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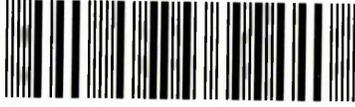
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**Community Regeneration: The Information Society in
Deprived Areas of South Yorkshire**

by

Karl Baker-Green

**A thesis submitted in partial fulfilment of the requirements of
Sheffield Hallam University for the degree of Doctor of Philosophy**

30th July 2013

Chapter 1	Introduction	9
1.1	The proliferation of Information and Communication Technology (ICT) as a tool to socially and economically regenerate deprived areas	9
1.2	The expansion and use of technology: small, portable and wireless	10
1.3	Situating the research	11
1.4	Aims objective and research questions	12
1.5	Organisation of the thesis	13
Chapter 2	The information society, information and communication technology (ICT) and digital divide(s)	15
2.1	Introduction	15
2.2	The growth of the information society	15
	2.2.1 The economic and social importance of the information society	17
2.3	Policy responses to the digital divide	21
2.4	The problem of 'universal access'	26
2.5	Successive types of access	28
	2.5.1 Motivation	28
	2.5.2 Physical and material access	30
	2.5.3 Digital Skills	31
	2.5.4 Usage	33
	2.5.5 Situating community	36
2.6	Community: a diverse concept	37
	2.6.1 The sociological roots of community – community lost	38
	2.6.2 The rise of community – community found	42
	2.6.3 Community and social capital	44
	2.6.4 Community technology centres	48
2.6	Conclusion	50
Chapter 3	Objective 1 Structural Funds	52
3.1	Introduction	52
3.2	South Yorkshires' economic decline leading to Objective 1 status	52
3.3	Structural Funds – their aims, objectives and allocation	56
3.4	Objectives of the Structural Funds: Objectives 1, 2 and 3.	58
3.5	Objective 1 Priority 4 – Measure 21	61
3.6	Conclusion	63

Chapter 4	Coalfield communities and the village of Grimethorpe	64
4.1	Introduction	64
4.2	The collapse of the UK coal industry	64
4.3	The regeneration of the coalfields	66
4.4	Grimethorpe – an introduction to a former pit village	71
4.4.1	Economic and social problems relating to Grimethorpe	72
4.4.1.1	Work	72
4.4.1.2	Housing	73
4.4.1.3	Education and skills	74
4.4.1.4	Transport infrastructure	75
4.4.1.5	Social and leisure activities	75
4.4.1.6	Crime	76
4.5	Embedded units of analysis – phase 1	78
4.5.1	Grimethorpe Electronic Village Hall	79
4.5.2	Learndirect centre	80
4.5.3	Grimethorpe library	82
4.6	Embedded units of analysis – phase 2	83
4.7	Conclusion	85
Chapter 5	Methodological decisions	86
5.1	Introduction	86
5.2	Paradigmatic decisions	86
5.3	Methodology	90
5.3.1	Case Study design	90
5.4	In the field	94
5.4.1	Documentary analysis	95
5.4.2	Interviews	96
5.4.3	Observation	97
5.4.4	Access and field relations	98
5.4.4.1	Phase 1	98
5.4.4.2	Phase 2	100
5.4.5	Sampling techniques	101
5.4.6	Ethical considerations	102
5.5	Data analysis procedure	103
5.6	Conclusion	107

Chapter 6 Grimethorpe: the digital divide – it’s all about access!	109
6.1 Introduction	109
6.2 Universal access – a solution to the digital divide	109
6.2.1 Accessing the Grimethorpe Electronic Village Hall	110
6.2.2 Accessing the Learndirect centre	115
6.2.3 Accessing Grimethorpe library	118
6.2.4 The nature of the centres	120
6.3 Accessing the social side of the GEVH and the Learndirect centre	121
6.4 Accessing CTCs and building social capital	125
6.4.1 Bonding social capital	125
6.4.2 Bridging social capital	127
6.5 Discussion	128
6.6 Conclusion	129
Chapter 7 Grimethorpe: ICT and Employment	130
7.1 Introduction	130
7.2 The economic situation of Grimethorpe	130
7.3 The GEVH – ICT skills and employment	132
7.4 The Learndirect Centre – ICT skills and employment	141
7.5 Library – ICT skills and employment	143
7.6 Discussion	144
7.7 Conclusion	145
Chapter 8 Grimethorpe: CTCs and community participation	147
8.1 Introduction	147
8.2 Issues of access to the CTCs at Grimethorpe	147
8.3 Grimethorpe residents, ICT and social capital	149
8.4 Grimethorpe residents, ICT and economic prospects	152
8.5 Discussion	155
8.6 Conclusion	159
Chapter 9 Grimethorpe: a decade of technological change	160
9. 1 Introduction	160
9.2 The expansion and use of technology – small, portable and wireless	161
9.3 The rise of social media	162
9.4 Embedded units of analysis	163
9.4.1 Family one	163
9.4.2 Family two	165
9.4.3 Family three	167
9.5 Accessing and using ICT and the Internet	168
9.5.1 Family one	168
9.5.2 Family two	172
9.5.3 Family three	174
9.6 Discussion	178
9.7 Conclusion	181

Chapter 10 Conclusion	183
10.1 Introduction	183
10.2 Addressing the research questions	183
10.3 Contribution to future ICT policy	189
10.4 Recommendations for further research	190

LIST OF TABLES:

Table 1 Levels of GDP in South Yorkshire and the UK	55
Table 2 Aims and availability of structural funds	57
Table 3 Objective 1 Teams	60
Table 4 Crime rates in Grimethorpe	76
Table 5 Opening times at Grimethorpe Library	83
Table 6 Design Test (adapted from Yin)	93
Table 7 Volume and type of research methods	95
Bibliography	192

Appendices:

1. Summary of Objective 1 Measures
2. Objective 1: Priority 4 – Measure 21
3. Objective 1 Investments: Measure 21
4. Outline of Acorn Centre, Grimethorpe
5. Plan of Electronic Village Hall
6. Basic types of Designs for Case Studies
7. Contact Summary Form
8. The strengths and weaknesses of each type of evidence.
9. Example of Interview Schemas from both phases of the research
10. Phase 1 and 2 participants
11. Coding steps in grounded theory

