work. This seemed to be a cycle without any proactive intervention, as tutors appear to be frustrated but accepting of these repetitious occurrences.

8.2 CHANGING PRACTICES

It was periods during the fieldwork, such as the final term, when there were clear changes in student practices occurring that emphasised the need to adopt a reflexive approach to the classroom observations and interviews. These were significant periods of change when there was a need to ensure it was students' views and actions that were being interpreted, as although I was there as a researcher I was also an educator and these aspects of my identity formed who I was at that time. Although, the need for reflexivity had become apparent right from the early stages of the research, especially those periods that on the surface appeared mundane when students outwardly appeared to be getting on with their work. But even then, there was the need to interpret how students were engaging with learning, including their interaction with the resources they had and the literacies being used. It is periods such as these, when it may seem that there is a continual repetition of behaviour that the researcher has to ensure they see beyond 'the familiar aspects of the setting' (Delamont, Atkinson and Pugsley, 2010: 3). This is not a new challenge for educators who adopt a researcher role, as Spindler and Spindler (1982: 24) frustratingly comment: 'I sat in classes for days wondering what there was to observe' when their observations seemed to find little different to that experienced when being a teacher, rather than a researcher. For these researchers and Atkinson (2012: 169) alike, 'where the action was' was problematised by 'the obviousness and familiarity of the action scenes' (ibid.).

I realised like those before me I had these potential traps to negotiate, especially now I had the time to observe, and from a different perspective, than when teaching. It was during these periods when the value of time became more apparent and amongst other research interests I could enquire in depth about some students' lack of urgency with their coursework. This reiterated my purpose of being there, as in my other role I would have encouraged the students to be more focused. For these Level 3 cohorts I understood how instrumental good grades could be in determining the next phase of their learning journeys, or careers. Now it was my research purpose to gather data from observation, interviews and informal discussions to try and understand from students' perspective why this was occurring, and that 'other' role was for the session tutors. Situations like this reiterated the significance and challenges of both achieving and maintaining a reflexive positioning during research.

Parman (1998: 395) suggests that 'making the familiar strange' is the goal of every educator who becomes a researcher. The familiarity *problem* continually surfaces as something to be addressed to

attain, 'good educational ethnography' and that sociologists and anthropologists need to treat the educationally familiar as anthropologically strange (Delamont, Atkinson and Pugsley, 2010: 3). As is stressed by Delamont, Atkinson and Puglsey (ibid.), drawing on Geer (1964), 'the concept is clear in its generality, but the mechanics, the doing of it, smacks of magic'. Although, within this issue, there must surely be some distinction made within the levels of familiarity within a setting. For example, an educator researching an unfamiliar educational context may only have some recognition of the environment and the processes taking place and any over-familiarity may arrive later following time spent living, working and being part of the researched environment (Coffey, 1999: 21). Another perspective is one only lightly touched on by Delamont, Atkinson and Pugsley (2010: 3), but reflects earlier comments, which is that of the researcher who only focuses, 'on the familiar aspects of the setting', rather than looking beyond this to what otherwise may appear so inconsequential, or mundane that it is disregarded. Consequently, 'it becomes impossible to single out events that occur in the classroom as things that have occurred, even when they happen right in front of you….things that are conventionally "there" to be seen' (Becker, 1971: 10 cited in Delamont, Atkinson and Pugsley, 2010: 3).

To return to observing students' casual approach to their studies late in the academic year; as an educator this would usually be something to address, not only from institutional expectations and the funding pressures to attain high levels of student achievement, but also as a caring professional. These were perhaps some of the most challenging moments during the time in the field, which required reflecting in action and on action to diminish any risk of slippage towards an educator's assessment of these situations. There were frequently times during the research when I would observe some students behaving in a way that if I had been in the room as a colleague visiting the tutor in a professional context I might have drawn their attention to the behaviour. But clearly this was untenable, not least from the need to have the students' confidence that I would always be managing my researcher position. What this illustrates is the challenges for insider research as there is the likelihood that there will be times when those judgemental perspectives can surface, even if they are not acted on. It was during these periods when notes made in the field were revisited later, as they always were, as a means of tidying them up or developing some brief comments further. But on occasions like this there would be extra level of reflexive scrutiny to identify if there was a slippage in focus in how events were being recorded and interpreted.

These periods were also amongst some of those moments when it was challenging to discard how I initially imagined the education I was observing should take place. I had the notion of education

being some beautiful idea of teachers teaching and students being motivated to learn. Perhaps some of this idealism of education was inculcated into me from what often appeared to be formulaic observational feedback on my teaching and that of colleagues, which would often form points of discussion. The processes and forms, in their mechanics, at times seemed to bypass anything other than a idealist view of education with fully engaged and *compliant* students; anything other than that was a deficit to address. In the need to respond to feedback I became located within this system, but the day-to-day education I experienced was one where stumbles and stutters in both teaching and learning were to be expected.

As an educator, through the teacher training processes of a PGCE and the subsequent teaching observations and feedback, it was the expectations that students should be engaged with learning activities throughout the duration of a timetabled session. If for any reason students are not on-task this became the responsibility of the tutor to facilitate their focus back to learning and ensure that they remain on-task. In discussions with colleagues it was a repeated experience that any off-task use of classroom computers or mobile phones was particularly highlighted in observational feedback. These formal comments expressed it as both a deficit in student behaviour and tutor classroom management. This then becomes something that needs fixing in future teaching sessions; if it is observed again then the tutor will be expected to undergo remedial professional development. It was through this lens of how education should be that was my initial experience of working of education.

I can also remember occasionally leaving a classroom session, or seminar relieved that it was over and wondering why some students had attended, as they seemed to have little interest in learning. Judging by anecdotal comments from colleagues I was not alone in these experiences. I recognised that these were the bumps and bruises that any professional takes, but that now I had the privilege to observe education taking place from an alternate view. I realised that in this change my views and experiences as an educator could not be separated from the researcher that I now was, as they were both part of me. This, therefore, would be something to aim to reflexively recognise and therefore reduce the risk of that 'forbidden pool of data' (Fine: 1992) intruding.

I realised that just as Bourke (2014) had, that part of my history could shape my positionality. Perhaps this is one of the greatest challenges that a researcher has to reconcile when researching within familiar environments and as Chiseri-Strater (1996: 115) comments in an ethnographic

context: 'All researcher are positioned whether they write about it explicitly, separately, or not at all'.

Therefore to render the research completely strange by trying to reflexively bracket away my personal history and familiarity with the environment, especially the years of teacher training and working within this type of environment was something I could not possibly achieve. In this sense ethnographic descriptions become misplaced if they are expected to meet any challenge of offering neutral accounts of a real world context. Instead their value can be that they present constructions formed from observation, interview, reflexive self-interrogation of what was seen and heard, not least allowing the participants voices to emerge. As a researcher, but also an educator I acknowledged that I needed to recognise and locate my-self in terms of the research as a means to minimise my effect on the research. What did stand out as one part of facilitating my orientation to being the researcher, not least the role preparation prior to each observation and interview was how I was actually positioned in the rooms. As a researcher my role was in the background, rather than the foregrounded presence of an educator managing the session. This re-orientation was decisive in being situated as an observer.

The fieldwork duration of one academic year would inevitably risk slippage, and this is one of the dangers of the lone researcher. As Alvesson and Sköldberg (2000: 246) denote, reflexivity avoids letting any one process of construction dominate and therefore it becomes the 'ability to break away from a frame of reference…and a narrow focus on a particular aspect'. The aim extends to attaining, 'a self-critical eye onto one's own authority as interpreter and author' (ibid: vii). Geertz (1988: 10) suggests that the ethnographer's challenge of attaining 'an intimate view and a cool assessment' is not just their positioning during time in the field but also in the writing of the ethnography. This was reflected in the aim of wanting to investigate how students were using computers as primary classroom resources, from their perspective. It was the need to be able to see it from within and therefore how the classroom and the activities of its occupants made sense to them, that held the most value. This seems to be a simple process through the self-scrutiny of reflexivity, yet some admit that their voice and positionality were 'intermingled and intertwined' into their research (Bourke, 2014: 4).

During Bourke's educational research (ibid.), he anticipated that his racial connections to some white students would facilitate their openness to him, yet he found the opposite and it was 'students of color' (ibid: 4) that took advantage of the opportunity to be heard. However, Bourke admits

most of his analytical processes were through white eyes and ears, which mediated his positionality. Bourke does not seem to resolve this beyond what he learned from the process and that his positionality was an important research element and one that he needed to be forthright in communicating. In this context it is worth raising the following extract where Bourke comments: 'The research in which I engage is shaped by who I am, and as long as I remain reflective throughout the process, I will be shaped by it, and those with whom I interact' (ibid: 7). It seems that Bourke sees research as extending beyond the findings, and as a means of developing him-self, but for what purpose is unclear. Although I can understand his comment, in that this research has developed my-self. This is not only as a researcher, but particularly those times when I reflexively consider how I now teach or facilitate learning and therefore how I interpret students' responses to the education I try to provide.

For Merriam et al. (2001: 412) positionality can be determined where one stands 'in relation to 'the other'', but add that during research in familiar surroundings the researcher will 'experience moments of being both insider and outsider, with these positions being relative to the cultural values and norms of both the researcher and the participants' (ibid: 416). The loaded terms of insider and outsider can carry a weight of connotations that can demand more specificity and often it seems that positionality is danced around due to the complexity of the term that can draw in both broad and local issues.   An extract from Chiseri-Strater (1996: 119) resonated with my position in a very familiar research field: '[t]urning in upon ourselves as researchers makes us look subjectively and reflexively at how we are positioned. Turning in upon ourselves prevents us from removing our selv(es) from our research process, from our connections with our informants, or from our written translation of data to text'. In this sense we may become imbued within the research to understand how we are situated within it. And, as Chiser-Strater (ibid: 119-120) suggests this can be a stance within qualitative research that could be rejected by some as untenable. Yet this argues for recognising the values of the researcher to be acknowledged, rather than something to be neutralised. In this light, the value of ethnographic accounts emerges through how they can collectively paint broad and rich interpretive stories.

To return to the topic of changing practices, what was perhaps even more unanticipated was how late it was in the academic year before there was a clear change in urgency in students' approaches to their work, as they recognised a need to complete before deadlines. The urgency was not a steady increase in pace but more of a sudden realisation, followed by an urgency to complete work, which for some also included work that previously had not been of sufficient content, or standard to

attain a pass grade. For media students some, even at this late stage, were outstanding units from the previous academic year.

Sally, the media Learning Support Assistant (LSA) had noticed this change in students' behaviour towards the end of the final term of the course.

> Sally: *I found that…now towards the end of term there is a bit more…stress* [and laughs] *and people are...there is DEFINITELY people that are not messing around any more and are just working. I've noticed that.*

Following from the focus of the previous chapter, and due to the urgent need to complete the course, students were asked if their approaches to checking the quality of their work had changed before submitting it. During a final interview, Debbie, a media student commented that at the start of the year she checked her work through before submitting it. However, as the time was encroaching to submit all the final work she changed these practices and submitted her work without any checking.

> Debbie: *…in the last few months, because it's got quite hectic I just basically did the work, handed it in and then the tutors would say I'd need to do corrections, then I would do them'.*

For Debbie, this was a more pragmatic approach under the pressured circumstance and she viewed the tutors as a resource. Helen, another media student, adopted a similar approach towards the end of the year.

> Helen: *I'm more likely to just do a spell check and a grammar check…and that's it, because as I'm…I usually get quite a lot of work done, so to proof read it I would feel like it's taking time from other areas of study. I'd rather get all the units done and then have them given back to me, if there's anything wrong, rather than spend two sessions doing one thing when I could, ye know, just…completing it and then proofreading it, when I could have done two units*.

Helen's mother had been helping her with her work, but as she was studying a degree for a career change and in her final year she was very busy at the same time. Prior to the interview Helen had commented that she had not been as focused on her work as much as she should have, and I had noticed that she had been absent for several sessions. Therefore her reliance on tutor feedback, following a rudimentary check of her work using the facilities of the computer, was a rationalised strategy for her need to complete the course. In many ways this serves to illustrate the changes that

can occur with students and the changing social and learning dynamics of computer-resourced FE classrooms.

Katie, a media student had come to England from Germany to study the course and to improve her English, as she wanted to study media at an English university. She was very quiet during the sessions and did not appear to mix with the other students, although she was not unsociable. Her attendance could be irregular at times and on some occasions during Fridays, when there were two of the three hour sessions in the same room, I noticed that she did not return after lunch. Despite this, she always seemed to keep up with her work and the tutors commented that her work was to a high standard. Paradoxically, she had said in a previous interview that she did not do any college work outside of the sessions and from observation the pace that she worked at during the sessions was quite slow and she often checked German social network websites for messages. During her final interview I asked if she had been checking her work more thoroughly towards the end of the course.

> Katie: *Err…a bit more, yeah* [and quietly laughed].

She added that this was because she was aiming for higher grades, and Katie did indeed progress to the university of her choice due to the grades she received. Katie's approach of doing 'a bit more' was what could reasonably be anticipated from a student at this stage of the year.

Some first year music students adopted differing practices. Colin, towards the end of the year, said that he was checking his work more than previously, with the rationale of: "To make sure that it's passable". Whereas Pete, commented that he was not checking his work as much as before due to: "Pressure of the time of year". For some students old habits remained, even when under pressure. Kerry was a very capable student but over the final part of the year she had developed a relationship with a student in the same cohort. Following this it was very noticeable that her initial commitment to her work and attendance was less than it had been. In the classroom, they sat next to other and socialise a lot, whereas previously Kerry had been quite focused during the sessions. Due to this Kerry fell behind with her work and started to work hard to complete it all on time. I asked Kerry how she was approaching her proofreading when the pressure was on her to complete, as previously she had been very critical of the content and proofread and made corrections to a high standard.

> Kerry: *No, I still do it* [laughing], *it's like an obsessive thing*.

So, for Kerry, previous habits were part of her studentship and sustained regardless of the conditions.

8.3 REFLECTIONS ON PRODUCTIVENESS

The previous section has looked at any changes in students' approaches to their work during the final period of the year prior to submission. The differing responses by students were not unexpected as the pressure made some students change existing practices due to the circumstances, whereas with others their academic confidence, or established practice is reaffirmed. As the focus of the research included students' academic and non-academic uses of technologies, it was more than apparent during the research periods that students used the technologies of the classroom for both educational and social and leisure purposes. For some the non-academic use could be quite significant at times, often far more than the time they spent on their coursework. Resultantly, I asked students if looking back over the year if they thought that they had used their time less productively than perhaps they could have.

> Debbie: *Well a few months ago we used to erhm…like when we went into town [at lunchtime] on Fridays we have like Carl in the afternoons* [Bob had been on sick leave*] and he's very laid back and he doesn't really…he doesn't teach us, so he doesn't know what work we're doing. So erhm we used to go into town and we used to like dawdle back and we'd come back at half one [thirty minutes late]…and then we'd just sit and talk for the rest of the afternoon. Like with everyone in the class, but erhm lately I haven't, I've tried to stop myself doing that.*

Ash was one media student who eventually did not carry through his original intention of a university application. Part way through the second year he decided that instead of studying for a degree he wanted to try and get an apprenticeship to train to be a tattoo artist. He commented about his non-academic use of technologies.

> Ash: *I've wasted a hell of a lot of time* [and laughs].

Students' practices with technologies in the classroom have emerged as complex and affected by a range of influencing factors. It has been illustrated how these can shape the learning environment and students' approaches to their work and their level of engagement when the classroom computer can provide a student with an excess of educational resources, but also a distraction from educational work.

> Emma: Like just left it there, like all day. But now, I just like refresh it and then I just sign out and then like maybe like an hour later I'll do it again.

Despite Emma commenting that she only checked social media every hour, it was noticeable that she spent much more time than she indicated when using social technologies.   Her comment of refreshing a webpage to see what her friends elsewhere were discussing online, as a means of catching up with the chat then ended up engaging her cumulatively for a significant amount of the session. This self-deception over the amount of time that non-academic technologies were accessed during a session was not uncommon amongst students' comments when compared to observation, even during the more pressured times.

Jim's approach to his work was reflected in what I observed with many of the students. Due to the need for those students aiming for university to get good grades, during the last interview with Jim I asked him how he considered his time using social media during the sessions.