Abstract

The proliferation of the information society over the last twenty years has made access to, and engagement with, information and communications technologies (ICT) and the Internet increasingly important aspects of social inclusion in contemporary society. Similarly, the ability to be able to use ICT effectively has been described as the indispensable grammar of modern life. Because of this there is a growing concern between those who have access and can use ICT the Internet and those who don't – referred to as the digital divide. This has resulted in a plethora of local, national and international policies aimed at getting people online and connected to the Internet being set in motion over the last couple of decades. These policies aim to bridge the 'digital divide' by focussing on increasing access to ICT for those living in deprived areas, areas already viewed as suffering from high levels of poverty and social exclusion. South Yorkshire, with many of its villages and urban areas built specifically for the coal industry had suffered from terminal decline with the closure of many of its pits over the last forty years. The decline of manufacturing has resulted in an array of economic and social problems burgeoning within many of its communities, to the point where the South Yorkshire region was granted Objective 1 funding from the European Union. The research explores whether or not ICT and the Internet can become the expected solution to so many diverse and interrelated problems facing the people and places of South Yorkshire – particularly with regard to the social and economic regeneration of deprived areas. The research was undertaken in two phases in 2003 and 2013 at Grimethorpe which in 2003 was considered one of the most deprived wards in Europe. In 2013, due to continued regeneration efforts, Grimethorpe's social and economic fortunes have improved greatly. Both phases of the research utilised a case study design and qualitative methodology to explore how local residents were accessing and using ICT and the Internet. In the first phase three community technology centres to be found within Grimethorpe were examined, two publicly funded and one from the third sector funded by Objective 1 South Yorkshire. These were explored in relation to ICT policy outcomes of both funding bodies which focussed on how the centres could help local digitally excluded people overcome the digital divide; build the social capital within deprived areas and also up-skill the local workforce to be able to participate in the wider knowledge economy of South Yorkshire. Findings from the first stage highlighted how people from Grimethorpe were not using the community technology centres due to a number of socio-economic barriers relating to low-levels of education, poverty, lack of observable employment and also in the form of resistance by residents of Grimethorpe themselves. The second phase of the research returned to Grimethorpe a decade later in order to investigate how the rapid changes of technology in the intervening years were being experienced by several families in the community. Here similar barriers to those found in phase one were discovered along with how family members are becoming central to helping other members overcome the digital divide. The research concludes that in order to help people overcome the digital divide they need to have a suitable reason to access and use ICT and the Internet, something often made aware to them by someone they trust.

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Chapter 1 Introduction

1.1. The proliferation of ICT as a tool to socially and economically regenerate deprived areas.

The last few years have witnessed a transformation in the industrial landscape across most of the developed world. Telecommunications liberalisation, the explosive growth of the Internet and a growing tide of mergers between computer, media and telecommunications companies all point to one thing – the birth of the information society (European Commission Information Society, 2003). The significance of the information society and its apparent strategic importance to transforming economic and social development is reflected in a wide range of local, national and European reports (World Bank, 1998; Castells, 2000; DfEE, 2000; Objective 1 South Yorkshire, 2006; PAT 15, 2000). Economically, there has been a shift in the balance of Western economies from manufacturing to a service base. This has resulted in the development of a core workforce in relatively secure, highly-skilled, well-paid professional employment along with a growing peripheral workforce of insecure, low-paid casualised labour (O'Brien and Penna, 1998, p.140). In relation to this there is also a schism that has developed socially between those who can access and use ICT and the Internet and those who cannot. In both cases there had been a growing concern for those groups in society who are being excluded from the information society in what has become known as the digital divide (PAT 15, 2000).

However, just as new technology has been identified as the force behind the transition to an information society and the cause of the digital divide; it is also viewed as a tool with which to remedy such disparities. Here, particular attention is being paid to the social and economic regeneration of deprived areas throughout the Western world. Within the UK ICT is at the centre of a coherent 'joined-up' policy response that emphasises community-based regeneration strategies aimed at securing the economic and social inclusion of excluded groups in information society (DfEE, 2000; Objective 1 South Yorkshire, 2006; DTI, 1999). Policies aimed at creating universal access to

ICT and the Internet are considered necessary to avoid further social divisions and to offer opportunities to all by ensuring that everyone could be included in future knowledge economies (GOYH, 2004; DfEE, 2000; 2001). For example, by learning new ICT skills excluded groups can increase the social capital within their local communities (Hamilton, 2001). Similarly, increasing the ICT skills levels enables these groups to participate more fully in the information society (Dabinett, 2000, p.164).

The importance of these initiatives can be seen in the way they are being complemented by the electronic provision of public services. Here, a framework aimed at the 'democratisation' of access to information in the areas of education, entertainment, health, housing, employment and local and national issues, is being made available via digital television, telephone or computer by 2005¹ (Selwyn, 2002, p.8; Cabinet Office, 2000). In this way, deprived communities who have ICT 'know-how' and are networked to the information society have the ability to become empowered and emancipated, able to access and be involved in an ever-increasing array of social and economic opportunities as part of their normal everyday life. To have no ICT skills is to be excluded from these mainstream activities. Therefore, the main priority of government and other funding bodies such as Objective 1 South Yorkshire has been to implement ICT policies aimed at providing universal access.

1.2 The expansion and use of technology: small, portable and wireless

In phase 1 of the research the investigation was focussed on how access to CTCs, suites of computers wired to the Internet, could help the digitally excluded of Grimethorpe overcome the digital divide. In phase 2 the technological landscape looked very different compared to the original research. The spread and prevalence in technological innovation, like Web 2.0 technology and social media, has created an explosion in ownership and use

¹ Some examples already available include, UK online, NHS Direct, the National Grid for Learning, Community Grid for Learning and University for Industry (DfEE, 1999).

of mobile technology and the Internet, which has been acknowledged as transforming the lives of many individuals (ONS, 2012). Nevertheless, the digital divide is still a current problem and access to, and use of, ICT and the Internet is still considered a major concern of government policy (Cabinet Office, 2010). For example, according to Wanless (2013) 16 million adults in the UK don't have the basic online skills to benefit fully from using the Internet and around 7.4 million have never used a computer or the Internet. This phase of the research focuses on how family members are experiencing mobiles technology and whether or not that experience is helping other none users to cross the digital divide. Similarly, the research asks if using mobile technology can also build social capital or improve the prospects of individuals finding employment.

1.3 Situating the research

The focus of the research is based in a deprived former coalfield community in Barnsley, namely Grimethorpe. The changing social and economic landscape of former coalfield communities has presented a number of opportunities for social research over the years (Winterton and Winterton, 1989; Warwick and Littlejohn, 1992; Turner, 2000). The terminal decline of the coal industry, although representing a disaster economically and socially, has offered the opportunity to try and trace the changing identity of miners and their communities in the wake of the mining closure programme of the 1980s and 1990s. The collapse of the industry within the UK during this period brought hundreds of occupational communities to an end after decades of existence (Bennett *et al.*, 2000). The result was viewed by many as the weakening of a unique cultural tradition and the destruction of many lives (Bennett *et al.*, 2000; Francis *et al.*, 2002). The isolated position of their communities and lack of alternative employment often meant deprivation and poverty were foregone conclusions.