> Jim: *…I think, really if there wasn't the Facebook and Myspace there I'd have probably done something different instead of doing my work. I don't know…like I'd have maybe…err..like read an article on the Internet, for example, that wasn't really…err…to do with what we're doing, but had some relevance to it.*

Later Jim added that going on games and social media websites was a form of coping strategy for him. It is apparent from his last comment that he needed some form of temporary diversion away from his coursework, which the mid-session break did not fulfil. I must admit that I became concerned about Jim and some other final year students and their apparent lack of focus on their work during the last term of the year, as I recognised that they could be jeopardising their final grades and immediate prospects. Although, as discussed above sometimes this level of familiarity, as an educator, can be useful in identifying the significance of some changes, or even lack of it when change might be anticipated. However, it also illustrates the personal connections that researchers can form when they have spent significant time amongst those that they are researching. It is times like this when I realised that certain situational knowledge can inform, but this can also mean that the concerns surface can be subjectively distracting to the detriment of the interpretation needs. The need then, is that the researcher has to reflexively take over to record and interpret what is occurring from the position of those being researched.

What the above has aimed to illustrate is the significant challenges that can be incurred when the researcher has history and especially familiarity in the environment they are researching. I

recognised that I had a set of values and a perspective of education due to my training and professional background. On reflection, perhaps one of the challenges of the research was thinking that I could adopt a more neutral perspective and that some aspects of my identity could be clearly separated from others.

Jim's comment above, from my final interview with him, made a connection with an interview earlier in the year (see Section 5.6) when Jim had indicated that the amount of time spent using computers for academic work was demotivating him. Jim had made quite a commitment to study at college, by reducing his working hours in a family garage business and I was surprised that on some days during the last term he spent most of his time avoiding coursework and using the Internet to access social and leisure media and online games. Jim did aim to progress to a media degree course at a local university, so I wondered why he spent so much time often playing some very basic online games. During this final term, whenever I asked Jim about his progress he always had work outstanding to do and he was also doing some college work at home. As Jim had to pay for petrol to drive over 20 miles to college I was surprised that he was not more absorbed with completing the course, as the non-academic activities he was using the college computer for could have been achieved if he had stayed at home and used his own computer. This appeared perplexing, as Jim did not actively socialise with the other students, therefore he was not attending just for companionship although he was certainly not anti-social.

For Jim, he still had the motivation to continue with the course. But it seemed that once he was in the classroom that drive to study seemed to evaporate during these late periods, as the mundanity of constantly sitting at his computer doing prolonged independent tasks was revisited session after session. Jim's commitment to media studies, and therefore the need to be there and the costs he had incurred by reducing paid working hours, appeared to come into conflict with the structure and delivery of the course itself.   To observe the time he spend doing coursework slowly decreasing until in some sessions he achieved very little was quite alarming.   I occasionally had casual chats with Jim, as his car was often parked close to mine on campus and sometime we would arrive, depart or sit in our cars for lunch around the same time. Although we predominantly discussed day-to-day topics what was consistent was how he viewed studying media as part of his drive towards a career change and therefore a move away from working in his family business. So this was not the behaviour of a student with little interest in the subject, but one where curriculum and pedagogy, and perhaps even the, at times, oppressive climate in the classrooms (see Section 5.2) seemed to be the attrition factors depleting his motivation.

During the final interview with Helen, a media student, at a period when she was working towards completing all her coursework, I asked if her use of social media in the classroom had increased, or decreased.

> Helen: *I'm not sure, it's probably...less actually, cos I've kinda stopped myself from going on those things at college...err I mean, I don't wanna to get to the point where...I don't get into uni and my Mum asks why and then I say because I was on...I spent that day on MySpace, or texting, or being on err MSN chat thing when I could have got a unit done. I mean I've seen people* [other students] *be on it all day long...and they literally just spend all day on it and it's like well...you're not going to get into uni doing that and then when someone asks why, you're going to have to lie or tell them, it's because you was on Myspace.*

I then asked Helen, if she thought that her use of social media over the duration of the course could affect her final grades.

> Helen: *Err, well I...the grades that I'm finishing now I would, I mean the thing is it's worked out differently because last year, in the first year I didn't have any intention of going to university. I had no idea of what I wanted to do...it was only until erhm the beginning of the second year that I was contemplating actually going to university cos my best friend is at university. They've just finished now and visiting them in Leicester and seeing them at uni and seeing them enjoying the uni life and being part of that...and seeing what was open and thinking, well I'm an intelligent person and I am good at what I do...err did make me think. So..it's not, nothing's been particularly affected in the sense that this year it's more so because I've actually got an aim now; whereas last year I didn't really have an aim. So the grades, I would have happily settled for passes back then...erhm...but...it is, err, a case of last year...I had no aim and this year, erhm, I would have settled for passes, whereas now I'm aiming for distinction, merit, merit...so.*

Although Helen did not precisely respond to the topic of the question, she did indicate the grades she was aiming for, which she did achieve, and her source of motivation. Helen's comments exemplify the changes that can occur with FE students over the duration of their course (see, for example, Hodkinson and Bloomer, 2001; Hodkinson et al, 2007). During an informal discussion with Helen she explained that during the first year of the course she did have some attendance issues. She added that when she did attend she was often quite tired from being absorbed into local late nightclub cultures and a frequent use of recreational drugs. Amongst young people this particular club culture commonly co-exists with drug use (Hutton, 2006). It was after that period when she began to associate more with young university students, who enjoyed themselves socially, but also managed their studies that her priorities appeared to change. During the second year, Helen regularly visited friends in their final year at one university and noticeably her priorities and work ethic changed. Helen's change in priorities clearly illustrates how external factors can

significantly affect how some students engage, or disengage with their studies and consequently their values and goals.

From observation, Helen still used social technologies during the sessions and although her absence rate had improved there were still times when she missed sessions. What did change was her focus and determination and Helen had expressed her commitment to progressing to a particular media and journalism course at one university, which she did achieve. I also asked Helen if she had been doing more college work at home during the last term.

> Helen: *Since I've applied to uni I've taken everything home….I've done it in as many locations as I can…so it's…I have taken it everywhere with me. I've taken it on coach journeys; I've taken my laptop everywhere to get the work done. So it's dedication* [laughs] *and it's reflected in my grades.*

Helen was in a cohort where all of the students had initial intentions to progress to university. But the driver for her commitment to this goal was external and came from her socialisation with friends, who were already experiencing a university lifestyle.

For some students the stress to complete became overwhelming and Hazel, a year one music student commented on her use of social media during the final term.

> *Yeah, even though the coursework was creeping up I still had to go on it. I don't know why…it's just…*
>
> AB: *Did you find you needed it more?*
>
> Hazel: *Because there's so much stress piled on you, because it's piled on so much, like you think, "Oh, I'm not going to get this done, might as well go on MySpace", then you lose it…*

For Hazel, the technologies offered a temporary escape from the need to complete her work by the end of the academic year, so that she could progress to the second year of the course. The stress came from the music tutors' reminders to the students, at the start and several times during the sessions of their pressing need to focus and complete their work. At the centre the sessions became unstructured during the final weeks to let students work on any outstanding needs and it was not unusual for students from different cohorts to be in the same room. Normally students were not allowed in the classrooms unsupervised during the mid-session breaks, or lunch period and the tutors locked the door. Over this period the door was left open and students could come and go as they pleased, with the remit that while they were in the rooms they focused on their work. Most

did, with the occasional exception and then the student was warned that they were at risk of being be asked to leave if they did not intend to do any work. As expected these were pressured times for both students and staff and the tutors sat at the staff computer marking work that students had uploaded and then feeding back on any outstanding needs. Immediately any student had been assessed as successfully completing a unit, Dave in particular loudly called this out and there was then a cheer from all the students. As such, this ritual gave an instrumental focus to the sessions.

8.4 REFLECTIONS, PROGRESSION AND COSTS

From observation and comments from students and tutors, there was no doubting that many of the students had used social and leisure media regularly during the sessions over the academic year. For some this use incurred a cost.

> Scott: *I mean I've kind of ruled out, cos I want to go to university next year I've actually kind of ruled out actually going for a BA. I've said I'm going to have to go for a foundation, cos I just know I won't get the points I need to get in.*

Due to the grades he was achieving for his work Scott could only apply for a two year foundation level degree in media, rather than the full three year BA degree that he had aimed for at the start of the year. Scott was not the only student who needed to reduce their ambitions to progress to a full degree course. Out of the 15 students, in total 8 had to reduce their original ambitions and enrol on foundation degrees in media, with only 4 progressing to full, three year media degrees. These students had illustrated during the course that they were capable of achieving higher grades than they eventually did and both tutors and students agreed on this.

Scott was asked if there was anything that he thought needed changing to the course.

> Scott: *Yeah […] definitely stricter deadlines, because I mean I've been like […] I remember when our digital units had to be in and I was like, "Oh, I can't be arsed to do it, today; I just won't hand it in", and that was like last, what […] probably last January, or whenever it was, and I just..and to think I've only just completed them now, it's pretty..it's pretty stupid.*

Scott was not the only student during the second year who had evidencing to complete from the first year of the course, which in turn added to the second year workload.

As indicated previously, there was an expectation for the students to become more independent in their learning, partially as preparation for those who intended to progress to university. The Internet

is a significant repository of resources that students can use for learning and tutors often directed them to search for appropriate ones during sessions. But for some students reflecting back on the course, during the final group interviews, they expected more direct teaching.

> Emily: *Certain things it's good to get on by yourself, but if you don't understand something they just say, "Go on the Internet", they don't teach us it.*
>
> Liz: *Like we know we don't ever get like taught anything, it's just if we need to learn something it's like, "Do a tutorial* [online]*", not like you teach us a tutorial.*

Other media students reacted in a similar manner.

> Ash: *….BUT, cos we had Bob it kind of made it a bit…cos half the time he'd sit there and say "Oh you're asking for help" (mimicking tutor) and he'd sit and tell you to look it up on the Internet and –*
>
> Seth: *Yeah like he meant –*
>
> Debbie: *Google it –*
>
> Ash: *I know like college work you're meant to like take your own responsibility but –*
>
> Seth: *But it takes the piss that –*
>
> Ash: *Takes a bit far like…saying you just…basically teach yourself and he's just going to sit there.*

From Ash's comment the students were aware of the expectation for them to work independently and to use the Internet to search for online resources, but they expected and certainly seemed to need more personal contact and teaching from the tutors. There was a significant range of resources online for the Adobe software that the students used, including many tutorials, but what I had noticed when students did search for them was that many were quite complex to follow and aimed at a high skills level. Often they contained actions within them that the students had not been taught, so then they had to search for a tutorial on those and this process appeared be demotivating and as a result of this they often disengaged with their work.

As Scott added, he would have liked stricter deadlines for their work and perhaps this pressure might have encouraged them to be more focused. The tutors were constantly reminding students how much time they had to submit, but this often ended up being extended. There were no punitive measures for submitting late and the tutors knew that they had to get the students to achieve regardless, as part of meeting targets. From this emerges a mismatching of expectations and

sometimes when the tutor was sat at the staff computer they were responding to a high level of internal emails, from course managers, college administration staff, colleagues and students. From the volume I saw tutors managing, responding to them all during a break would have been unlikely to be achievable. The tutors did have administration time, but many of the emails seemed to need quick responses and their administration time could involve a range of activities, not least at certain times of the year interviewing potential students for the following academic year. Therefore students' responses are not unreasonable but they need to be situated within the wider context. Clearly, they indicate some dissatisfaction with the pedagogical strategies and this was reflected in the classroom activities. This situation highlights the complexity of the computer-resourced classroom environment and its fragmentation into differing activities through responses to internal and external pressures and social and cultural practices and expectations.

8.5 TUTOR RESPONSES TO DIGITALLY DIVIDED CLASSROOMS

Throughout the year of the ethnography there was always a detectable frustration from the tutors towards how the students approached their work and the pace that they worked at. Despite this, over the year I did not detect any change in how the tutors delivered the subject that they were teaching. This was at an individual level and also at an institutional level, as there was no professional development or meetings that took place to discuss good practice when computers and other technologies were used extensively in a classroom. During the final term I asked the tutors if they were planning any changes to their pedagogy for the following academic year.

Several of the tutors commented that they were considering spending more time developing the literacy skills of the students. This included punctuation, more time spent on drafting work and proofreading it. One media tutor reflected on the time that students spent on computers.

> Carl: …they spend too much time on a computer, they're doing a lot of time passing time, passing time of day, ye know, your Facebook sites, social sites, things like that because it's hard to concentrate at the screen all the time, err and I just think they should be short, sharp chunks…at work, at a computer. So it needs breaking up…I think they need deadlines erhm…I think they need more pressure, but on a timescale basis […] it's like we start the day and break it down "I want you to do this, this and this, you've got fifteen minutes now" […] then you should pull them away from the computers and say, "Right we're moving on to something else and if you haven't finished that then that's your responsibility to sort that out AFTER this lesson…not during.

Carl clarifies that he is very aware of students' pace of work, the challenges of working for lengthy periods on a computer and their procrastination strategies. The generic expectation at the college for formal lesson observations was that there should be sequence of short activities that kept the students challenged and engaged, and Carl demonstrated an awareness of this. The difficulty with this is the different pace of work that individual students are capable of working at and their cognitive skills. Many tasks required efficient short term and working memories, such as following a short software tutorial with a significant number of sequences, or retaining what a tutor was delivering to the whole group. Carl did acknowledge this, as he added.

Carl: But then you've got to be considerate to students that can't learn at the same pace.

A common expectation across the college for sessions to have short engaging learning activities for the students was difficult to achieve, especially as the media students had lengthy projects; these often focused on developing one software product, or lengthy research and writing evidencing. This was not dissimilar to the music students and Dave, the lead music tutor, commented on the arduous contracts unit that he delivered over a full term, which included a lot of challenging subject specific lexis and very lengthy sections of complex text.

Dave: Mmm, yeah, I have, yeah. I mean my initial kind of thing was to have erhm...err, a mixture of me reading it, err, the clauses, and them reading the clauses and then, err, them working in small groups, err…interpreting a clause per group and then feeding back to the larger group and err…for some reason I, I didn't do that small group thing err with the contracts, this time..erhm....I'm not quite sure why. I guess I thought that it would slow progress down, ye know. But, maybe, it would have.

What Dave identifies through his thought of using small group activities was the sheer duration of the unit and what Dave referred to at other times as its 'dryness'. The unit was a prescriptive part of the course he had to deliver and had no option for modifying. He also illustrates the pressure to get student achievement, despite the nature of the content, which involved deconstructing very lengthy legal contracts. During informal discussions with Dave he was very aware that the students disliked the unit, but the students had considerable respect for him. His guitar skills had gained him significant cultural capital and he sometimes played with the students in the studios, if they had a band member absent. He was also active in the local music scene and had a long history of playing rock music. This respect showed in students' behaviour during the contracts sessions when Dave needed to spend a long time explaining some points; if any became restless he politely reminded them that they needed to listen and they regained their focus and became quiet again.

Alan, a music tutor, commented on some initiatives in education at the time to engage students with their work through social media.

> Alan: *Not really….I think as soon as you try and do something about their social use of technology in the classroom they adapt and change, for instance the banning of certain websites, they can get round them, somehow and they do it and I don't know how. But it's like they're one step ahead of ye, so as soon as you try to implement someat to stop it erhm…. But again, like it's a good method like going into their little social circle by using the things for teaching that they use socially, like MySpace and stuff; by coming into that they don't want to use it anymore* [and laughs]. *I don't know…so you could actively use that negative psychology approach*.

8.6 CONCLUSION

The focus within this chapter on the final part of the academic year illustrates the complex issues within classrooms where technologies are used extensively and how students' priorities can change and what can influence that. These changes identify how there can be both external and internal factors that impact on the classroom. For some students not engaging sufficiently with their coursework came at a cost and this can partially be attributable to the culture of the computer-resourced classroom and the divide in the uses of technologies. As students reflect on what they consider as deficits in the course it also identifies how the students' approaches to their work do not necessarily meet tutors' anticipations, which results in a dissatisfaction from both sides. The picture that emerges is one of a working dilemma, especially as all these students were enthusiastic about their course subject, illustrating that within classrooms where computers are the primary educational resource there is a dilemma.

8.7 STUDENT PROGRESSION

At the end of the year all of the nine first year music students, apart from one male student, progressed to the second year. This student found that he was too self-conscious when performing in front of others and decided not to re-enrol.

Of the twelve, second year music students, all successfully completed the course, one male student progressed to a foundation degree course in music at a university in the next county and another male student progressed to a full degree course in music at a local university. All the other students had ambitions to work in the music industry and to keep on playing their instruments and

performing. These students realised that they may need to do unskilled work as a means of supporting themselves and several gained employment as retail workers.

From the fifteen media students, two male and one female enrolled on a media foundation degree course at the same college. Two male and two female students were accepted on full media degree course at external universities. One female and four male students were accepted on media foundation degree courses at external universities with the aim to progress to the full degree top-up year after completing the foundation degree. One male student had insufficient points to progress to a degree course and he planned to return to college to gain these points. He had been seriously ill and this meant that some of his unit evidencing was lacking. One male student aimed to source an apprenticeship as a tattoo artist and one female student failed to complete the course.

Chapter 9, which follows, is the final chapter of this thesis. It will present the key empirical findings and reflect on the implications of this study for further research and its contribution to knowledge.

CHAPTER 9: DISCUSSION OF RESEARCH FINDINGS

9.1 INTRODUCTION

In the introduction of this thesis I outlined the stimulus for this research, which was formed from personal and colleagues' experiences of FE students' use of social technologies while in the classroom and their limited and seemingly superficial engagement with text based resources and coursework in general. I explained the level of frustration that was surfacing among educators due to this situation, and resultantly the blame culture that emerged due to the pathologising of this behaviour that was seen as a deficit in studentship as students reduced their level of *being* a student. More than this, what was apparent from this and earlier research was the ease in which a student could appear to avoid the educational task they should have been engaging with, which on the surface suggested a level of 'whateverness' (Agamben, 1993) to their educational priorities. Social communication and entertainment through the high-choice and ease of access of new digital technologies offer students quick levels of gratification. That is in opposition to the greater attention and cognitive demands of listening to a tutor talk, or focusing for long periods on coursework. As FE courses can be vocationally orientated, the students predominantly enrol for that aspect; consequently the academic elements may be less engaging to many students whose attention can then drift to alternate digital activities. Therefore, due to this cultural change in attention, a cycle emerges of tutors needing to use the most instrumental methods for achievement, not least as a means of addressing the challenges of working within the performative culture of FE (Simmons and Thompson, 2008). In this situation, any blame culture is then at risk of being reciprocal as tutors become frustrated with students' limited engagement with their coursework due to their non-academic use of the classroom technologies. Conversely, students perceive a deficit in tutors' pedagogy, especially if there is minimal direct teaching, or facilitation of learning. This is heightened, as evidenced in this study, when this pedagogical approach results in the students' periods of working independently at computers becoming too lengthy for their level of studentship and attention needs.

Reiterating this exemplifies the new knowledge that this thesis brings to the context of students' practices within computer-resourced classrooms, even more so as research in this FE environment and topic is extremely limited. The duration of the ethnography was intended to offer more than just a glimpse of what can influence FE students' classroom practices, especially when there is an intersection of educational and non-educational practices. The ethnographic lens is directed to how

this duality can not only influence students' approaches to their academic coursework, but also their social and leisure uses of college computers.

To do this ethnography was a personal opportunity and a journey to understand a situation that I had experienced as an educator. My professional priorities had previously masked much of what was occurring in the classrooms, and I was aware that I had only viewed students' non-educational practices with digital technologies as getting in the way of their progress and not sufficiently questioned why this was occurring. In my previous guise as an FE educator, I myself had been caught in the performative need to get students to achieve their qualifications and this would often mask the finer details of the classroom behaviour. This would especially be the case as I went around the cohorts I was teaching offering individual support when the students were focused on individual, or small group activities. By approaching this environment as an ethnographer I was able to reflexively respond to my previous familiarity (Delamont and Atkinson, 1995), and ways of interpreting classroom behaviour. As Willis (2000: 114 original emphasis) indicates, this ''rough ground' can be experienced and recorded only through a degree of sensuous immersion in the field…[…]. This is the material of 'thick description''.

Following the Preamble below, this chapter will discuss the key findings of the research relative to the research questions. As there is one overarching question, the key findings relating to this will follow on from a discussion of the findings relating to each of the three subsidiary questions, which are:

How do students use these technologies for research purposes and then the processing of the information that is sourced?

How is students' use of these resources in the classroom affected by their potential for use as a social and leisure resource?

What factors, environmental, social and personal affect the way students use these technologies both within a specific session and over the academic year?

The main question remains:

How are computers and digital technologies shaping the social learning environment of the FE classroom, when they are used as the primary learning resource?

9.2 PREAMBLE: RESEARCH FINDINGS

This research illustrates that students' extensive use of computers within a classroom environment results in a situation that is educationally, socially and culturally both complex and nuanced: complex due to the number of elements at play in these rooms and nuanced, as many of the practices by students may be subtle, variable and at times difficult to notice. This reverts back to Section 6.2 and the notion of divisionism to conceptualise that to an onlooker these classrooms would present the image of education taking place – as expected within that environment. Look closer, through an ethnographic lens over a period of time and the image starts to fragment into component, and at times seemingly disparate parts.

What has become apparent through this research is that when computers are the main resource in a classroom their polyvalent capacity, which affords them to be used out of context, is taken advantage of by many students. This capacity of the technology becomes influential in how they are used, as certainly without this some opportunities would not be possible within a classroom, apart from through the use of smart phones. However, an excessive use of a mobile phone would render these non-educational activities more apparent to a tutor, especially considering the, at times, lengthy duration that students would use the classroom computer to access social-leisure resources. One causal factor in particular that emerged is that when students work independently with computers for long periods they have the opportunity to intersperse their academic use of the computer with non-academic activities. This may occur sporadically and with some constraint, as a form of temporary relief from a prolonged focus on coursework. The technology can also offer a more prolonged distraction if, for some reason, the coursework is not engaging, or if a student finds it too challenging. The risk is that the non-academic use then overrides the coursework demands, compounding a problem that can, as identified in Section 8.4, have significant consequences for some students.

As indicated within this thesis (see Sections 2.3.2) there is a similarity in how technologies are used both outside of education and in education itself, in that at times there is a disregard for some social

conventions. What would have been considered more appropriate conduct in a particular situation without the technologies is now being overridden as the user juggles their priority with what, on occasion, can seem to hold little regard for the immediate context. What the user can access through technology can, at times be more attention demanding, or needy than the value of the immediate non-digital situation. This approach to considering these situations facilitates one way of rationalising the interaction between the immediate environment and the digital and the formation of new values for some digital users, as the technologies appear to mediate some aspects of the lives of users in new ways. The tensions that can occur as a result of this are in those contexts when these new forms of digitally facilitated behaviour may be unacceptable, detrimental, or even have a disregard for others.

Bijker (2009: 2) denoted that technologies and technological cultures can, 'reshape human activities and their meanings', and this was clearly evident within the classrooms during the ethnography. It was not only how the computer was the students' main focus of attention, above any other potential resource and through this singular focus isolated students from their peers, but also how they were viewed as objects that could border cross cultures with ease. Therefore the technology facilitated how the space of the classroom could be conceptualised as functioning between cultures, despite its discrete intent for education; consequently students' focus of attention could be considered as oscillating between educational and other, social-leisure activities. In this way they show that they do not differentiate between each context, due to the affordance of the technologies they use. Although they are situated within the classroom students' computer screens would usually contain both educational and social-leisure artefacts that could be viewed within their field of vision. In this context the academic and social-leisure uses of the technologies were either alternated between, or used with a variable degree of coexistence. As Willis (2003: 402) indicates, those technologies that function as commodities of the social and cultural practices of young people can act as 'positioning goods' (Willis, 2003: 402). In the classroom how computers were used did serve to illustrate how mutable identity can become when there is access to multi-functional digital technologies. This reflects the polyvalent capacity of networked computers, even when situated within a discrete and formal context and how the distribution of an individual's attention can be affected by contemporary cultural practices with cultural artefacts (Stiegler, 2010).

Huberman and Wu (2008) suggests that the ubiquity of information we are in contact with due to the prevalence of the Internet and digital media is in continuous competition for our attention, and therefore, as Lanham (2006) posits, what is scarce in an information based economy is attention

itself. For Lanham (ibid: 258) we exist in a 'toggle-switch world' and therefore we are 'bi-stable' and 'move from one view of the world to another', which are always in competition. Notably, within the interests of this research, Lanham (ibid: 257) comments: '[i]n the digital writing space, words no longer have it all their way. They must compete with moving images and sounds'. The bi-stable oscillation that Lanham argues for in the context of text and image can also be considered as not dissimilar to liberal humanistic notions of cultural diversity. In this, cultures are essentialised, and in doing so promote cultural relativism where cultures have fixed places and identities, thus becoming at risk of affording the dominant culture its hegemony. The digital classrooms of this research were more sites of cultural difference, where difference was contained within the body and enacted through active engagement with technologies and interpersonal discourse. Computer screens, as a 'digital expressive space' (Lanham, 2006: xi) displayed the fluidity of identity and cultural differences as not being static and fixed and switched between, but more through their digital interactivity and the dialogue between students within the room and others elsewhere.

Thus, cultural difference in the digital classroom is evidenced more through the shifting relations and interactions of personal and educational histories and politics, which at times became nonlinear and multi-vocal in their hybridity. Lanham (2006: 258) approaches this change in attention, when he discusses bi-stable views of the world which move from one view to another, as we 'learn to live in two worlds at once' that always compete with each other, and refers to this as a 'toggle-switch world' (ibid.).

The content of computer screens, as observed during the time in the field (see Appendix 1) evidenced what Bolter and Grusin (2000: 34) conceptualise as Hypermediacy:

> …contemporary hypermediacy offers a heterogeneous space, in which representation is conceived not as a window on to the world, but rather as "windowed" itself – with windows that open on to other representations or other media. The logic of hypermediacy multiplies the signs of mediation and in this way tries to reproduce the rich sensorium of human experience.

As clearly evidenced through observation of students' screens, Bolter and Grusin (2000: 32) add:

> …it is not unusual for sophisticated users to have ten or more overlapping or nested windows open at one time. The multiple representations inside the windows (text, graphics, video) create a heterogeneous space, as they compete for the viewer's attention.

The heterogeneity evident on students' screens was not just that of differing representations of new media and also literacies, but also that of the different digital cultural artefacts they engaged with while in the classroom and consequently how these vied for attention within the same field of vision. Coexisting within this array of resources were predominantly text-based assignments with their longevity of weeks, or months and relevant online research resources and the relatively immediate attention needs of communication with friends, within and outside the classroom and those websites, and audio and video media that were non-assignment orientated. This coexistence in some way demonstrated the values, or needs of students while in the classroom. Although the drudgery of some of the tasks where students were sat in the same position and focused on one task for hours at a time, not least that this involved little peer interaction and was repeated from session to session, perhaps identifies how this approach to learning brought with it a need for relief. The challenge for some students was regulating their time and attention away from college studies, so that their grades were not affected, which in itself indicates a less than ideal learning environment that does not recognise both learning needs and the social and cultural changes that high levels of engagement with digital information and new media bring with it. As discrete environments the digital classrooms and the students illustrate the digital conflict occurring between remaining within the fixed boundaries of education and other social and culturally formed needs. This was not least evident in the pressures on the tutors, whose attention was at times diverted to pressing administrative duties, rather than students' learning. This was partially sanctified by curriculum expectations for Level 3 students to demonstrate independent learning; although, this was contradicted by students wanting, or needing, more than 'teach yourself'. The classrooms thus were an uneasy environment of quiet conflict, which was expressed by how new technologies and media were used off-task, rather than an environment that was adaptive to the broad cultural changes and expectations that have occurred through students' relationships with technologies. It is in this sense and from this situation that the blame culture that was evident emerged. This was something of a paradox, as what has offered the most significant change in educational resources in modern times, has also created a situation where they can sit uneasily between different cultures and expectations.

As students, they were expected to use a college computer for its educational value, but at times that was diminished (see Section 6.3) and then the technology's alternate social-leisure value could become more appealing. For some students, any incommensurability between these two opposing values of technology within the formal learning context of a classroom could be transcended. This indicates that young people, as students establish 'a range of regimes of value' (Miller, 2008: 1128),

and any factors determining the primacy of value between education and social-leisure activities are likely to be affected by the prevailing conditions.

As Baudrillard (1988) suggests, how an object is used can mirror the subject who is using it, as long as the object has the capacity to do this. Therefore, how the polyvalent technology of a computer is used can reflect its value to the user at that time and consequently its level of embeddedness within different cultural practices (Ihde, 2008). If, as some students indicated, they alternated between different uses of the technology when doing coursework at home it can be understood how this transfers into a classroom context, especially if there is something occurring that results in a loss of interest in the educational activities, which may simply be the duration of a singular activity.

A belief from FE tutors had been that if students were using Facebook, or YouTube, or their mobile phones in the classroom, if they disciplined them it would deter this behaviour reoccurring. But this would only be a partial and usually very temporary deterrent. Therefore there needs to be a deeper understanding of these classroom conditions, so that they can be responded to more appropriately and therefore engage the students in their learning; consequently this clarifies the contribution that this study aims to make to this field of educational enquiry.

9.3 ACADEMIC USES OF CLASSROOM COMPUTERS

The first subsidiary question of the research has a focus towards students' approaches to their academic work and asks: How do students use these technologies for research purposes and then the processing of the information that is sourced?

All of the students' assignments involved some level of research, even when evidencing how they used the specialist course software through a range of screenshots of their sequential actions and the strategies that were used to resolve the technical problems that could often occur. The students' constant access to their individual computers for both creative and academic work and the convenience of the Internet and online resources resulted in a general avoidance of any alternative non-digital resources that were accessible within the classroom, or college. As commented in Sections 4.1.3 and 7.2, there were some hard copy texts that students had access to, albeit limited in numbers or, in the case of music students, both limited in numbers and not readily accessible.

It was apparent across the three cohorts that the students received little coaching in research skills. A rationale for this level of consistency within pedagogy across both courses, despite the differentiation amongst the students, could be a common assumption amongst individual tutors that as the students arrived at college with the skills to use computers and other technologies, they already had adequate research skills. Although the interview data contradicted this by identifying that many students' ICT skills were initially quite limited. Those who came to college straight from school only had occasional access to school computers and their leisure use of technologies was often very limited to specific uses, rather than finding focused information through refined search criteria.

The tutors were very conscious that the students were becoming too reliant on the Internet as their main source of information, together with a relatively conservative and superficial approach to online searching. Therefore, as a means to try to get the students to broaden their range of resources some tutors did promote the value of alternate non-digital sources, although this was in the form of brief verbal directives rather than a planned teaching exercise. As using a range of different sources of information was not essential within assignment evidencing needs the students remained using the Internet, which for them offered ease and familiarity; albeit without any instruction from the tutors on effective online search strategies or how to evaluate the results. Debbie, a media student, reflected on this situation when she commented that her cohort had not "been taught different research techniques". The students therefore viewed any deficit in their skills not as a result of their negligence, but more that the tutors had not adequately prepared them. This formed a barrier, as the students avoided asking for tutorials on research strategies, but continued using whatever approach they thought appropriate under the circumstances.

This situation clearly indicates there is the risk of a level of inaccuracy in the assumptions about students' digital skills when they enrol at a college and therefore a potential need for a skills audit, together with some integration within the curriculum for the development of research skills and strategies across a range of digital and non-digital resources. Embedded within this context there is also an illustration of one aspect of the level of relationship and authority that circulated within the classrooms, as students were reluctant to question a tutor's pedagogy. Brabazon (2007: 15) infers that Internet researching can result in, 'laziness, poor scholarship'. In this context any laziness or deficit in students' scholarship appeared to be more that of a limited skillset by using what was familiar and easier and which had previously functioned sufficiently for their needs. There seemed to be little awareness that a range of resources could offer the opportunity for deeper learning.

With their focus directed towards the computer monitor, students lost the opportunity to critically engage with peers and the sharing, questioning and scaffolding of knowledge. This continued focus on the computer consequently was significant in limiting any development of a shared learning culture, or support between peers and therefore contributed to the isolation of students that was very apparent during the sessions. Students would 'chat' digitally, or discuss some amusing YouTube video, or other non-academic topics, but this was a social interaction that did not transfer over as an academic practice. Students reverted to what Massey (2004: 5) refers to as 'isolated atomistic entities'. Massey (ibid.) adds, 'identities are forged in and through relations', therefore any notion of studentship being stimulated through classroom learning cultures and peer interaction was impoverished. If student identities are not rooted and stable they can be viewed as 'mutable ongoing productions' (ibid.), consequently how classrooms become divided into spaces can be fruitful in not only considering how students approach their research, but also the remainder of their activities. The argument is therefore, that a computer-resourced classroom can be more than a passive container (Kenway and Youdell, 2011: 133); as a space it has the potential to function through a multiplicity of meanings. For tutors it became not only a room for teaching and learning, but also a more isolated space around the staff computer where the pressure of administrative demands could in part be reduced. In that sense it exemplified the day-to-day pressures on FE staff, but also the polyvalent nature of computers. At one moment they could be used for administration, or facilitate a presentation to students through a room's interactive whiteboard, assess and feedback on student work either within the immediate cohort, or to others, and so on. The students had initially viewed their classrooms as places of learning but the challenges of a curriculum and tutor pedagogy expected high levels of independent learning without providing the students with the study skills for this, not least a lack of activities that could stimulate peer interaction and learning. Due to the polyvalency of the computers, students at times used them to engage with social media and other artefacts that they would use in their personal leisure times; illustrating how they were not quite making a clear distinction between educational time and space and cultural uses of technologies. These were 'underground' activities that tutors were aware of, but could not police all of the time and as such they became something of a norm for non-academic behaviour within session times. Not that the students, in general, appeared to arrive at the sessions with these uses of the technologies at the forefront of their aims for the sessions, but more the classroom conditions were such that students would turn to them without much deliberation. In that sense their cultural norms of using new technologies and media drifted into the classroom and coexisted alongside their educational uses of the technologies and media. The fluidity of movement between each was regulated by the learning conditions and any pressing needs, not least evidenced when there was

urgency to complete work that may have been neglected. Attention itself was mutable and not dissimilar from what Lanham (2006: xiii) refers to as 'oscillatio', or the oscillation of moving back and forth. What troubles the limitations of the thought of attention moving or switching between differing actions, or project, or anything else is when it occurs in the close field of vision within the boundaries of a computer screen. Consequently, unlike the gamer in the research conducted by Martin et al (2013 see Section 2.1.6) who rotated between the virtual world of the game on their multiple computer screens and their domestic environment, unless students verbally interacted between themselves, which would have involved some movement of position, there were few clues as to any switching of attention.