The research is interested in exploring whether or not ICTs could potentially help to socially and economically regenerate the community of Grimethorpe. One of the main objectives of the research was to investigate the idea that

providing universal access to ICT and the Internet will act as a panacea promoting social capital and economic opportunities within Grimethorpe (Selwyn, 2002). A second objective was to investigate how the rapid changes of technology were being experienced by several families within the same community. The aims of both stages are to provide insights into how ordinary people experience ICT and the Internet.

1.4 Aims objective and research questions

One of the main aims of this research is to explore how public ICT policies delivered through community technology centres in Grimethorpe can help digitally excluded individuals and group's access and use ICT and the Internet to overcome the digital divide. Further objectives are to explore whether or not these measures are increasing social capital and up-skilling the local residents within the community. A final objective is to explore how the rise in mobile technology is being experienced by individuals from the same community ten years later. These aims and objectives have resulted in the following research questions:

1. What is the nature and extent of ICT measures supported by the Objective 1 Programme South Yorkshire in Grimethorpe, and what other ICT related developments are occurring within the same community?
2. How are ICT related measures increasing the social capital within Grimethorpe?
3. How are ICT related measures increasing the ICT skill levels within Grimethorpe, creating an up-skilled workforce that can participate more fully in the information society?
4. How is the rise in mobile technology over the last decade being experienced by families, including:
 - how they are individuals using new mobile technology,
 - is this having an effect on using the mobile technology by other family members therefore helping them to overcome the digital divide?
 - is social capital being increased.

1.5 Organisation of the thesis

The thesis is organised over ten chapters. Chapter 2 is concerned with reviewing the relevant literature from which the main themes of the thesis were discerned. It discusses the growth of the information society and the onset of the digital divide before moving on to outline the policy responses to this in the form of universal access. Successive types of access are then considered along with the importance of community to policy debates concerning how to tackle social exclusion and deprivation. The final section introduces how community technology centres are at the centre of ICT policy implementation by government and European funding bodies.

Chapter 3 expands on the literature review outlined in Chapter 2 by outlining the economic decline of South Yorkshire. The main point of this chapter is to provide an explanation of the granting of Objective 1 status to South Yorkshire and what this meant in terms of funding for ICT projects – particularly Priority 4: Measure 21. It also explores the similarities and differences to be found between local, national and European funding initiatives and demonstrates how ICT's are being deployed in an effort to regenerate deprived regions.

Chapter 4 explores the terminal decline of the coalfields, along with the numerous regeneration programmes that have been initiated since. From this the community where the actual research was undertaken is introduced and includes a socio-economic breakdown of economic and social problems that have since affected the village. This leads onto an examination of the embedded units of analysis in both phases of the research.

Chapter 5 introduces the research approach to be used to answer the questions formulated from Chapters 2-4. This includes a deliberation of the theoretical and methodological framework which informed the choice of research methods used for data collection. Access to the field is considered and reflected upon in both phases of the research along with a discussion of

the sampling techniques used and the consideration of ethical issues. Finally, data analysis procedures are examined

Chapters 6, 7 and 8 focus explicitly on the analysis of the data produced in the first phase of the research and have been organised thematically around three key areas. Chapter 6 considers whether or not the community technology centres at Grimethorpe are helping to increase the social capital within Grimethorpe. Similarly, Chapter 7 focuses on whether or not the community technology centres are helping to increase the ICT skill levels in the area. While Chapter 8 forms a discussion with local residents in order to identify potential barriers to motivating digitally excluded groups from accessing ICT and the Internet. Each of these chapters is based on answering a particular research question and aims to question the deployment of public ICT policy.

Chapter 9 discusses the spread and prevalence of technological innovations, like Web 2.0 technology and social media and introduces the rise of wireless mobile devices. It explores whether or not family members are accessing and using the new mobile technology and what effects they are having on other family members and friends.

Chapter 10 draws conclusions based on the findings from both phases of the research and in relation to the research questions outlined above. It also includes a discussion of the benefits and limitations of the research and the contribution it has made to knowledge in the field as well as identifying areas for further research.

Chapter 2 The information society, information and communication technology (ICT) and digital divide(s)

2.1 Introduction

The proliferation of the information society over the last twenty years has made access to, and engagement with, information and communications technologies (ICT) and the Internet increasingly important aspects of social inclusion in contemporary society. Similarly, the ability to be able to use ICT effectively has been described as the indispensable grammar of modern life. Because of this there is a growing concern between those who have access and can use ICT and the Internet and those who don't – referred to as the digital divide. This has resulted in a plethora of local, national and international policies aimed at getting people online and connected to the Internet being set in motion over the last couple of decades. These policies aim to bridge the 'digital divide' by focussing on increasing access to ICT for those living in deprived areas, areas already viewed as suffering from high levels of poverty and social exclusion. This chapter aims to explore these issues beginning with the economic and social importance of the information society. The next section discusses the fixation of public policy on creating universal access to help counteract the digital divide. This is then contested by demonstrating how creating physical access to technology is just one part of a larger problem when discussing the digital divide. The final section is concerned with understanding the role communities play as mediating 'spaces' in the regeneration process, but particularly in relation to overcoming the digital divide.

2.2 The growth of the information society

Although interest in the conception of an 'Information Society' dates back to the 1960s with the work of Fritz Machlup (1962) and Daniel Bell (1976), it wasn't until the mid-1990s with the growth of the Internet that this idea of society really came into its own (Martin, 2005). At the time there was a widespread assumption that an information revolution was taking place where

economic, social, cultural and political interactions and relationships were being increasingly grounded in information and communication technology (ICT) helping to augment a new type of society – the information society (Graham, 2011). According to Mansell (2009, p.2) it was the growing use of ICT in the 'acquisition, storage and processing of information; and the role of information in supporting the creation and exchange of knowledge' that helped usher in the information society. A society where ICT was increasingly viewed as the main catalyst for the changes in work organisation, societal structure and politics occurring in the late 20th century (Giddens, 2000; Castells, 1996, 2000; Toffler, 1990).