In this context *fluidity* does not fully capture the way in which students worked both educational and social and leisure resources on the screens. The only visible action to an observer might be the use of a mouse to engage with a different resource. In the absence of other clues, attention shift would have only been discernable by monitoring eye movement as the range of artefacts, whether text, image, audio or video would either be in direct or peripheral vision. With familiarity other clues suggested when students were giving more attention to non-educational artefacts as their facial expressions or body language would indicate that they were being more entertained, or focused than they would usually be when doing their course work.

This reflects the cultural changes in how attention is distributed when new digital technologies and media are regularly used and the fluidity of cultural norms with both social media and other forms of digital contact. On any day people can be observed walking in a busy city centre while holding a conversation on a mobile phone; this is indicative of how social and cultural uses of digital technologies are changing, or have changed how we interact in what could have previously been mono-activity situations. Recently I had an academic tutorial with a final year, 21 year old, Fine Art student and at one point while we were talking she touch-typed a text reply to her father on her iPhone. Yet all of the time she was looking at me and did not disengage from, or disadvantage our conversation; at the time I was quite taken aback by her skill in doing this.

This student's actions could have been considered as rude or inappropriate, but her father needed some information urgently as he was helping assemble part of her degree exhibition. Our meeting was timetabled for one hour, so she could have easily asked me if she could have a few minutes break to attend to her father's needs, but for her this was not needed. Her attention could not be classed as switching, or even fluid in movement as her attention was simultaneously focused on two

completely different topics, and the kinaesthetic actions of texting. As I knew her quite well from our regular weekly meetings all I could assume was that she felt comfortable enough in my presence to respond to her father in this way without breaking our discussion. At other times she behaved just as expected of any well-mannered person. Although, to set this in context, I could not have imagined her doing the same thing during something more formal, such as an important job interview. So what appears to be occurring is that when digital technologies are involved the boundaries of what is socially and culturally deemed as polite, or appropriate, is certainly changing and may indeed be formed from knowledge based and situational judgements. This is unlike the context where Ling (2008) was perturbed by the tradesperson not paying as much attention to him as he expected, as this student, from my standpoint, was giving enough attention to our discussion for it not to be jeopardised. Clearly she had a high skills level not only to touch type in this way but also to be able to cope with simultaneous conversations where one was in text and the other verbal.

As students rarely moved beyond the familiarity of the Internet as a source for information, they adopted a similarly conservative approach to the online resources they used (see Section 7.3). The tutors bemoaned students' reliance on Google and Wikipedia, but despite the occasional directives to students that they should also use other resources, there was no modelling of these strategies. The students consequently remained using Google and Wikipedia. The dilemma was that if students considered these easy and, from their standpoint, effective to use, there was little to persuade them otherwise. The same occurred with the search page results; any criticality was limited and those at the top of the webpage were usually selected. Tutors were very aware of this, which was illustrated when Bob, a media tutor, commented on students' practice: "…Wikipedia, or Google and the first result…", but the cycle continued unabated. These ways of working within these conditions used *existing* experience, rather than new learning and resulted in students accessing only a portion of what information can be imagined was obtainable. The students all had a level of functional digital skills that enabled them to use multifunctional and multimodal technologies and media in their social lives, but as transferable skills these were not critical enough for the academic expectations of the tutors. Clearly the situation illustrated a need for more sophisticated study skills and information literacy interventions; something that could relatively easily be implemented by tutors themselves.

Even if a student has limited information from their research, how that is assimilated can still demonstrate a level of individual criticality and note making can be one process that can identify this. This practice and therefore the recognition of the utility of notes for deeper learning (Piolat,

Olive and Kellogg, 2005; Stefanou, Hoffman and Vielee, 2008), was rarely seen during the research (see Section 7.5). A small number of students, particularly Helen in media, adopted a more multisensory approach that afforded her to "take in something" and offered a "little escape" from the computer through the act of writing. Other students relied on their short-term memory and digital methods such as copy and pasting to work between the online information and their Word formatted assignment. These bypassed the intermediary stages of notes, or other 'thinking' practices with text based information as the text was then digitally manipulated within the Word document itself. As students worked from one digital source at a time, any synthesis of information was limited. I particularly noticed that even when students sitting next to each other had different information there was minimal curiosity, if any at all, towards each other's work. Students' gaze towards their monitor screens for both academic and social and leisure usage contributed to their academic isolation that was apparent during the research period. This therefore illustrated how the curriculum and pedagogy did not encourage the dynamic of peer interaction and learning. Clearly these were classroom practices that had become established over the period of the course, not least amongst tutors who would isolate themselves from the students when they used their staff computer to try to keep apace with administrative tasks.

Planning for any task, educational or otherwise can be considered a fundamental process to ensure that everything needed is considered and nothing essential is overlooked. Depending on the task there could also be a level of planning that includes the sequential stages of the process. Notably across the cohorts any evidence of planning was minimal and if the students did plan an assignment this was predominantly by using the learning outcomes as a linear structure, with little deviation beyond this. Those few students that used this approach would predominantly copy them from the assignment brief and then paste these in at the start of their assignment Word document and then refer back to them, or progressively type their work below each one. Despite one tutor's comment of wanting to, "see them PLANNING…and rough planning", there was little evidence of this in students' academic work or the more creative elements of the coursework. The same tutor's comments concurred with the processes that I observed: "they'll sit at a computer, they'll have one idea, they'll work up that idea but they won't change that idea". During the same interview he added, 'computers are making students lazy'. This comment is evocative of Brabazon's (2007) view that the popularity of Google amongst students as a search resource can result in a lack of rigour in their work. What emerges from this research is that these could be construed as reactive statements that illustrate the frustration amongst tutors with students who appear to adopt what they themselves considered to be an appropriate way of working.

As there was little evidence of any teaching directed to a whole cohort, which aimed to develop students' skills relative to what the tutors considered to be students' academic deficits, what occurred amongst the students was more a 'making do' (de Certeau, 1984: 29). This was not so much a purposeful activity, but something that was more passive with little thought of an alternative. Resultantly, there was an impasse between students' levels of skills and tutors' frustration. As noted in Chapter 6, students used the technologies at hand to temporarily escape the classroom to other more social and leisure orientated spaces. Yet despite what in a Deleuzoguattarian context would be classed as 'lines of flight', or 'line of drift' (see Section 2.3.4) by using the technologies in a liberatory movement to resist the rigid space of academia, paradoxically, the same technology academically constrained the students. The students were not equipped with the skills and confidence to explore the resources of the Internet beyond their limited experiences. Certainly, as indicated in Section 7.5, strategies such as mind mapping and clustering to make a more semantic connection with information (Makany, Kemp and Dror, 2009) were not evident at all.

What has been illustrated so far, is that rather than the technology being an enabler for learning, the ease in which students accessed information through familiar sources and existing strategies limited the potential that its use was capable of. Any approach to refining information copied from websites and pasted into an assignment document was limited at times and resultantly, some students' work could be considered as being at a superficial level (see Section 7.6). Certainly, the academic isolation incurred by students' discrete use of computers limited a shared learning culture amongst peers and this further compounded the lack of any clear academic strategies amongst the cohorts and individual students.

The students were not assessed on anything other than the work that was submitted, so there was no formal incentive to produce any evidence of planning and development stages of an assignment. Section 7.6 explained how some students worked with text by copying from a website and then pasting into the assignment document. The ease in which the software allows text to be manipulated in this manner, especially if there has been little forethought to the content can develop concerns of the limited evidence of idea generation, criticality and the potential for plagiarism. One student commented: "I copy and paste it into Word and then like I write around it as well. I put my own words in and then delete the old ones, so it's kind of in my own words". For sure, this would not have been quite so easily achieved without the software and the same student added that as the pressure increased towards the end of the year they increased this practice, which they did actually

recognise as what they referred to as, "bad form". This practice subtly differed amongst the students and it can be likened to Howard's (1993) term of 'patchwriting', and Brabazon's (2007: 22) description of a 'type in-download-cut-paste-submit educational culture'. Brabazon, like the tutors at North Dale College bemoans some student practices, but the argument from this research indicates that students were only working within the parameters of what they themselves viewed as acceptable. Sometimes these boundaries were stretched, when under pressure, or through academic inexperience, as one LSA succinctly commented: "they didn't realise that they were cheating".

Before submitting their assignments, the students' level of criticality towards their work through proofreading and correction differed. Some used family and friends to proofread their work for them, while others relied on tutor feedback; others used the basic functions of Word to check for errors, yet without any additional strategies to check the appropriateness of the content for the learning outcomes. The assumption appeared to be that whatever was typed at the time was fitting. As Mark, a music tutor commented, some students submitted to, "see how it goes". Bob, a media tutor, considered that some were content with a pass, whereas others were aiming for higher grades. For some students, the sheer duration of time spent using computers each session was perceived as a factor for mistakes occurring in their work: "you start to slip up […] if you're doing the same thing for hours and sitting and writing essays on Word". Those students who clearly relied on the tutors to feedback on any deficits in the content, did so selectively: "It depends what tutor's marking it…cos certain tutors…they like to correct". One student added: "I find it easier to send it to Dave and say, "Oh tell me what I've done wrong here"". Phil, a music tutor, analogised the process of sending and receiving coursework to a game of tennis; such was the ease that email facilitated this iteration of the assignment digitally travelling to and fro between the student and tutor until it was deemed acceptable to formally submit and be marked. It would be unimaginable for these levels of exchanges to take place if the students were not using computers to send their work to the tutors. For the students, these repeated submissions to tutors to check the viability of their work can be considered as proxies for their own criticality; when the feedback facility was there they recognised the opportunity that was available and took advantage of it.

9.3.1 CONCLUSION

This section set out to discuss the first of the subsidiary research questions, which asked: How do students use these technologies for research purposes and then the processing of the information that is sourced?

What was clear throughout the time in the research field was that one outcome of students using computers as their main academic resource, was the academic isolation this created with little evidence of any intellectual curiosity, or shared learning between peers. Massey (2005: 55-56) suggests that, 'Change requires interaction. […] We cannot become without others. And it is space that provides the necessary condition for that possibility'. Within the classrooms, the actual and the digital space for this change in learning to take place was available, but not utilised. Although across the students there was evidence that there were any properly and consistently 'whatever' (Agamben, 1993) students, the majority were evidently enthusiastic and committed to the subjects they were studying even if there were some lapses over the year. Academically though, most students were not applying this commitment to the subject by fully *being* students through the skills of studentship. Learning as a choreography that draws on social interaction and an assemblage of academic skills and strategies was certainly lacking in both evidence and potential. Although there were very few tutor directed, or ad hoc group activities that occurred in the classrooms, the music students did play in bands together in the studios and the media students occasionally filmed in the college grounds in small groups, but this peer interaction was not transferred into the context of the classroom. Similarly, students would readily discuss social events, or come together if, for example, they found an amusing YouTube video, or wanted to discuss some music they were listening to. But once the students were using their computers academically, they became isolated from the immediate surroundings. Some students isolated themselves further by listening to music, although the media students would do this somewhat less than music students, therefore this was not a broad determiner of practice. This situation however, is especially pertinent to the main research question, which asks how technologies shape the social learning environment of a computer-resourced classroom. Therefore the indication is that how students can become isolated when they are using computers extensively emerges as a broad educational concern.

Certainly, the limited ways in which many students used the technologies constrained their research and rendered any processing of information as at times superficial. In particular there was very limited evidence of deep learning across the cohorts. As a researcher it was quite enlightening to observe how students digitally manipulated and used the text they had sourced from the Internet. The staff would pathologise these practices, but paradoxically as subject specialists they could have taken advantage of their expert status to facilitate the students to develop their academic skills and empower them as independent learners and establish peer interaction for learning. An interweaving of power can occur in a classroom through complex power relations (Watkins, 2011), but at this

point perhaps a more directive use of their status could have been productive in developing the way students approached learning within the cohorts.

During the ethnography, I was continually observing tutors who would never intentionally neglect the students, together with students who were clearly enthusiastic about their course subject. The students had individual networked computers that were more than capable of fulfilling their educational function. Despite this, something was clearly not working as well as it could, especially as the data indicates that the students were clearly not developing their learning skills to the potential that could have been attained under the conditions. It is here, as an area of enquiry, where the literature on literacies when using networked computers is limited. Not least when investigating the *actual* close quarter processes that take place within classrooms, especially when the students use computers extensively, and as the primary resource for their studies. Some of the literature on digital literacies offers advice and anecdote (Gilster, 1997) or an indication of what it is to be digitally literate through a range of literacy practices (Lankshear and Knobel, 2008). Other work is more theoretical in nature (Kress, 2003). Section 2.2.2 does discuss others, but what is apparent in its absence is that there is limited empirical work that explores student practices and their response to the microgeographies of the computer-resourced environment, each other and the curricula. In what has been presented so far in this concluding chapter, the aim is to contribute to an understanding of how the extensive use of computer technology is shaping approaches to learning and the internal dynamics of the computer-resourced classrooms in FE.

9.4 THE DUALITY OF TECHNOLOGIES IN THE CLASSROOM

The second subsidiary question focuses on how computers and digital technologies can become polyvalent artefacts of the classroom and asks: How is students' use of these resources in the classroom affected by their potential for use as a social and leisure resource?

The analysis of the data offers two insights to this question. Firstly, social and leisure resources did act as a form of work enabler for some students, under some classroom conditions, but there is a caveat with this finding. Secondly, for the students, they were undoubtedly a diversion away from their coursework tasks.

To illustrate some students' uses of classroom technologies as a social and leisure resource, what follows draws from an interview with Hazel, a first year music student (see Section 6.4).

> Hazel: *"You HAVE to go on Myspace. Cos you get so bogged down with coursework, it's like, "I just need five minutes"".*

From observation that five minutes was more a figure of speech, and it was often much longer than this and the duration of these breaks were unproductive in the amount of time taken away from coursework, which both disturbed Hazel's attention and her progress. Hazel added:

> *"I think music helps as well…if you put music in your ears while you're working. I find if I listen to music on my iPod I just….I write ten times faster and a lot more work than I would do without music".*

This strategy was indeed effective for Hazel and she was noticeably much more productive when she listened to music, although at times what she was listening to would form a point of discussion with students sat next to her. If not listening to music, she could be easily distracted away from her coursework and she would frequently chat to students nearby, and therefore distract others, or drift on to Myspace or other non-educational websites. When there were only weeks remaining to complete the course, the stress of trying to complete all of her outstanding work on time became too much for Hazel and she commented: "Oh, I'm not going to get this done, might as well go on Myspace", then you lose it…". Hazel's despondent thoughts were then acted out in her actions. One question that I had considered was that if Hazel had been unable to access Myspace, or other websites would she have eventually returned to her coursework or found another avoidance strategy? Of course, this can only be hypothesised as the ease of opportunity for procrastination was there and under these circumstances Hazel seized it. This example drawn from just one student serves to illustrate the dilemma that multi-functional and therefore polyvalent digital technologies presented within the research classrooms and this will now be expanded on further.

Seth, a media student, found if he had a video playing in the background of his computer monitor he could focus more on his coursework and not be affected by any classroom distractions. As with Hazel's strategies, this was not an uncommon practice amongst students.

> Seth: *I find, I've found that, that I go on like…say on like a programme website and put it small, in the top corner of the screen and listen to it while I'm doing work I can actually get more work done, cos I'm listening to that. So it keeps like, you like…well it keeps my attention on the screen and away from like everyone else.*

The networked computers offered students high-choices, both educationally and non-educationally, which illustrates their cultural relationship with them and the dilemma of their polyvalent capacity

within the classroom. Spending hours sat working individually with computers was certainly arduous for the students, as the findings clearly identify (see Chapter 5). The educational value of a computer to a student was one of necessity and without one, students would find it challenging to complete the course. The other side of the relationship was put into practice when students used the classroom computers for the same social and leisure purposes and similar resources accessed when they were not at college. The facilities of the computer could then provide the opportunity for a respite from the coursework, the learning environment or the isolation of working independently, and some students used this constructively.