Primarily, the main impetus for the growth of the information society was explicitly economic in nature, with policies implemented by governments around the globe to ensure their inclusion (Anttiroiko, 2001). However, soon after this initial wave a second phase of policies was endorsed, this time concerned with wider social aspects of the information society, based on new tensions and dilemmas perceived from its development (Graham, 2011). The problem was based upon the threat of a digital divide between people from different socio-economic backgrounds with regard to their opportunities and abilities to own, access and use ICT, creating a potential barrier for participation in the information society. Social policy responses, from the developed and developing world, to these predicaments were initially focussed on increasing individuals' awareness, access and skills to information technology based on the supposed economic and social benefits of being 'plugged in' or 'connected' to the information society (European Commission, 1994; Dabinett, 2000).

As access to ICT and the ability to use it increasingly becomes part of the toolkit needed to participate and prosper in an information-based society, there is a fear that the IT revolution is 'bypassing people from deprived neighbourhoods and communities' (Servon, 2002, p.279). The move towards an increasingly digital society is said to be having economic and social impacts that 'threatened to exacerbate existing inequalities in society' (Servon, 2002, p.280). As a result, over the last couple of decades, ICT has been

utilised within global, European and UK policy as a potential regenerative 'tool' aimed at developing the economic and social structures of numerous disadvantaged communities (DfEE, 1998; European Commission, 2000; Servon, 2002). Economically, this has meant raising the awareness of, and access to, ICT through the acquisition of new skills with which to compete effectively in the new information society. Socially, ICT is seen as a way to enhance democracy and citizen participation in local and national decision making, as well as creating new forms of cultural cohesion and empowerment, particularly with regard to the digitally excluded (van Dijk, 2012).

2.2.1 The economic and social importance of the information society

The arrival of the Internet as a form of mass media prompted worldwide interest in whether a post-industrial, knowledge economy had emerged in developed countries (May, 2002). As such, the significance of the information society, and its apparent strategic importance to transforming social and economic development, was being reflected in a wide range of global, European and national reports and statements (World Bank, 1998; Castells, 1996; DfEE, 2000; Cabinet Office, 2000). A central proposition of these documents is the dynamic function of new technologies in fuelling 'globalisation', effectively changing patterns of economic and social activity around the world. For example, according to Castells new technology allows for the 'dramatic acceleration and speeding-up of internationalisation processes alongside the shrinking of time and space' (2000, p.13). Because of this, multinational and transnational companies are able to move around the globe, 'siting their production activities wherever is considered most profitable, often fragmenting their sites across different countries' (Held *et al.*, 1999, p.15). Scase (1998, p.28) supports this view:

'Multinational companies are able manage their global operations on a fully integrated basis using information technology, particularly the Internet. They can operate as if they were operating on a single geographical site. This gives them the opportunity to be flexible in deciding in which parts of the world they should base their various operations

depending upon the price of labour and the availability of tax credits, as well as the tax policies of national governments. Geographical distance is no longer an important decision making factor'.

Within this new 'techno-economic' paradigm, institutions of regional and world governance, such as the International Monetary Fund (IMF), World Bank (WB) and the European Union (EU), depict economic globalisation within a functionalist and technological discourse (Waters, 1995). Here, new technologies and new economies are viewed as part of a global restructuring of capitalism, where the knowledge and information sectors are increasingly important domains within society (Webster, 1995). Consequently, there has been a shift in the balance of Western economies from manufacturing to a service base. Within the new sector there has been the development of a core workforce of relatively secure, highly-skilled, well-paid professional employment; and a growing peripheral workforce of part-time, low-paid, casualised labour. The main effect of this change has been structural unemployment, increasing inequality and increasing poverty (O'Brien and Penna, 1998, p.140).

Economic globalisation, on the one hand, is firmly accepted as a further phase in capital accumulation, following the policies of deregulation, liberalisation and privatisation (Scott, 1997). On the other, it is charged with exacerbating and entrenching societal disparities and creating new forms of social exclusion associated with a digital divide (Damarin, 2000). However, the idea that some form of resource gap exists between different sectors of society causing social inequalities to occur is not new. For example, Tichenor, Donohue, and Olien (1970) identified a knowledge gap created by the mass media in the early 1970s. Here, segments of the population, particularly those 'with higher socio-economic status, tend to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease' (Tichenor, Donohue, and Olien, 1970, p. 159). The resulting disparity could be viewed as a distinct social hierarchy between those who had access and those who did not.

Similarly, the shift from industrial to post-industrial society has placed an even greater emphasis on 'knowledge' acquisition as the key resource which is unevenly distributed in society. Anderson *et al.* (1995) were one of the first to identify a potential increasing gap in access to the new information and communication technologies. They demonstrated how an 'information elite', with higher socio-economic status and access to and knowledge about computers and e-mail, have become the primary beneficiaries of the information society. In the next year, the US National Telecommunications and Information Administration (NTIA) report '*Falling Through the Net*' was exploring whether the US government's goal of ensuring universal access to telephones had been achieved, but extended its research to study penetration rates of computer and modem ownership (NTIA, 1995).

The report identified that while a standard telephone line can be an individual's pathway to the riches of the Information Age, a personal computer and modem were rapidly becoming the 'keys to the vault' (NTIA, 1995). This survey was followed up with a second report '*Falling Through the Net II*' which noted that the US government had made it a 'fundamental goal' to connect all Americans to the information infrastructure (NTIA, 1997). It also pointed out that although ownership rates for computers, modems, and email accounts had increased dramatically, there was still an increasing inequality between different strata of society based on access to new technology (NTIA, 1997).

On the one hand, it became obvious in most economically developed countries that certain groups were being excluded from this new society 'creating internal social issues related to problems of a digital divide' (Henten and Kristensen 2000, p.179; Henten, Skouby and Falch, 1996; Anttiroiko, 2001; Cullen, 2001). For example, according to Goraya and Light (2011, p.52) 'across most quantitative studies, the following groups are found to be less likely to have used or currently use the Internet: people aged 65 and over, people with disabilities, people with lower educational attainment and people

in social classes C2DE². On the other hand, with rapidly increasing trends of globalisation spearheaded by the political and economic institutions of advanced industrialised nations, the 'grossly uneven spread of ICT around the world came to be seen as a digital divide on a global scale' (Avgerou and Madon, 2005, p.206).