Rationalised in this way, if the students were not engaged with their coursework the balance of choice could easily sway away from education, as the students could control this through the technologies. What both complicates and confounds this situation is the reason the students enrolled was to gain a qualification, subject knowledge and experience; therefore they and the tutors needed to ensure that occurred. The tutors, as professionals, had a moral and professional duty, not least the pressure to gain student achievement stemming from the top-down pressure of FE's audit and performative culture (Ball, 2003; Sparkes, 2007; Hodkinson, 2008) that they worked within. The students were predominantly reliant on their own incentives to pass the first year, or the full course, although this was added to by pressure from the tutors. For some students, especially towards the end of the academic year, the balance between the educational and social-leisure use of computers became much more reactive and the focus shifted much more to the academic as there was no option but to work much more intensely to complete the coursework by the submission dates. For some their overindulgence with non-academic technologies over both the course and the final year incurred a cost and they had to reduce their ambitions and apply for alternative courses than they had initially aimed for.

For the students, being able to spatially escape the confines of the classroom through digital technologies appeared to be important, either as a social practice that they expected to continue in the formalised setting of the classroom, or as a coping strategy that was a response to some element of the timetabled sessions. Paechter (2004: 449) comments that, 'space is largely ignored in both the theory and the practice of education'. In this study the interest is in how the students conceptualised and responded to the computer-resourced classrooms, not only the educational processes and the environment, but also as a place that consisted of the actual, terrestrial environment and other, educational and non-educational digital spaces.

Returning to the example of the second year music student Hazel, when focusing on her coursework on the computer became too demanding, the level of attention she had been giving to it rapidly diminished; from this loss of focus her attention looked for something else less challenging and more familiar to engage with. If she did not talk to another student sat next to her, she turned to something familiar that she would use when not at college for its social and leisure functions and the quick gratification it offered, which was Myspace. As Hazel could access this with ease through her college computer it then became the main focus for her attention and consequently for the period she was engaged with Myspace she avoided her coursework. Myspace offers the user a multimodal experience that is engaging at several levels as a visual and auditory experience, therefore it offered a more culturally familiar and pleasurable experience than the demands of coursework. This engaging variety of text, images and music, both static and animated, drew Hazel into the user experience of Myspace and away from the place of education into another, socially and culturally familiar space. This retreat away from the challenges of education can be conceptualised as Myspace functioning in alignment with Deleuze and Guattari's notion of a refrain, when the 'motif of the refrain may be anxiety, fear…' (Deleuze and Guattari, 1987: 300). Buchanan (2004: 16), with reference to Deleuze and Guattari, suggests a refrain can be, 'our means of erecting, hastily if needs be, a portable territory that can serve us in troubled situations'. Hazel used the classroom technology to access Myspace and this offered her a line of flight (Deleuze and Guattari, 1987) away from the challenges and toil of her coursework; through this movement into a more social-leisure space, she 'interrupts or suspends familiar, confining, formal possibilities' (Hughes, 1995: 46), which at that time was her experience of being within the challenging educational space of the classroom. From *being* a student, working at a computer, the technology afforded Hazel to draw on other facets of her identity; therefore the flight was not to a new place but a cultural territory that was less-threatening. The threat, for Hazel, was the thought of having to tackle the coursework, which to her represented a significant challenge. Her flight was not to flee away from college itself, but to react against the dominant expectations of her course and tutors.   As Deleuze and Guattari (1987: 204) indicate a line of flight is a runoff, or a leak, 'rather than running away from the world' and Hazel's runoff was to remain within the college and maintain her good attendance but move to an alternative digital space that offered more comfort and none of the academic challenges for her dyslexia. Although, the ease in which this occurred with Hazel and other students questions the clear sense of deliberation that might be a line of flight, as an act of resistance.   Deleuze and Guattari (1987: 202) suggest that 'we are traversed by lines', but a line of flight is an active and creative line (ibid: 422-423) and often rebellious (ibid: 204) against dominant conditions. For Hazel, and others, the avoidance of educational tasks and movement to other non-

educational activities was something that was repeated quite frequently and although this could still be argued as lines of flight away from something that was unappealing, they also might be re-considered more fittingly as 'lines of drift'. A drift line, in many real world contexts, can be the path of least resistance and one that aims to avoid any obstacles. In this sense it can be considered as going with an alternate option, that offers less challenges than the current direction or position.

Zepke (2005: 157), drawing on the concepts of Deleuze and Guattari, posits that lines of drift produce 'new complexities' in the refrain. For Duffy (2000: 63) lines of drift afford an event to be 'embedded within a greater context, enabling participants to attach and reattach themselves to a sense of place and to make claims of belonging'. Hazel's actions of avoiding coursework were due to the challenges of education, not least its continually re-enacted drudgery and therefore she drifted to other less demanding and more pleasurable activities that offered the comfort of the refrain (see pages 184 and 264and somewhere where she culturally had a sense of place. As this drift, was erratically repeated over the duration of the session, which involved a drift away from studies and then a movement back to them, the concept of a line of drift will be remodelled to fit within this learning context as an *arrhythmic cycle of drift and return*. This is discussed in more depth on page 285.

By bringing in Zepke's (2005: 157) notion of new complexities the calmness and stability of the refrain that was students engagement with social and leisure use of computers, as a means of relief away from educational tasks can be situated within the complex milieu of the computer-resourced classroom. For Deleuze and Guattari (1987: 1837) milieus can 'slide in relation to one another, over one another', with each being coded: 'Every milieu is coded, a code being defined by periodic repetition; but each code is in a perpetual state of transcoding or transduction' (ibid.). Consequently, the repeated nature of students' use of these non-educational resources may be considered as moving them beyond being unacceptable behaviour to something different within this environment and a level of acceptability within the changing cultural and social uses of new technologies and media. Thus there was a dividing of the classroom into curriculum-sanctioned activities and others drawn from increasingly accepted cultural norms that were seeping into previously considered discrete contexts - when the conditions were fitting. This can be viewed as not only occurring with student practices, but also those of tutors and their classroom administrative practices. This highlights the change in norms through human relationships with technology and therefore how we now work with, and through them.

With Hazel's attention directed to Myspace, or any other non-educational social or leisure website, or activity she engaged with in the classroom, she reverted to that facet of her identity that was the digitally active teenager that she was outside of college.

By using Hazel as an example and applying, or 'plugging' in (St. Pierre, 2004: 284) the spatial concepts of Deleuze and Guattari as analytical tools affords a way of analysing students' use of technologies for educational and non-educational purposes. That is their use of the classroom technologies as their means of digitally moving between the spaces of education and other alternate and digitally facilitated social-leisure spaces. As Low (2003: 13 original emphasis) comments: 'People not only structure spaces differently but experience them differently and inhabit different sensory worlds […] by individuals "tuning out"'. Hazel tuned out of the classroom and her immediate coursework demands by using her polyvalent computer for an alternative purpose. From this example it can be viewed how a student's presence in a particular space, that is, the space of education, or alternative digital spaces, or even the enclosed space that can form when students socially chat in the classroom and blank out the rest of the environment, can be imagined as spatial choices. The choices are those that are 'mediated by value' (Charlesworth, 2009: 263) at a particular moment in time and therefore they are not necessarily planned out.

When the students were using a computer for long periods, these strategies can also be conceived as functioning as 'ways of operating' (de Certeau, 1984: 30) under the prevailing conditions. The technologies of the classroom computers were the enablers that afforded the user to distribute their presence from one space to another, or remain in both simultaneously. The examples below, drawn from Chapters 5 and 6, indicate, that for some, the balance of using the technology for a short break was difficult to manage, but others were more considered in their usage. One media student's comment below, underscores one extreme of this, and Emma would spend all of some sessions pretending to work if a tutor checked on what she was doing. The actuality was she would access a range of social and leisure websites, chat to her friends sat immediately either side of her, listen to music, send texts on her mobile phone and so on. These were Emma's means of getting through the duration of the three hour sessions. Paradoxically, her attendance rate was very good; she just was not motivated by the coursework and the way she was expected to produce her evidencing.

> Emma: *I've, I've go to the point where I can't even start working any more...so I don't actually do anything all day.*

Despite this level of despondency, Emma did eventually complete the course with a lot of rushed work in the final term and she then progressed to the two-year media foundation degree at the same college and successfully completed that. Therefore it could be considered that everything did work out for her and this stage of her education had a happy ending. Although, her clear despondency towards her Level 3 experience is perhaps an indication of some of the mismatch that occurred between the curriculum and pedagogy, and what some students either expected, or needed. Therefore this part of her educational experience was less than ideal and certainly from her interview comments this was troubling for her.

Jim, another media student, referring to his use of Facebook and Myspace, commented:

> Jim: *I do…I think it helps me sort of get through the day more than anything, and it sort of gives you a break from your work for a few minutes.*

At one point during the year, this was how I observed Jim using these websites and he appeared to have adopted a pragmatic approach to having a brief respite from the coursework by engaging with these, which then allowed him to regain his focus on his coursework. However, later in the year Jim would deviate from this practice and I noticed that he would spend significant amounts of time using his college computer for non-academic uses. Although Jim did successfully complete the course his grades determined that he remained at the college and enrolled on the two-year media foundation degree, rather than his initial plan of progressing to an external three-year full degree. Jim's motivation later in the year was somehow not as keen as it had been in the first term. From observation I noticed that his use of the computer for quite superficial online leisure resources retained his attention during these periods and therefore any potential re-motivation back towards coursework was reduced. Jim was slightly older than the majority of the media students and had committed to the course by reducing the hours of his previous full-time work, but the pull of these online distractions were to the detriment of his coursework.

9.4.1 CONCLUSION

The ethnographic data offer a revealing insight into how students can use the facilities of the college computers for both academic and social and leisure purposes. At times the strategies would be individualistic and purposeful and for short, managed breaks away from coursework   What needs to be reiterated, is that most of the sessions were three hours long and for a significant amount of the time the students would be working independently at their computers, and the media students would have two of these sessions on each Friday of the academic year. At other times, an

alternate balance would be worked out, for example, listening to music while working, or having a video loaded in a corner of the monitor. For the students, this was an effective strategy and the tutors permitted it, as they recognised that many students would be more focused on their work in this way. However, there is a caveat with this type of strategy. Roda (2011: 14) indicates that when attention is not focused on a single activity, such as multi-tasking, or receiving multiple sensory inputs, 'divided attention has been shown frequently to induce errors…Another hypothesis which is relevant to divided attention is that multi-tasking involves switching from one task to another and that the switch itself may generate inference'. Under this premise, although these activities were effective for the students, they can be considered as compromises rather than measured pedagogical strategies for retaining engagement with coursework under these classroom conditions.

The indication from this research is that under the conditions which formed the focus of this research, an educational goal to aspire to would be to provide a learning culture and environment that are sufficiently stimulating to afford students to maximise their attention to their coursework, without the need to revert to accessing non-educational technologies unless they were for short relief breaks. Without this, a danger, which is exemplified within this research, is that when students individually control the frequency and duration of in-session breaks, or use background media as strategies that afford them to function within the conditions of the classrooms, their judgement in how it is used can be erratic and detrimental. This type of student control could potentially be more viable if there was maturity in how this was conducted. There were a very small number of students who appeared to attain what appeared to be a reasonably effective balance, but these were certainly the exception within the cohorts. What was clear throughout the ethnography was that when students switched to non-educational uses of the classroom technologies the duration of these activities was much longer than they appeared to realise. When students had media running as a background application, which for some replicated their working practices at home, although it could be argued this effectively reduced their level of attention given to the coursework, it certainly facilitated their focus. Again, there is a caveat, depending on the media, as on occasion students' attention would become more focused on that than coursework. At times this would then become the centre of attention for several students. This could be by students sharing earphones to listen to a particular music track and chatting about it, or to watch a quite trivial YouTube video.

9.5 THE AFFECTIVE GEOGRAPHIES OF THE DIGITAL CLASSROOMS, AND STUDENT RESPONSES

The third and final subsidiary research question to present the key findings from is: What factors, environmental, social and personal affect the way students use these technologies both within a specific session and over the academic year?

At first I found myself considering how students not using technologies would have responded to the classroom environments and what, if anything made them more affective to students using computers for most of the sessions. Initially this was difficult to differentiate when bracketing away the climate of the rooms; certainly the students would have liked more symbolic connection with the spaces and a décor that identified them as music, or media spaces but I imagine this would be similar with most subject areas. The music students' identity was often embodied through their clothes, which demonstrated their allegiance to favourite bands, or music genres. I was unsure if this and the music studios was enough of a compensation for the bland classrooms, and this was difficult to ascertain despite some students' comments on the rooms and building. Media students could form some identification with their subject through the professional media software and was this sufficient as a proxy for the lack in décor? These were merely speculative and unqualifiable considerations that ran through my thoughts.   Other subject areas could identify with their course through dress codes, such as Hair and Beauty and Motor Engineering but their classrooms would be just as bland. The difference being that they would spend more time in salons, or workshops, and these were dedicated course areas, just as the music studios were. Also, theirs and other subject area classrooms did not have the same capacity for computer access and I was aware that the sessions of other courses were often much more tutor directed.

When asking the music students for their opinions of the classrooms some students were quite explicit in their response: "They're shit and boring"; others were more resigned: "You don't get a choice"; some were quite ambivalent: "I can't say I've ever thought about stuff like that". One media student commented: 'the workplace brings you down'; for this student, the room itself was clearly a less than ideal environment, aside from any other considerations. Notably, no student would offer a more positive response to indicate that the rooms motivated him or her to work, or even that they liked them in some way. A point to be mindful of in these responses is that these would be the rooms that the students would inhabit for the full two years of their course and over that period there would be very little change to them.

A number of factors can be correlated from this: repeatedly working in isolation and looking at a monitor for long periods can be catalysts for any dissatisfaction becoming more of a frustration. The level of motivation or demotivation for learning may well vary amongst students, and this can modify if there are other factors that become included into the situation. For these students, apart from the adjustment on their chairs their posture would always be sat, facing the monitor, with their hands using the mouse and keyboard and their legs under the worktop. A supposition is that the tedium of working at a computer, in a relatively fixed position for up to three hours at a time, needed stimulating learning conditions, as compensation; not least when at times there was a less than ideal classroom climate (see Section 5.2). The classrooms of the ethnography were at times uncomfortably warm, or paradoxically, too cold for those sat near the air conditioning units which emitted cool air as an attempt to reduce the less than ideal ambient temperature. During the warmer months this resulted in the students becoming noticeably lethargic. Another negative aspect for some students was that continually looking at a computer monitor for long periods resulted in them experiencing headaches and eyestrain. On Friday afternoons, when the media students had their second, three hour session of the day they would usually, at some point, gradually turn away from their computers and engage in casual chat with other students. As one student Debbie commented: "After lunch I come and I'm like, "Uhhh" [she slumped as if she was worn out]. And really warm. And I get dehydrated". For some students, the warmth of the classrooms coupled with poor air quality and then the effort they needed to exert trying to focus on coursework while working alone on a computer, with no other motivation, apart from coursework deadlines, was at times too much. It can be imagined that if the students came to anticipate these conditions, even before a session started, it could certainly be a demotivating factor – even before entering the rooms. Once inside, students had little option but to somehow cope with the conditions and establish some ways of working within those spaces. These conditions cumulatively underscore what was an aspect of the affective geographies of the classrooms and therefore how the students experienced, interpreted and managed their activities during the sessions.

As noted in Section 5.4, the classrooms could be surprisingly quiet at times, but on occasion the noise levels would increase which some students would then find intrusive. On occasion, students would chat in small groups, or to the person sitting next to them. At other times some students wearing headphones would have the volume high and others could hear the music as it leaked from their headphones. Media students also had to cope with one tutor's choice of music being played through the classroom's speakers. For those students who did not want to use music, or other media as an isolator from the rest of the room, or to aid their focus towards their coursework, or even less

academic activities, these noise levels were at times too intrusive. Again, the relative isolation of working independently at times exaggerated any noise, especially as these were not shared choices.

Despite any environmental, or other factors that could affect students' focus within the classroom, their approach to coursework was relatively unchanged over the first two terms of the academic year. By far the most significant transformation occurred during the final term that followed the Easter break, especially as the deadlines for final submissions of work gradually became closer. For many second year students, especially those in media, this was an important period as the grades they achieved could determine if they progressed to the university course of their choice. For the first year music students to progress to the second year of the course, they needed to demonstrate their ability to successfully cope with the first year workload. Therefore, for students with ambitions the final term was a significant one, especially if they had been less attentive to their coursework for the earlier part of the year. This became very apparent amongst many students and they were visibly much more focused when using their computers for coursework than they had previously been. The following comment from Helen, a media student clearly illustrates the change over the final term:

> Helen: *I don't wanna to get to the point where…I don't get into uni and my Mum asks why and then I say because I was on...I spent that day on MySpace, or texting, or being on err MSN chat thing when I could have got a unit done.*

Helen's comment epitomised the perceivable change in most of the students during the final term, especially the level of reduction in non-academic activities during the sessions. For Helen there was an instrumental incentive to complete the course with the grades that would enable her progress to the specific university degree course of her choice, and she did achieve this. This also reflected her respect for her mother, who was studying for a degree at the time with an aim for a career change. For other students, there were elements of self-deception, or perhaps a lack of awareness of how little they had reduced their social and leisure use of the Internet. Others found the stress from trying to complete work in time too much and they actually increased their use of social media during this period, as a means of avoiding confronting these challenges.

This late period of the academic year was one of both realisation and reflection for the students, as some came to realise that due to the time limitations, even their best efforts were going to be insufficient to achieve the grades they needed in order to progress to their preferred degree courses, consequently they had to reduce their ambitions. These students had not directed sufficient focus to

their work over the previous terms and for some the submission deadlines needed to be extended by the tutors. This situation meant that as they were starting new units in the sessions, they still had work remaining from previous units to complete. These students somehow never considered being unable to achieve the standard needed with their coursework, while at the same time directing insufficient attention to it. This conundrum that occurred within the computer-resourced classrooms illuminates the limitations of some students to be able to work independently at a level that the curriculum and tutors expected of them. The data identify that there was a significant lack of realisation in just how much guidance and learning interaction the cohorts needed and expected. This was made clear through the comments of several students, such as: "…basically teach yourself…"; "…we don't ever get like taught anything…"; "…the teacher kind of isolates himself […] I need that pressure to be there…".

The non-educational technologies that could be accessed using the classroom computers offered the immediacy of the *now*, and a level of short-term pleasure and culturally formed satisfaction that the more protracted coursework was unable to compete with. The more demanding and prolonged needs of coursework where assignments, even if there were multiple evidencing needs, could last for weeks, or usually months is certainly at odds with this other, social and leisure element of technologies and media that the computers could access. This type of academic labour was perceived as more the needs of the *later* and relative to a submission date beyond the immediate *now*.

Notably, the instability and fluxing of studentship that was evident during the sessions as the uses of the technologies were dynamically played out between education and social-leisure, for many students, resulted in the delaying of any ontological transformation of *becoming*, or *being* a student.

9.5.1 CONCLUSION

From both observation and interview data, and even personal experience it was apparent that at times the environment of the classrooms could become very uncomfortable and this adversely affected the students' engagement with their coursework. This was especially so in the warmer months when the air quality and temperature levels were less than ideal for hours of sitting in one position and working in relative isolation at a computer. The fabric and décor of the rooms were certainly not motivational for students, but just how much this impacted on students engagement

with learning over an academic year can only be speculated. For some, it was a negative element and therefore one consideration that contributed to their educational experience.

Noise levels, from both individuals and small groups chatting socially, could be a distraction and irritant to those not participating. If there are factors within a micro-environment that are either constant, or reoccurring and less than ideal, then any that add to these may result in a heightened sensitivity to them.

Students' use of the technologies for both coursework and non-academic activities noticeably changed during the final term and reflected the pressures on them to complete the year and the course. These behavioural changes were determined by the value placed on achievement and the effect of the pressure. What this works towards illustrating is that when students work in relative isolation at computers, despite being amongst a peer group, this does not necessarily aid in promoting a supportive work ethic within a cohort. As indicated earlier, for some students not achieving the grades they ideally needed, was a result of them not attaining a balance between their social and leisure uses of technology with the greater prioritisation being directed towards their coursework.

These findings serve to illustrate the challenges of teaching and learning within a computer-resourced classroom, especially when these technologies are used extensively as the main educational resource. As a social, cultural and educational place the classroom can divide into both educational and alternative spaces, both are facilitated by the polyvalent nature of the classroom computer and this clearly indicates that there is much of educational value to learn from investigating the differing conditions that can occur in these environments.

9.6 A RESHAPING OF CLASSROOMS AS SOCIAL LEARNING ENVIRONMENTS

In addition to the three subsidiary research questions that have now been discussed there was one overarching question for this research, which asks: How are computers and digital technologies shaping the social learning environment of the FE classroom, when they are used as the primary learning resource?

What certainly emerged from data is that the computer-resourced classrooms where this ethnography took place divided into educational activities and non-educational activities, through the facilities of the classroom computers. These were not always clear divisions, but more that of

fragmented and variable spaces according to the waxing and waning of a range of factors, which included students' individual dispositions and priorities, the session and the tutor, the time of year and term and so on. What was notable was that there was little disparity in these across the three cohorts, despite the differences in students, tutors, subject and locations.

What was clearly not evident in the classrooms throughout the duration of the research, were the more social possibilities for learning where knowledge can be developed through a culture and dynamic of interaction amongst peers. The classrooms were relatively small and discrete spaces that the same cohorts of students would use over the two academic years of their course. Yet a peer learning culture was not nurtured or promoted by the tutors, despite the group activities that would occur in the students more creative work, such as the need to evidence performing together as bands, or the team roles needed to produce videos using camera, audio and lighting equipment. Nor did it occur through a level of inherentness that might have been expected due to the plentiful non-educational social interactions amongst the students. Certainly there was no lack of social interaction within, or outside of the classrooms when students' focus was not on coursework, but this was somehow not transferred into the context of learning. The focus on independent learning and the use of individual networked computers appeared to be an institutionalised filter that bypassed any thought of working with others during these periods.

Certainly during the media sessions the emphasis was placed on students' need for independent learning at Level 3 and this was common across tutors, and this also transferred to the music department, which was on another college site in another town, but it was not verbally emphasised as much as within media. As such this appeared to be a common and overarching culture within the department that both media and music were part of.

The level of students' individual engagement with the computers certainly established an isolated approach to working, especially as there was this continual emphasis on independent learning. As the academic coursework evidencing was at an individual level, this further encouraged this approach to working. Not only that, but students would isolate themselves further from others through the music, or other media they accessed while being at their computers. If there was any interaction during a session this would often be on light-hearted social and non-academic topics. The exception to this focus on individual evidencing only occurred during some of the practical and creative elements of both courses where the students would work together for activities such as filming and band rehearsals. Despite this, there was no evidence at all of this being transferred into

the academic context of the classroom. Other forms of socialisation that occurred during the sessions were external to the institution, and achieved by accessing social networks and other platforms for digital communication. Certainly what was evident from this was that a digital divide of a new order occurred where the segregation was between using either the computers for educational, or social-leisure purposes. As the latter was achieved through the same classroom computers that were used for academic work, it aided in even further establishing the ironic classroom isolation amongst a cohort in close proximity to each other and a further digital divide occurring amongst the students through their focus on coursework being primarily directed to the monitor.

Certainly the layout of all the classrooms, which resulted in the students being sat down and facing the perimeter walls, discouraged any ad hoc peer discussions on coursework, apart from with those sat immediately at either side.   Although there were long central tables in each room these were very rarely used for any activity, in fact it was rare to see anything placed on them at all. At times students sat near each other would lightly discuss any queries regarding the evidencing needs for a learning outcome, but there was little evidence of any extension in the discussion beyond this. Therefore the geographies of the classrooms, where each student sat facing the wall, certainly appeared to be one barrier to learning interaction amongst students, although this did not prevent social interaction at times. Therefore there are opportunities to experiment with a redesigning of the internal layout of the rooms, and as these are students who combine design within their media creations it could form an empowering exercise. If not the Level 3 cohorts, then there are also the media foundation degree students who could become involved. Office and creative workspaces are continually being rethought and this could form a research exercise. The possibilities for this are quite open, as long as the institution was willing to rationalise educational spaces beyond what has been traditionally associated with ICT classrooms and a particular mode of education that involves listening to instruction and then doing work focused on the students' learning as being atomistic. Even if the rooms remained within an institutional pattern, then perhaps the research exercise on creative work spaces itself could engender in the students, and even the staff to re-consider how they approached learning as something more interactional with an aim towards deeper and more critical thinking.

One factor, already commented on, which contributed towards the lack of learning interaction, was students individually spending session time using the technologies non-academically. However, the additional effect this had was that students would at some point realise a need to return to their

work. Within that period of refocusing on coursework any progress was often making up for lost time, and therefore the focus was even more so on the self, rather than any interaction with others.

The academic processes that the students were observed using were predominantly individualised. For example, the students used the Internet to search for information for their assignments and as each student had their own computer this activity became isolating with little identifiable sharing of results, or critical discussions amongst the students during these periods. In this sense, with the emphasis on independent learning, students established their own way of working, rather than being instructed in cognitive strategies where peer interaction could have been advantageous for scaffolding of knowledge and developing a learning culture and community within the cohort. Students enacted the barrier between social-leisure and academic through their uses of technologies and this cascaded into their learning activities. This was often apparent at the start of the session, when students would catch up on social topics and then their focus would turn to their individual computers and that would end the interaction at that point in time.

It was clear that throughout the ethnography classrooms were spatially fragmented into something more multi-layered. This was facilitated through the students' continual use of their individual computers and the individualised coursework, with the students creating further divisions through the digital divide of educational and social-leisure activities and the non-educational events often seemed to satisfy any immediate need to socialise. As the students were still in the process of developing their studentship any strategies they applied to their learning were more instinctive and culturally framed, rather than established through deliberation and pedagogy.

What emerges from this research is that when technologies are used extensively they can reframe the classroom and students' approaches and therefore dispositions to learning. Not least, how students can conceptualise the spaces, digital or otherwise, within the classroom as more than a place for education. It becomes clear that there are more than just pedagogical interventions needed to facilitate students to both work effectively in these spaces and to use the technologies to gain the most value from the undoubtedly significant resources that they have the potential to be. The tutors' interpretation of the curriculum, like all others at the college, was derived from the awarding body's requirements and it is how the individual assignments were written where pedagogy was first considered. This was then influenced by what appeared to be a culture for independent learning within the department, whether this was a broad college initiative was unclear within the boundaries of the ethnography. Therefore change could emerge from this very early stage of the

curriculum with both independent and the social construct of peer learning fostered within an environment where students have individual work stations, yet are consistently in close proximity to each other over two academic years for hours at a time. This would recognise and respond to the broad cultural changes in the world afforded by humans' relationship with these new technologies that are increasingly embedding themselves within the fabric of society and therefore the way we think and act across both work and leisure.

Consequently these cultural changes and the nature of much of the Internet's resources that students engaged with outside of college afforded through new digital technologies and media was not being considered, or taken advantage of within the classroom. The notion of how independent learning should take place that was evident appeared to constrict students' learning and academic confidence, rather than facilitate students to develop their skills. Certainly independent skills are to be valued as transferable skills, but this study does illustrate the ways in which these are assumed to all ready exist in students, rather than something to be nurtured and developed.

As indicated earlier (see Section 5.7) some students did cope with the conditions described and would effectively manage their own short relief breaks away from studies. Notably, taking William as an example who appeared to have the educational experience and maturity accrued from being at university to be able to work within these conditions. There was also Max who arrived at college from being home tutored where his previous experience was of studying alone, albeit with some direction from a parent and a reward system. Consequently, as cohorts, their depth of knowledge and learning experiences were not accrued and disseminated within the peer group.

Computers, digital technologies and the Internet as connected educational resources bring significant added value to the classroom, as both an individual and social learning place. If students come together as a cohort, rather than working remotely from diverse locations, then this social context should be taken advantage of by educators to develop a learning culture through peer interaction and the scaffolding of knowledge that can be sustained and developed over the two years of a Level 3 course. To not do so, as this research indicates, results in students not gaining the skills and learning capability that they have the potential to achieve. This was clearly evidenced through some of the more superficial levels of engagement with text, the limited use of technologies as information repositories and lack of peer learning and therefore the fundamental processes of education in a computer-resourced classroom.

9.6.1 CONCLUSION

Over one academic year this ethnography explored the contours of the digital classrooms that three cohorts of students used for their coursework with the overarching question of how extensive uses of technologies, especially computers with Internet access are shaping the social learning environment of FE classrooms when they are used as the main educational resource. What has been revealed is that an extensive use of the Internet and other digital technologies within computer-resourced classrooms is reframing the educational environment and how students engage with both education and their peers. Not only that but it is what students expect from such an environment and the digital resources, due to how these new technologies have penetrated the fabric of their social and cultural activities. As digital technologies reach further into social, leisure, domestic and professional lives there is certainly little possibility of a reduction in the use of technologies in education. Not least as many references to technology in education, industry and society commonly incorporate the phrase, *exponential growth* (see, for example, Duderstadt, Atkins and Van Houweling, 2002; Sorman-Nilsson, 2013). This will occur not only due to the increase in the use of technologies and the Internet but also with the level of access that students now have to digital texts due to academic subscriptions for ebooks (Ashcroft, 2011). As the learning resource centre at North Dale College reduced its space for hard copy books to make space for computers, shortly after the ethnography it increased the range of ebooks students had access to.

As a resource, digital technologies undeniably offer access to an immense range of resources of information and therefore they have a significant bearing on learning. What this research has illustrated is the compound and complex situation that occurs within the computer-resourced classroom environment itself and how that can affect students' engagement with the technologies, learning and the classroom as an environment for the more social aspects of learning through peer interaction and development. There are certainly indications that there are areas that need working out for these technologies to be productively used in the classroom. All the staff involved in the research were educators who certainly wanted students to attain their potential, but there are identifiable needs for staff development, especially a need to consider how pedagogy and the curricula are tailored to work effectively within these spaces, not least with a consideration to the diversity of students that enter FE. These need to facilitate students' development of more independent working skills, but to develop these as part of the educational process, alongside the nurturing of peer interaction that was notably lacking. Students were continually working in isolation for long periods and during the research I found myself returning to Rutherford's (2007:

155) comment: 'We struggle to occupy an identity…'. What I continually observed in the classrooms were young adults, who often indicated that they were not anchored in their learning and identifying with *being,* or *becoming* students.

Student identity has been argued as multi-faceted but the educational conditions were not allowing this to flourish in a productive way, and instead they were situated within a student identity that education intended them to embody. The *learning body* was imagined as sitting facing the computer screen with a focus on individual assignment evidencing through the demonstration of independent learning.

This was contradictory to students' culturally shaped learning needs and therefore the classroom became something of a palimpsest that was constantly being erased and written on again, even if only partially, with meanings that were interwoven but at times competing with each other. Identity, in all its facets, renders a subject as meaningful and it was clear that this was not fully developing at times and not just because of the duality of the technologies and therefore how the space of the classroom was conceptualised, but the environmental conditions also affected it. The climate and the décor of a space that is regularly occupied for lengthy periods can become those minutiae that can contribute to determining what it is identified with. If these become conjoined with other areas of ambivalence, or dissatisfaction, such as a pedagogy that does not quite fit, then education will never quite be acted out to somewhere near its potential.

This ethnographic research has also remained within its intent to provide an insight into the practices that students used to engage with text through the functions of computer software and the Internet. These were, in some instances, identifiable as being at a superficial level and also questionable relative to the integrity of idea generation and ownership of the end product of coursework evidencing, including issues of unintentional plagiarism. The functions of copy and paste and the ease and speed in which online text can then be manipulated and worked into through the functions of software, can render the result to become an assemblage of sources that are not necessarily identifiable. This situation draws in significant consideration towards the viability of how students, in some cases, approach the development of their academic work. These surely offer new challenges to educators and also students. If students can move beyond the superficial and attain a deep level of engagement with the range of sources of information that the Internet and non-digital information can offer, then the synthesis of that must function towards countering the pathologising of students' 'lazy' practices with the Internet and some of the online resources such

as Google. On an optimistic note this deeper and more purposeful and scholarly approach would surely also work towards countering the blend of sources that can occur when many of the core elements of working with text are bypassed, as witnessed during this ethnography. Computer-resourced classrooms and access to resources such as the Internet and what they digitally afford learning, are such a significant development in the contemporary educational environment that these conditions need to be thought through, to enable students and the educators to gain what they have the potential to offer.

What now follows is an outline of the contribution to knowledge that this research aims to provide.