The consequences of such unequal access to ICTs and the Internet can be conceived as more or less participation in the most important fields of society (van Dijk, 2005). For example, new media access is needed in an ever increasing range of jobs (Niznik, 2012). Non-participation can also equate to a lack of political representation in public decision making (van Dijk, 2012). Similarly, in social networking, access is required to create new ties and maintain old ones in this digital era (van Dijk, 2005). In spatial terms, people without access are more likely to stay in the local area, especially when looking for work or building social and sexual relationships. In contrast, people conversant with digital media are more likely to have the ability to become more mobile (van Dijk, 2005). Culturally, people without access will not be able to contribute to an ever growing range of applications and types of expression offered by digital culture (Deuze, 2010). Not only can a lack of online participation within these fields of society reinforce existing personal and positional inequalities, it can also diminish an individual's life chances in comparison to those who are familiar with and have access to digital media (Zillien and Hargittai, 2009; van Dijk, 2012; Dutton and Blank, 2011).

Yet, just as new technology had been identified as the force behind the transition to an information society, it was also viewed as one of the key ways to remedy, or bridge, the resulting inequality. For example, in the UK, particular attention was being paid to the potential social and economic regenerative nature of ICT on the fortunes of deprived communities and the people who lived there. As a result, ICT have been at the centre of a coherent

² Social classes C2DE refer to the system of demographic classification used by the National Readership Survey (NSR) in the United Kingdom. They are used by many organisations to distinguish an individual's social grade based on occupation. C2, D & E refer to the working class, whilst A, B and C1 refer to the middle class.

'joined-up' policy response that emphasised 'community-based' regeneration strategies in relation to the information society and economic and social inclusion (DTI, 1999; IT For All, 1999; DfEE, 2000; Objective 1, 2002; Cabinet Office, 2010a).

2.3 Policy responses to the digital divide

Initial policy responses from the UK focussed on increasing individuals awareness, access and skills in relation to ICT, based on the perceived economic, political and social benefits of being 'plugged in' or 'connected' to the information society (European Commission, 1994; Dabinett, 2000). During the mid-1990s part of the UK government's regeneration policy began to coalesce around the utilisation of ICT into a strategic framework aimed at promoting universal access to ICT in an effort to engage those less fortunate with regard to the information society. A 1996 paper '*Government Direct*' set out the government's vision to increase the electronic delivery of information and services, which raised the problem of ensuring universal access (Wilcox, 2013).

The aim was to assist with the economic and social development of deprived or marginal communities – many of which were viewed as casualties 'of the changes arising out of the influence of the informational economy on the economic and social welfare of rural and urban areas' (Dabinett, 2001, p.157). This culminated in the launch of the '*IT for all*' campaign in 1996 by the then Conservative government (DTI, 1996). It was deemed necessary to incorporate ICT technologies within regeneration strategies to help secure some form of competitive advantage for the UK in a globalising world (Dabinett 2000). The main remit was based on inclusion, by making sure everyone had access to computers and by investing in relevant infrastructure and physical hardware (DfEE, 2000).

Whilst the '*IT for all*' campaign was economically focussed, founded on 'up skilling' the deprived populations to make use of ICT for employment purposes, it also acknowledged 'wider social benefits to be gained by society'

(Dabinett, 2001, p.159). For example, it highlighted new opportunities in the way people could communicate using e-mails, video links and chat rooms; as well as promoting social cohesion through the creation of new social networks (Dabinett, 2001). Similar policies were also being promoted in Europe and internationally to help minimise the effects of the digital divide globally (Hüsing and Selhofer, 2002). In Europe and the US, these played an important role in social and employment policies, education policies and general information on the participation in an information society (European Commission, 2000; Servon, 2002). The EU began supporting multi-national research, infrastructure investment and regional development all linked to using ICT (Dabinett, 2001, p.159). A major result of this was that European funding bodies, such as the Structural Funds programme, began to capitalise on the use of ICT adopting it as a cross cutting theme for all of its programme priorities³.

After winning the 1997 election, the New Labour government sought to sustain investment in ICT, setting up a government office, the Office of the e-Envoy⁴, to lead the drive to get the UK online. This was supported by the then Chancellor of the Exchequer, Gordon Brown, who noted with some concern that, 'anyone left out of the new knowledge revolution will be left behind in the new knowledge economy' (Shearman, 1999, p.3). Whilst the then prime minister, Tony Blair, declared that he wanted to ensure universal access by 2005 (Cabinet Office, 2000); and in 2005 a '*UK Digital Strategy*' document reaffirmed universal local access by 2008⁵ (Cabinet Office, 2005). A variety of schemes were developed by the Labour government including 'providing state-subsidised access to ICT for disadvantaged groups' (Selwyn, 2003, p.351). These were mainly focused on supplying deprived neighbourhoods with the necessary infrastructure to get online – with access either through low cost computer units or via community technology centres (Turner and Pinkett, 2000; Dabinett, 2001). For example, 'UK online centres' and 'Learn Direct'

³ For example, Objective 1 South Yorkshire, which is a central part of this research, supported several modernising schemes formulated around the use of ICT. These included an e-campus in Sheffield and community initiatives augmented under the auspices of Priority 3 – Measure 21. Objective 1 and Priority 3 – Measure 21 are examined in more detail in Chapter 3 of this thesis.

⁴ This became the E-Government Unit in 2004 but subsequently closed in 2007.

⁵ The latest estimate is that everybody in the UK will have access to Internet by 2014 (BBC, 2011).

became government flagships for assisting people to get online; often based in existing community assembly points such as schools, libraries, and council buildings (UK Online Centres, 2013).

As a result, deprived areas could begin to benefit from using such centres to develop new social networks that could help (re)create the social identity, social cohesion and social inclusion of residents within and around a specific location (Hamilton, 2001; Dabinett, 2000). This was supported by PAT 15⁶, whose remit included the:

‘social inclusion and economic development in the information society are mutually reinforcing; and for people in low-income neighbourhoods, gaining and exploiting ICT skills can lead to opportunities to participate fully in local and national economies’ (National Strategy For Neighbourhood Renewal, 2001 p.197).

As Tony Blair put it ‘the best defence against social exclusion is having a job and the best way to get a job is to have a good education with the right training and experience’ (PAT 15, 2001). It appeared taken for granted that by acquiring new ICT skills, people living in disadvantaged areas would be able to become more economically competitive in, and attractive to, a globalised market place (Dabinett, 2000).