9.7 CONTRIBUTIONS

As indicated from the outset of this thesis, FE as a sector has received a range of research interest but within this there has only been a limited amount focused on the student experience, especially at Level 3, which for many students is an important transitional stage before entering the employment market, or progressing to degree level studies. Therefore what this study aims to build on is the early work of researchers such as Avis (1985) and Aggleton (1987) where the interest was on how this level of student makes sense of and understands their college experience. In doing this it not only updates knowledge but does it in a timely manner through the focus on learning environments where the main student resource is a networked computer. This in itself is a somewhat unexplored area for FE research. Therefore the contribution this study offers raises issues that are pertinent to educators themselves, FE institutions and policy and not least of all a more critical development of curricula when networked computers are the primary learning resource, which will now be expanded on.

This research set out with the intention of investigating how the presence of new digital technologies affected teaching and learning and social activities within FE classrooms. In doing this it has contributed to an understanding of the role of networked computers as a primary resource for teaching and learning in the FE context of Level 3 students with respect to the following four inter-related areas:

1. The interface between administrative pressure on academic staff and the way the networked independent learning is used within the curriculum, which suggests that any capacity to support learning can be limited by staff time pressures.

2. The use of technology based learning to support individualised, rather than collaborative approaches to learning suggested that the technology's potential to stimulate collaborative and creative work was not fully developed.

3. The nature of the inter-relationship between social and personal use of classroom technologies, and use of technology to support directed learning – and the way that this develops our understanding of students' movement between spaces of culture and education as arrhythmic lines of drift.

4. The way that students engage with on-line material for learning purposes and how this can have the capacity to encourage superficial rather than deep learning.

Before working through each point in more detail, it is worth reiterating that each and everyone one of the students in the three cohorts were enthusiastic about the subjects they were studying and generally viewed these as part of their future plans, for either careers or continued education. Likewise, the tutors wanted the students to succeed.

1. What has already been commented on, and will be further discussed is not only relevant to teaching and learning and student needs and expectations but also illustrates how FE educators can be pressured to complete their daily administrative tasks, especially when this is conjoined with contracts that include a high level of student contact within the working week. This administrative aspect of their workload can at times overflow into those timetabled periods allocated for teaching and facilitating learning.

As illustrated using the vignette of a Friday afternoon media session (see Section 5.2) and from student comments during interviews (see page 280) administrative pressure on tutors certainly intruded into some teaching sessions. Tutors took advantage of the onus on the Level 3 students to evidence independent learning by using these periods to address their workload through the convenience of the staff classroom computer. This availability of time when students were intended to be focused on individual tasks thus offered tutors the space and time to relieve their pressured workload that otherwise may have resulted in them working beyond contracted hours. Some of this administration needed more rapid responses, such as email enquiries from college staff, especially as evidenced when Bob, a media tutor, needed to leave the classroom for a brief period to visit college office staff (see page 156).

As evidenced by the music student Pete's comments (see Section 6.9) tutor's focus on administration was at the cost of time that could have been used to support learning at an individual level, or spend time spent on group activities, such as developing study skills, which were clearly needed. Tutors' utility of the classroom for administration thus demonstrated timetabled classroom sessions as fulfilling a duality of purpose, albeit within the same faceted framing of their professional role. However, any evidence of faceted identity by students through off-task uses of the networked classroom computers was viewed as a deficit in behaviour with a disregard to any educational deficits that prompted this, including how these practices with technologies were culturally shaped. Although this situation could still occur in a more analogue situation when students are set project work, or group activities and the tutor uses that time for marking, or other forms of assessment. The risk is when the administrative focus removes the tutor from recognising the need for student support, especially in the context of this research where staff computers were at the far corner of the rooms and the tutor was therefore sat facing the wall at that end of the room rather than towards the main space of the room and the students.

2. Clearly, as has been illustrated, the curriculum and pedagogy were not sufficiently supportive of student study and learning needs in this digitally resourced environment. Thereby the curriculum and how it was interpreted for these Level 3 students did not acknowledge how students' cultural development with digital technologies could affect their student needs and practices, including their unsophisticated methods of engaging with information and text. Certainly, two or three hours sat at a computer focused on one assignment, especially when it involved a high level of engagement with text and an onus on independent learning, which would then be repeated for several sessions did not utilise students' culturally shaped capacity for engaging with multiple tasks and differing levels of stimulation and communication. A clear indication of this was that the rate of some students' progress was such that extensions were needed to ensure that their coursework was completed; with some second year students still having outstanding work from their first year of the course to complete. If nothing else, this clearly signifies that something occurring within the curriculum, pedagogy and learning expectations was out of alignment with student needs and the fleeting nature of their culturally shaped attention.

Certainly, from these points, the politics of the place of the classroom and those educational and culturally shaped digital spaces within it emerged from the research. The educational expectations focused on the classroom as being a place of education to be filled with compliant students who were passive receptors for independent learning. Therefore they were expected to remain engaged with their work for the duration of the sessions. Clearly, as evidenced throughout the data these

assumptions were incompatible with students' needs and expectations and consequently students' use of their networked computers expanded their own space within the room through their drift on to a more familiar cultural use of the polyvalent technologies. These were either managed moments of short relief from a period of focused coursework, or a temporary, at times prolonged, escape away from the drudgery and mundanity of the individualised coursework. This certainly illustrated that the interpretation of the curriculum and tutor pedagogy would have benefited from being more shaped toward current student needs, not least to develop their level of studentship. Networked technologies can stimulate collaborative and creative work amongst peers, as evidenced by Barden's (2014) short-term project with dyslexic students where Facebook acted as their learning platform. Certainly, the creative aspects of the media and music courses which involved group work and creative software stimulated this but it was not transferred within the more academic text-based coursework; illustrating a clear structural divide within the curriculum and pedagogy.

This thesis started off with a particular interest in why students were being distracted away from coursework activities by their use of those digital technologies and resources that they used outside education. In part this can still occur, when there is a need to respond to a text message, or other social contact becomes an imperative beyond the immediate context. However, this needs to be contextualised as something that can also happen in day-to-day lives when a face-to-face conversation is interrupted by a mobile phone call. Although some judgement can occur in this and I have observed students check their phone to see who is contacting them and make an assessment if it needs responding to immediately, or can wait until later. However, to open this up to another view it is worth referring back to one interview response by Pete, a Year 1 music student. Pete comments:

> *They can be quite isolating as the teacher kind of isolates himself from the students and doesn't really go around as much as they should do. I mean me myself, I'm admitting this openly, I'm like constantly going on MySpace and YouTube and I get distracted from my work and I need that pressure to be there...*

Pete admits in this interview that he gets distracted, or at least this is how he describes his use of the college computer to access social media. Whenever I observed Pete working, and this was both from a close distance and from across the room he would always appear to remain on task, until he reached an impasse with his work. His frustration would be quite palpable and it was then after a period that could vary between approximately 20 seconds to ten minutes that he would move off-

task and watch a YouTube video, or MySpace and very occasionally he would check his phone for messages, or to send some. Only on rare occasions, if he was focused on coursework, would he interrupt that flow and then it would only occur briefly and with little interruption to his focus on coursework. At times, this would simply be to change the music he was listening to, or to quickly check his phone.

By Pete referring to these actions as distractions that take him away from his work he seems to construe this as his deficit. What seemed to be occurring was more that he was unsure how to progress with his work and his only recourse then, other than sit and do nothing, was to pass the time watching, or listening to YouTube or MySpace until a tutor was available to support him. Perhaps, if a culture of peer support had been initiated then other students could have guided Pete, or they could have discussed common difficulties to arrive at a solution. This is not discounting how more structured learning in general may have facilitated students to become more engaged with their work, especially if that incorporated breaks for discussion. Often in the music sessions, when students were working independently a large portion of them would be listening to music through headphones, or earphones and this seemed to be one barrier to this culture developing, despite the efficacy this had for maintaining student focus. This was especially identified through comments made by Hazel (see Section 6.4) and observations of her, and the use of background media as focusing strategies that other students, such as Seth in media would use as enablers for maintaining focus.

To return to Pete, I had observed him becoming quite frustrated with his work on numerous occasions, and occasionally a tutor would offer him some brief support. Typically he would be advised to calm down, as if his frustration was deemed a disciplinary issue rather than something in need of a remedial intervention. Pete had a high level of commitment to the course through his desire to become a professional musician. This was illustrated by his good attendance, and that to get to college for 9am each day he needed to catch a bus at 7:30am, due to the distance that he lived from the centre and the infrequency of the buses from the rural location of his home. Indeed, several music students had similarly long journeys on bus, train or by car from a range of different locations.

His frustration could simply be that he needed a tutor to stimulate his learning through more input, or even more one to one coaching. Or, if other students were experiencing the same problems then small group tuition, or even the whole cohort receiving some study skills coaching contextualised

within interpreting the assignment brief and strategies for addressing the learning outcomes. If this had been initiated at the start of a new assignment then, considering the diversity of students, there would also have been the opportunity to develop a culture of peer support and scaffolding of knowledge. This is especially pertinent, as these students were generally engaged with extensive levels of communication and interaction with peers through social technology and media.

3. When analysing students' off-task use of technology, theories of space have been discussed and particularly the affordance of Deleuze and Guattari's (1987) notion of lines of flight as a means of conceptualising students' on-task and off-task use of the classroom computers. As suggested earlier this can be imagined as something more emphatic than what was observed in the classroom and more fitting for an agentic re-location that drives for significant change and therefore is likely to be mono-directional with little aim for return. However, lines of drift, a concept only lightly touched on by Deleuze and Guattari (ibid.), offers a more nuanced approach to the change observed in students' on-task and off-task activities with classroom technologies. Drift still suggests, a movement away, but something that is less emphatic and less deliberated than a movement of flight. By adopting this viewpoint, students could be considered as drifting away from coursework tasks and then later returning to the main flow of their coursework. However, drift can still be conceived of as a movement in one direction. Therefore, I propose that this can be refined further and more fittingly conceived of as being an *arrhythmic cycle of drift and return*. This movement was afforded by the polyvalency of the institution's networked computers, which facilitated students' presence to become more layered and therefore attention to both oscillate and be extended between both educational and sociocultural activities. This culturally formed relationship resulted in students' agentic use of the digital classroom resources, thereby illustrating students' multi-faceted identities and their close cultural relationships with technologies that could facilitate their response to both immediate, or more prolonged individual student needs. Due to this, the place of the classroom can be conceptualised as consisting of spaces that at times are non-linear, multi-vocal and therefore demonstrating their spatial hybridity. Education, and the students themselves, needed their engagement with the networked computers to achieve a success rate for both the institution and student progression. The students also needed the polyvalency of the computers to satisfy their cultural expectations of these technologies, not least to enable them to cope with a culture of learning that was at times out of alignment with their needs.

From this, I have demonstrated the value of conceptualising classroom computers as polyvalent objects. In seeking to understand the complexity of students educational and non-educational uses of classroom computers and why this may occur within classroom conditions I have applied the

utility of Deleuze and Guattari's notion of lines of drift. In doing this I have adopted the spirit of Deleuze and Guattari by taking one of their concepts, and applied it to a different context. Likewise, I have followed Willis's (Mills and Gibb, 2001: 412) suggestion of adapting a concept by remodelling it to fit this particular educational context and develop my argument that these movements are more appropriately viewed as an arrhythmic cycle of drift and return.

Students' personal spaces within the classroom and their extended digital spaces can therefore be conceived as mutable and multi-faceted and likewise their identity and therefore how they identified with being in a classroom and conceptualised the spaces within it. At times their drift away from coursework and back again would be observed as more of a rapid oscillation between the two. This would be prevalent when several resources on a computer screen were within a field of vision, or at the most brought into focus through a slight eye movement. Drawing on the notion of layers of presence (Martin et al: 2013), presence and attention would be distributed and maintained simultaneously between both classroom activities and others more off-task, or simply to maintain being on-task.

 4. Students' practices with text illustrated how digital resources can facilitate an ease of handling and manipulating text, but these were relatively raw levels of skills, not gained through education or focused tutoring; consequently these were practices developed on a needs basis, rather than sophisticated actions. Study skills interventions would seem the most logical approach to teaching students the skills needed to more effectively gain from the Internet as a repository of information. This included the critical skills to make choices between search criteria and results, especially as tutors bemoaned students' lack of skills in this area but paradoxically offered little to remedy this. And, rather than criticising students' reliance on resources such as Google and Wikipedia, students could benefit more from understanding the basic strengths and limitations of these resources and therefore being able to accrue higher level skills to interpret the results and thus use them more critically. As the Internet continually expands these are information literacy skills that will benefit students beyond education. It was also apparent that there were deeper learning needs, for example, those students who were demonstrating only a surface level of engagement with text, and limited comprehension, such as Jim the Year 2 media student and Geoff a Year 1 music student. At Level 3 students should have been developing and demonstrating skills for engaging with information at a much deeper level than what was occurring in some instances. This would be through more sophisticated judgements to make a more profound summary of multiple sources of information, including evidence of information synthesis. Not least, higher skills at word level comprehension.

Certainly some student comments identified that they were unsure of the meanings of some text that they were then using for their assignments.

A range of literacies models were discussed in Section 2.2.2 and as indicated Howard's (1993) notion of patchwriting, as an analogue practice was similar in principle to what was observed in students' manipulation of digital text and how they explained it themselves. What the technology of copy and paste and the facilities of Microsoft Word do, is to render this as a much quicker and easier process than when engaging with hard copy and writing tools. Notably though Howard (ibid: 233 emphasis added) stresses the need 'to *learn* how to manipulate' for greater word level cognition and grammatical skills that many of the students in this research demonstrated. Therefore these are 'fixable errors' that Sterngold (2004: 18) references, but through the development of skills that facilitate, firstly the recognition of errors and then appropriate correction.

As discussed (see Section 2.2.2 and Section 9.3) much of the research focus on literacies is notable in that there is limited empirical work that explores students' ranging practices with text, especially within a computer-resourced environment. Therefore, this study in part aims to address some of that knowledge gap and the implications for teaching and learning when computers are the primary resource. Certainly, the social literacy skills that students evidenced through their cultural forms of digital communication and off-task classroom discussions were not integrated into a learning context, as this was viewed as contra to the skills needed for their course text-based assessments. Therefore, academically their literacy practices were constrained within restrictive and instrumental curricula. In this sense this research does not argue for a new model of literacies surfacing, or the extension of an existing one, as much of what was seen from curriculum level fitted within a deficit model. The students' needs could be situated within the models of transliteracies in all its breadth, and multiliteracies. In this way, this research argues that students left to their own strategies may demonstrate raw, unrefined literacy practices that may not provide them with skills needed for critical scholarship. Within this, is the need for curriculum developers and tutors to recognise that students do not arrive ready equipped with the breadth of literacy skills that they are expected to evidence, and therefore avoid the risk of a deficit discourse through the lack of skills interventions.

From the above summaries, this research therefore also aims to contribute to relieving some of the deficit that Bloomer and Hodkinson (2000: 583) identified as lacking in studying how students' approaches to learning can change over a period of time. In this context, this was over a full

academic year, which can be a crucial period for a student when they need the credentials of a qualification to progress in life and further studies.

9.8 AREAS FOR FURTHER RESEARCH

The study intentionally sought out student cohorts who were using computers extensively as their primary classroom learning resource. This was to investigate how this level of use of computers and networked technologies could affect students' approaches to coursework, the learning environment of the classroom and importantly from this how students conceptualised the space of the computer-resourced classroom. From this foundation, this ethnography has offered an insight into how students' respond to this constant access to technology for their academic coursework. However, there is the scope for further research into this area, as despite the increased use of computers in FE, there remain some subject areas that only lightly access these technologies during their timetabled sessions. Under these more limited circumstances, which were beyond the capacity of this research, and to gain a broader understanding of how students use institutional technologies and computers, researching these conditions would offer a level of comparison to this and any other like-minded studies. Some questions could be asked that if students do have a more limited access to institutional computers, does this then correspond to there being a more purposeful and focused use of the technologies? Not only that question, but how does such a level of access affect the development of learning cultures, the sharing of resources and students level of engagement with online information? Or, will similar practices prevail, despite a lighter use? FE colleges consist of a broad range of courses and levels of qualifications together with cohorts that can vary in their constituent ages and gender and therefore this research offers just a portion of how digital technologies are used within discrete learning environments.

Since this ethnography took place both music students and especially the media students at the same college now have to produce more extensive multimodal portfolios of their work. This is to ensure the presentation of their work aligns with the expectations of external examiners' and to provide a digital means of submitting portfolios of work when students apply to some university courses. The skills in producing these also reflect some of those that are now needed to function within a number of work roles in the field of media and music. This is due to the advancements in technologies and concomitantly employer and client expectancies.

This multimodal format of evidencing provides students with opportunities to learn and demonstrate their skills with both text and visual images and also the design skills needed for effective user interfaces. This is alongside the basic needs of functionability, with the consideration of user experience and accessibility. These encompass many of the areas that were focused on within this study, such as how students approach critical research, planning, evidencing their development of both the text and visual elements of their work and the considerations that go into its final presentation. As the evidencing needs are now more aligned with students social and leisure uses of technologies and media the research novelty would be to investigate both tutors' pedagogical response to these changes and also how students engage with this more multifunctional and multimodal work.