The change in government from Labour to the Coalition in 2010 did not change the overall direction of ICT policies. If anything, there has been a continuation of New Labour policies with the rhetoric still remained focused on access as the key to digital inclusion. As David Cameron states in his letter to Martha Lane Fox, appointing her as the UK Digital Champion:

‘To make this happen, we need to encourage more people to go online and hence be able to access

⁶ PAT 15 was one of eighteen Policy Action Teams (PAT’s) set up by the Social Exclusion Unit in 1998 to provide essential building blocks for the Labour Governments National Strategy for Neighbourhood Renewal. Led by the Department of Trade and Industry, PAT 15’s remit is concerned with making Information and Communication Technology available to all who want it, but is particularly aimed at people living in disadvantaged areas.

information and services. In addition to the many benefits to people themselves – including making connections with other people, consumer savings, increased employability, and access to public services – this will also help us to drive down the cost of delivering public services.’ (Cabinet Office, 2010b)

The obvious concern, like that of the previous Labour government, is that exclusion from Internet mediated economic, social, political and cultural networks is viewed as one of the most damaging forms of segregation in our economy and in our culture (Choudrie, Brinkman and Pathania, 2007). The emphasis is still focused on the benefits and importance of ICT and the Internet for society, particularly with regard to deprived areas and in terms of economic and social inclusion. A key principle of government policy is to facilitate access to computers and the Internet. Improved access to the Internet is said to help people to develop new skills, improves their employability and confidence, and helps regenerate their communities through increased social networking.

Nevertheless, at the beginning of 2010 ten million people in the UK had still never used the Internet⁷ (BBC, 2011). This resulted in the Government’s appointed digital champion Martha Lane Fox, along with a small team, establishing the ‘*Race Online 2012*’ campaign⁸, which attempted to get millions more people to use computers and the Internet by the end of 2012 (Capgemini Consulting, 2012). By increasing the input of the private sector and co-ordinating the public and third sector digital inclusion strategies, non-users were to be supported to get online (Cabinet Office, 2010a). This was to be coordinated in several ways. For example, the donation of ICT equipment for sale at reduced costs and by businesses and charities offering ICT support to customers and staff to overcome barriers to getting online (Lane Fox, 2010).

⁷ Although the figure of 10 million is given here, the actual figure could be far greater depending on which survey you choose to look at. This figure is gleaned from the Office for National Statistics (2011) and represents around 17% of the UK population, but according to the Oxford Internet Survey (OxIS) (2011) the figure rises to 27% of the UK population. This is probably because the Office for National Statistics also measure ex-Internet users.

⁸ Now known as ‘Go-on UK’ available at: <http://www.go-on.co.uk>.

Policies aimed at providing access to excluded populations came about as a direct result of the move towards the digital provision of public services. Information in the areas of crime, education, entertainment, health, housing, welfare, employment and local and national issues have been moved online.

This began with the Conservative government in 1996 and was taken forward by Labour in 2004 with the creation the Directgov web site. In October 2012, this was replaced by a new Gov.uk web site under the 'Digital by Default' public service delivery policy (Capgemini Consulting, 2012). The coalition government has also taken steps to ensure that all public services fully exploit ICT delivery through public, private and third sectors partnerships. Today, 94% of citizen-based services in the UK are accessible online, compared with the EU average of 83% (Cabinet Office, 2010b). New measures have also been implemented to reduce inefficiency, replication of systems and duplication of effort through a process of standardisation and simplification (Lane Fox, 2010). In future, all public services are to be delivered via a common infrastructure design (Cabinet Office, 2010b; Lane Fox, 2010).

Due to the commitment of 'online' delivery of public services it becomes increasingly important that people have access to computers and the Internet. However, with a large proportion of the population unable to use or access the Internet, there are problems associated with this type of policy approach. For instance, the idea that facilitating universal access to computers and the Internet could somehow act as a panacea, solving the digital divide problem, is difficult to believe. By placing people within the dichotomy of either 'has or have not' access or ownership to ICT 'merely helps to disguise emergent divisions or multiple digital divides' (BECTA, 2001, p.4). Often these divides involve a complex web of interconnected social, economic and cultural factors that cannot be fully captured by policies which focus solely on creating universal access to new technology (Selwyn, 2004; Rodino-Colocino, 2006).

2.4 The problem of 'universal access'

Initiating schemes that aim to create universal access may appear to be the best solution to help disadvantaged groups⁹ get online. This is especially true considering the fact that these groups are less likely to have access to ICT and Internet, yet often have the most need for interacting with government departments (Choudrie, Brinkman and Pathania, 2007). However, what is meant by access is often a question of how it is interpreted. The initial characterisation of what access meant was formulated by the NTIA (1995) and involved the possession of physical access to the Internet – at that time a telephone line and a computer and modem. In other words the emphasis was on network infrastructure, something that has been at the forefront of what it means to be 'connected' ever since. To some, once a person has ownership of these items then digital access has all but been achieved (Compaigne, 2001). As a result, most politicians, academics and businesses initially felt that the digital divide would be closed as soon as everyone owned an Internet ready computer and had a connection at home – or was at 'least able to use one at a public place' (van Dijk, 2012, p.197).

Technological optimists believed that new technology would quickly filter down to all members' of society via diffusion (Graham, 2011). The basic remit of diffusion theory holds that the most deprived in society would be able to 'catch up' with the more affluent in their appropriation and use of new technologies, in a similar manner to the way the television and telephone filtered through society (Rogers 1990; Grantham and Vaske, 1985). As new technology becomes more 'readily available and affordable, and people become more aware of them and their uses, they will become integrated into people's lives' (Hüsing and Selhofer, 2002, p.1281). However, the initial cost of purchasing a computer and subscribing to an Internet connection meant universal access did not happen as quickly as expected. Hence the plethora of public policy set in place to counteract this problem (Thierer, 2000; Cabinet Office, 2010a).

⁹ For example, the elderly, the poor, the less educated and the language limited (Choudrie, Brinkman and Pathania, 2007).

What is also important to remember at this point is that access does not equate to usage. Although access to computers and the Internet is important, even when it is physically available this does not necessarily mean people will use it and cross over the digital divide (DiMaggio and Hargittai, 2001). With more reliable longitudinal data¹⁰ of people's access and connectivity, physical access alone is shown not to automatically guarantee the effective use of digital media. According to the Office of National Statistics (2012) nearly 84% of the adult population in the UK have used the Internet, which could easily be misconstrued that the digital divide has almost been closed. However, surveys regarding the digital divide are often viewed as falling short of any kind of real sociological sophistication so the information they generate may be misleading (Webster, 1995; Selwyn, 2002). In this sense, local, national and international bodies, make use of facts and figures concerning the digital divide using quantitative accounts, overlooking the qualitative nature of technological diffusion and the contexts where the diffusion takes place (Tsatsou, 2011). Just because an individual states in a questionnaire they have used the Internet does not mean they are using the Internet regularly or effectively. Instead, attention needs to be diverted from investigating the divide between those on and offline to identifying differential levels of access and types of usage (Hargittai, 2002; Loader and Keeble, 2004).

According to DiMaggio and Hargittai (2001) physical access to Internet technologies is never enough to ensure productive use of it. Other scholars have also argued quite clearly for moving beyond physical access to emphasise the use and the skills needed to apply digital media; something often referred to as the second digital divide (de Haan, 2004; Reilley, 2011; Hargittai, 2002; van Dijk, 2005). This second-level digital divide describes the gap that separates the consumers of content on the Internet from the producers of content (Reilley, 2011). Because the digital divide is viewed as decreasing in most developed countries, mainly due to the exponential growth and penetration of the Internet, the meaning of the term digital divide is evolving beyond physical access (Graham, 2011).

¹⁰ For example, the Oxford Internet Survey (OxIS, 2011).

For example, new online applications have made it possible for most people to become creators of online content. However, whilst Web 2.0 technologies, like Facebook, YouTube, Twitter, and Blogs, allow people to contribute online and create content, for most people how the technology works is beyond their understanding. A key result of this is an increasing separation between those who have the skills and understanding to interact more fully with the technology and those who are simply passive consumers of it (Reilley, 2011). Similarly, researchers are paying more attention to the way the Internet is being accessed through more mobile and diverse devices, such as, laptops, readers, mobile phones and tablets (OxIS, 2011; Correa, 2008). As a result, it is 'becoming less and less useful to merely look at demographic differences of who is online when discussing questions of inequality in relation to the Internet' (Hargittai, 2002, p.1). According to van Dijk (2012) the digital divide is a much more complicated issue which needs further consideration beyond physical access¹¹. He goes on to distinguish four types of new media access, which include: motivation, material or physical access, skills and usage.

2.5 Successive types of access

2.5.1 Motivation

The process of 'appropriating new technology starts with the motivation to achieve access' (van Dijk, 2012, p.197). Motivation is important because this is the catalyst which people need in order to purchase a computer and network connection, learn the necessary skills and begin utilise some of the available applications (van Dijk, 2012). However, people are not motivated for a number of reasons. For instance, some people may not like computers or even fear them. Others may have used computers and the Internet in the past but no longer wish to, while other people have no opportunity to obtain access because of a lack of 'material means or mental and educational capacities' (van Dijk, 2005, p.197). The lack of motivation can be caused by insufficient

¹¹ Similar formats have been proposed by other researchers wanting to understand how we can overcome the issues surrounding unequal access to computers and the Internet, for instance, DiMaggio and Hargittai, 2001; Clement and Shade, 2000; Goraya and Light, 2011 and Selwyn, 2004.

temporal, mental, material, social or cultural resources. These equate to a lack of time, technical knowledge, money and social relationships that help people to access new technologies; as well as, cultural lifestyles and identities that fit to both computer and Internet use (van Dijk, 2012).

The lack or the availability of these resources can be explained by personal inequalities and positional inequalities. Personal inequalities relate to age, gender, ethnicity, intelligence, personality and health and disability. For example, age plays a role in unequal access. It is well known that, on average, younger people are more motivated to adopt and use computers and the Internet than older generations (Dutton and Blank, 2011). Gender can also be cause for unequal levels of access to new technology, although 'there is essentially no gender gap left in Britain with respect to mere adoption of the Internet' (Dutton and Blank, 2011 p.15). Intelligence also counts. For example, people with no educational qualifications are much less likely to be Internet users¹² (Finn and Korukonda, 2004). Likewise, people with disabilities are also less likely to access new technology. According to Dutton and Blank (2011) nearly sixty per cent of disabled people were not using the Internet.

Positional inequalities, for example, levels of education and employment status, seem to be less important than personal inequalities with regard to motivation. Nevertheless, having or wanting a particular job or type of education can often become the necessary catalyst for wanting to obtain access to ICT and the Internet (van Dijk, 2012). The same could also be true depending in which country you reside. For example, inhabitants of high tech countries, such as Hong Kong and Sweden, where it is becoming almost compulsory to own a computer and have Internet connection (Woyke, 2008).

¹² People with no educational qualifications equate to only 31% of Internet users, compared to those with basic (80%), further (79%), or higher education (91%) (Dutton and Blank, 2011).

2.5.2 Physical and material access

After acquiring the motivation to get access, the challenge for new users is to act on this (van Dijk, 2012). This can include purchasing a computer and Internet connection or using an available one – something public opinion, public policy and a variety of research has been concerned with (van Dijk, 2005; Selwyn, 2002; Dutton and Blank, 2011; Hüsing and Selhofer, 2002; Cabinet Office, 2010a). However, having physical access to an Internet connected computer does not automatically mean using that connection. For example, people may not be able to use a workplace connection or a home computer may not be available equally to all members of a household (DiMaggio and Hargittai, 2001). Similarly, community technology centres, aimed at providing computers and Internet facilities and support to local communities, may limit access in terms of what services they provide or what times they are open.

Although physical access is essential, material access is often a more important issue for getting people involved with new technology¹³. Without material resources initial start-up costs – Internet ready computer and connection – are rarely feasible. More than this, there are the often costs of keeping up-to-date with new technology along with the hidden costs of ‘subscriptions to gain access to particular channels, programs or sources of information’ (van Dijk, 2012, p.199). As Van Dijk (2005, p.117) stresses the material resources ‘keep playing their role after a physical connection is acquired’. To be able to participate fully in the information society material factors play a significant role and need consideration.

¹³ For example, people in the highest income category (over £40,000) were more than twice as likely in 2011 to use the Internet than those in the lowest income category (£12,500 and below), by 99% versus 43% (Ofcom, 2011, p. 17).

2.5.3 Digital Skills

The next form of access concerns learning to manage the hardware and software in order to gain benefits from new media. As more people gain access to ICT and the Internet, the level of their digital skills become much more significant in relation to their potential of being digitally excluded (Commission of European Communities, 2005). For example, Bonfadelli (2002, p.72) points out that Internet usage requires not only 'high enabling technologies but also a much more active and skilled user'. For van Dijk (2012) two related areas come into play here, media-related and content-related digital skills. Media-related skills are based on two types of technical skills: 'operational skills and formal skills' (van Dijk, 2012, p.200). Operational skills are what are needed in order to use Internet technology. An individual must be competent in turning a computer on and off and using a keyboard and mouse (van Dijk, 2005). Formal skills entail mastering formal structures such as file and menu structures, web-browsing and navigating the Internet (van Dijk, 2012; Park and Kim, 2000). Content-related skills refer to four key abilities needed to participate fully in digital media, these are: 'informational skills, communication skills, content-creation skills and strategic skills' (van Dijk, 2012, p.200).