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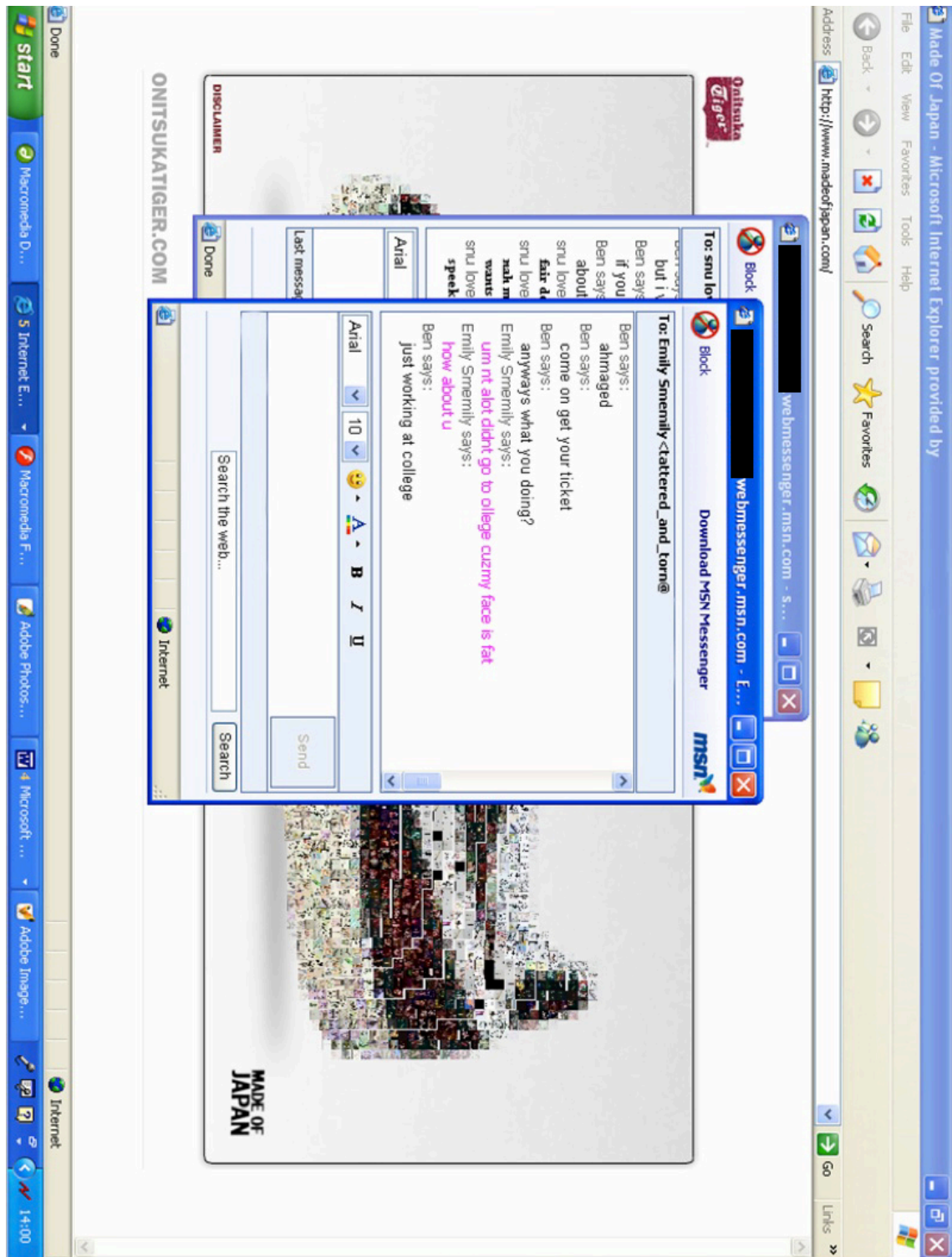
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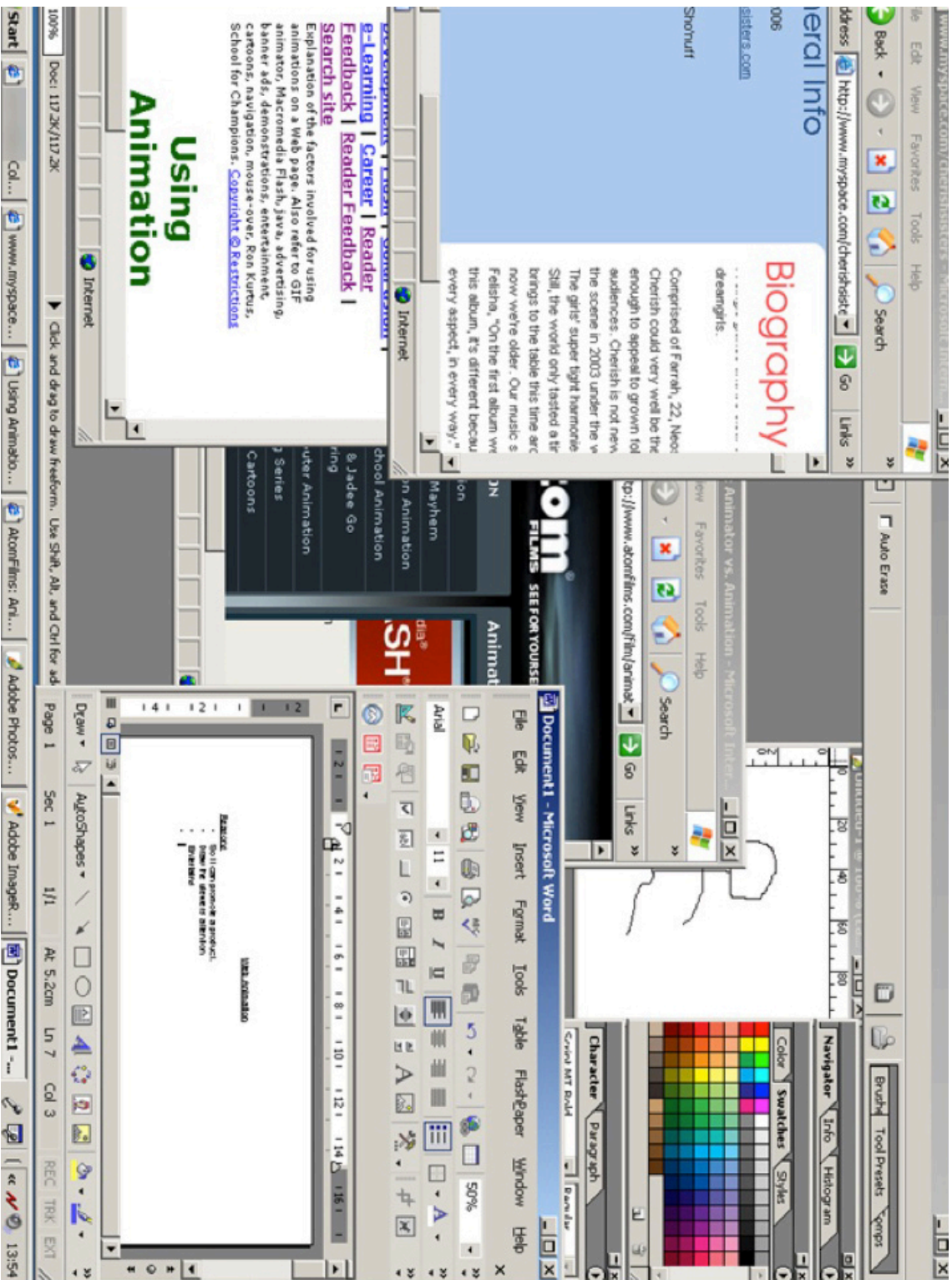Zepke, S. (2005) *Art as Abstract Machine: Ontology and Aesthetics in Deleuze and Guattari*. Abingdon: Routledge.

APPENDICES

APPENDIX 1: SCREENSHOTS OF STUDENT COMPUTER DESKTOPS

APPENDIX 2: DETAILS OF INTERVIEW RESPONDENTS

Level 3 Media Year 2 Students

Respondent	Age	M/F	Ethnicity	Previous educational and, or work experience	Number of semi-structured interviews
Ash	18	M	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Ben	17	M	White British	Enrolled on media course after leaving school	0 several informal discussions
Debbie	17	F	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Emily	17	F	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Emma	17	F	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Helen	20	F	White British	Previously studied a Level 3 Media course at another college but dropped out	3 one to one
Jim	21	M	White British	School and then progressed to working full-time in a family business	3 one to one
Katie	18	F	White German	Enrolled on media course after leaving school	2 one to one and 1 small group
Liz	18	F	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Sam	20	M	White British	Range of other college courses prior to Media	0 several informal discussions
Scott	18	M	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Sean	18	M	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Seth	17	M	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Simon	17	M	White British	Enrolled on media course after leaving school	2 one to one and 1 small group
Sue	18	F	White British	Enrolled on media course after leaving school	0 several informal discussions

Level 3 Media Staff

Respondent	Age	M/F	Ethnicity	Professional role	Number of semi-structured interviews
Alan	38	M	White British	Full-time tutor	1 one to one
Bob	29	M	White British	Full-time tutor	1 one to one
Carl	26	M	White British	Part-time hourly paid tutor	1 one to one
Ian	28	M	White British	Part-time hourly paid tutor	1 one to one
Sally	25	F	White British	Part-time hourly paid LSA	1 one to one

Level 3 Performing Musician Year 1 Students

Respondent	Age	M/F	Ethnicity	Previous educational and, or work experience	Number of semi-structured interviews
Amy	17	F	White British	Enrolled on music course after leaving school	2 one to one
Colin	17	M	White British	Enrolled on music course after leaving school	2 one to one
Geoff	27	M	White British	Unemployed prior to enrolling on the course	2 one to one
Hazel	17	F	White British	Enrolled on music course after leaving school	2 one to one
Kerry	17	F	White British	Enrolled on music course after leaving school	2 one to one
Kev	19	M	White British	Enrolled on music course after leaving sixth form	2 one to one
Rob	39	M	White British	Reduced full-time employment as a joiner to part-time to study the course	2 one to one
Ron	37	M	White British	Reduced full-time employment in a warehouse to part-time to study the course	2 one to one
Pete	17	M	White British	Enrolled on music course after leaving school	2 one to one

Level 3 Performing Musician Year 2 Students

Respondent	Age	M/F	Ethnicity	Previous educational and, or work experience	Number of semi-structured interviews
Al	18	M	White British	Enrolled on music course after leaving school	2 one to one
Art	23	M	White British	Completed a degree in drama prior to enrolling	2 one to one
Jack	18	M	White British	Enrolled on music course after leaving school	2 one to one
Jacob	17	M	White British	Enrolled on music course after leaving school	2 one to one
Jenny	21	F	White British	Part-time employment while studying the course	0 several informal discussions
John	18	M	White British	Enrolled on music course after leaving school	2 one to one
Max	18	M	White British	Enrolled on music course after being home schooled	2 one to one
Oliver	17	M	White British	Enrolled on music course after leaving school	2 one to one
Pat	18	M	White British	Enrolled on music course after leaving school	2 one to one
Stan	18	M	White British	Enrolled on music course after leaving school	2 one to one
William	24	M	White British	Completed a degree in sports prior to enrolling	2 one to one

Performing Musician Staff

Respondent	Age	M/F	Ethnicity	Professional role	Number of semi-structured interviews
Dave	55	M	White British	Full-time tutor	2 one to one
James	33	M	White British	Part-time hourly paid tutor	0 several informal discussions
Mark	32	M	White British	Part-time hourly paid tutor	1 one to one
Paul	29	M	White British	Part-time hourly paid tutor	1 one to one
Phil	53	M	White British	Full-time tutor	2 one to one
Nick	31	M	White British	Part-time hourly paid LSA	3 one to one
Karen	35	F	White British	Part-time hourly paid LSA	1 one to one
Julie	58	F	White British	Full-time key skills tutor	1 one to one

APPENDIX 3: OBSERVATION CONSENT FORM

This consent form outlines my rights as a participant in the study of computer-resourced classrooms by Andrew Barbour, Doctoral student at the University of Huddersfield.

I understand that taking part in this study is entirely voluntary.

I may end my participation at any time.

It is my right to decline to answer any question that I am asked.

I am free to end an interview at any time.

I consent to the recording of any interviews I participate in.

I consent to observation data being recorded of my activities during those periods that I am in a timetabled course session.

I may request to review any information about myself that has been documented for this research.

I HAVE READ THIS CONSENT FORM. I HAVE HAD THE OPPORTUNITY TO ASK QUESTIONS CONCERNING ANY AREAS OF THIS RESEARCH THAT I DID NOT UNDERSTAND.

PLEASE COMPLETE ANY OF THE TWO CATEGORIES BELOW THAT ARE APPLICABLE TO YOUR PARTICIPATION IN THIS RESEARCH.

TO PARTICIPATE IN OBSERVATIONS

....
(Signature of Observee)

....
(Printed name of Observee)

Date: ....

TO PARTICIPATE IN INTERVIEWS

....
(Signature of Interviewee)

....
(Printed name of Inerviewee)

Date: ....
You may decline to participate in this study. You may end your participation in this study at any time. All materials generated from this research, including observations and interviews will remain in my direct possession and the identity of all participants will remain anonymous through the use of pseudonyms.

Signature of Researcher and Date: ....

APPENDIX 4: INTERVIEW SCHEDULE FOR STAFF

<u>First round:</u>

What were your thoughts about the students' initial computer skills?

What literacy skills do you think students need for the course?

Could you describe the current students' research skills?

How would you describe students' initial approaches to writing their assignments?

How would you describe students' focus on their work when they are in the classroom?

How do students respond to your feedback on their work?

What would be the difference between a good submission for an assignment and a poor one?

How would you describe a successful session with students?

Could you describe what you consider to be the attributes of a good student?

Is there anything that you would like to change in the classroom layout or decor?

Second round:

Is there any particular style of teaching that you find students have responded best to?

Are the students progressing as expected within the curriculum targets and your scheme of work?

Do you think that this year's curriculum has been appropriate for the students?

Would you consider there is a need to develop students' literacy and study skills?

Overall could you reflect on how students have approached the coursework this year?

Are you planning to make any changes to the way you teach in the next academic year?

APPENDIX 5: INTERVIEW SCHEDULE FOR STUDENTS

First round:

First: What motivated you to enrol on this course at this college?

First: Did you use computers much when you were at school, if so was it any different from how you use them at college?

First [for older students]: Could you describe your computer use and skills prior to enrolling on this course?

First: How does experience at college compare to your previous experiences of education?

First: Do you have any thoughts about the classrooms, could they be improved in any way?

First: Can you explain what you do first when you start a new assignment?

First: Can you explain how you start your research for an assignment?

First: What value do you place on literacy skills?

Second round:

Mid: When you are in the classroom is there anything in particular that motivates you to learn?

Mid: Do you discuss coursework with other students, or friends and family?

Mid: What helps you focus on your work?

Mid: If you do any coursework at home could you describe how you approach it and the resources you use?

Mid: Do you prefer the tutors to give you feedback verbally, or by email?

Mid: When you need to research for information can you describe what you do first?

Mid: Tell me about the websites you use for research and if you have any favourites?

Mid: Once you have done your research and found the information you need can you describe the next stage and what you do with that information?

Mid: Do you proofread your own work, if so, what do check for and how do you do this?

Mid: Do you submit draft work for tutor feedback, if so, what do you expect from them?

Mid: At what point do you decide that your assignment can be submitted for marking?

Mid: Do you do any college work at home and if so, do you approach it differently than when at college

Mid: How do you feel about the duration of the sessions?

Mid: What is your opinion about the classrooms as an environment

Mid: How do you feel about the way classroom sessions are structured

Mid: Can you think about anything that you particularly like, or dislike about how you are taught?

Final round:

Final: What are your thoughts about the grades you have been getting?

Final: Do you think you could have improved your grades, if so, how?

Final: Can you describe your experience as a student on this course?

Final: Is there anything that you would change about the course?
Final: Looking back can you describe a session, or part of a session that you particularly enjoyed or found interesting?

Final: Can you describe any sessions, or part of sessions that didn't interest you?

Final: Has there been any type of teaching and learning that has not appealed to how you like to be taught?

Final: What do you think about the amount of time that you spend on computers in the classroom?

Final: Could you reflect on your overall experience of this year at college?

Final: As there is only a short time left before the end of the course do you still feel that you need to go on YouTube, MySpace, Facebook etcetera when you are in the classroom?

Final: Do you think that you have changed your approach to your coursework over the last year?

Final: Looking back over the year, how do you think you have paced your approach to coursework?