Informational skills are necessary to carry out valid searches for information. For example, to understand how search engines work and to be able to select and evaluate the media content gained from such searches. Communication skills need to be learned in order to be effective in exchanging meaningful digital media, such as sending and receiving emails. Content-creation skills refer to being able to contribute to websites, chat lines, blogs or social media sites such as Facebook or twitter. Finally, strategic skills enable people to make use of digital media for their own purpose. Perhaps gleaning information from the Internet to be able to add content to a personal web site or producing a report for work using information gained in the same manner (van Dijk, 2012). These four categories are based on the relevant skills needed to be able to 'function well in an increasingly digital environment' (van Deursen, van Dijk and Peters, 2012, p.828). They also rely heavily on an individual already

being competent with media-related skills – technical competence, technological literacy and technical proficiency (DiMaggio and Hargettai, 2001). The Internet assumes that operational and formal skills are in situ to begin with. As a result, if individuals are not proficient in these areas they will rarely undertake any part in content-related skills (van Deursen, van Dijk and Peters, 2011).

The idea that the digital divide can also exacerbate existing inequalities is also demonstrated here, especially when taking into account that ‘those who have a high level of traditional literacy also possess a high level of content-related digital skills’ (van Dijk, 2012, p.201). If we consider the socio-economic structure of most developed countries, it is usually people in the middle and upper strata who are able to utilise higher-end technical skills for their personal or professional benefit, often at the expense of those at the bottom (Perry and Francis, 2010). This is corroborated by a number of surveys undertaken by van Deursen, van Dijk and Peters (2011, p.16) that ‘repeatedly demonstrate that the six types of digital skills applied to Internet skills expose a rising level of inequality from top to bottom’. In other words, most inequality can be found within the content-related information and communication skills, the content-creation skills and the strategic skills.

Using the same surveys, van Deursen, van Dijk, and Peters (2011) demonstrated that young people were much better at using media-related skills, the Internet for example, than older generations. But conversely, older generations were better with content-related skills, undertaking valid searches and evaluating the information as well as being able to appropriate information much more effectively for their own benefit. The results of this are clearly at odds with current results from recent survey research into Internet access and age. For example, while 99% of young people aged 14-17 may be using the Internet at this moment in time, they are not utilising content-related digital skills as thoroughly as older generations, even though there are fewer of the latter age group online¹⁴ (Dutton and Blank, 2011). From this it would seem

¹⁴ 80% of people aged between 45-54 and only 33% of people aged over 65 (Dutton and Blank, 2011).

that an individual's education and age have the most direct bearing on digital skills inequality.

2.5.4 Usage

The ultimate purpose of learning to make use of new technology can be discussed under van Dijk's (2012) fourth kind of access – usage. Although the three types of access outlined above are viewed as necessary in order to utilise new technology meaningfully, they do not automatically guarantee frequent and diverse usage. For example, an individual might have the motivation to use computers and the Internet, have physical access to them and the skills with which to manipulate them, but still have 'no need, occasion, obligation, or time' to actually make use of them (van Dijk, 2012, p.201). Why an individual chooses to use, or not use, new technology is a complicated issue. DiMaggio and Hargittai (2001) claim that people need a reason or purpose to use new technology. Similarly Cross (2005) points to the fact that people will use digital media when there is something in it for them, highlighting the success of digital televisions and mobile phone as examples. Other researchers have put the onus on a lack of local content available for users to engage with (Pinkett, 2003). However, according to van Dijk (2012) there is an inequality of usage which underlines these explanations.

van Dijk (2012, p.202) proposes the theory of a 'usage gap' where people who have different educational backgrounds use different types of Internet applications. The 'usage gap' theory, at first glance, seems to emulate the 'knowledge gap' theory considering mass media use of the 1970s (Tichenor, Donohue and Olien, 1970). However, the knowledge gap is concerned with the 'differential diffusion and development of knowledge or information' (van Dijk, 2012, p.202). There are differences between the emergence of knowledge gaps concerning older media and usage gaps concerning the Internet. As Bonfadelli (2002, p.72), points out 'in comparison to print media and television, Internet usage requires not only high enabling technologies but also a much more active and skilled user'. Whereas traditional media require some form of active mental processing, the Internet is much broader in scope

and involves some form of active engagement leading to the possibility of interactions, transactions and interpersonal communication. Making use of the Internet therefore comprises 'action, interaction and transaction' (van Dijk, 2012, p.202); and it is here that current issues can be found.

For example, unlike the knowledge gap thesis, people with lower levels of education are using the Internet more hours per day than those with higher levels of education (van Deursen and van Dijk, 2009). Although this should be received enthusiastically it can actually be viewed as problematic, especially when considering the differences in types of Internet application being used. Whilst people with lower levels of educational significantly use more chatting, gaming, social network sites and online market places, people with higher level education prefer to use more news, government or travel services applications (van Deursen and van Dijk, 2009). As the Internet becomes ever more popular, this can lead to the potential problem where 'all existing socio-cultural differentiations in society will be reflected in Internet use and, by means of this use they will be reinforced, instead of reduced' (van Dijk, 2012, p.202). This is supported by Steyaert (2002, p.200) who argues that 'technology does not create a new social divide, but replicates the existing social stratification'. Here then, an individual's social and cultural background can be seen as affecting the type of online applications he or she chooses to use.

This pattern of usage is not benign, but has consequences in all the fields of contemporary and future society (van Dijk, 2012). It also reflects the extent to which technology use 'enables individuals to participate and be part of society' (Selwyn, 2004, p.350). For example, old media and face-to-face communications are becoming inadequate ways to fully participate in an ever-increasing online world (van Dijk, 2005). A lack of access or only using low level digital skills could result in the appearance of first, second and third class citizens. These are represented by an information elite at the top, who have access to all areas of the information society, often making the most important decisions and having the best jobs and societal positions; a majority of the population in the middle who have access but fewer digital skills; and the

excluded at the bottom, which consist of 'the lowest social classes, ethnic minorities and the majority of (new) immigrants and particularly the elderly' (van Dijk, 2012, p.205). Rather than a two-tiered society of 'haves' and 'have-nots' found within the former digital divide debate, we have an increasingly complex situation constructed through the differentiation of social, economic and cultural factors.

Considering van Dijk's (2012) four types of access reveals a complicated, but quite inclusive, overview concerning inequality of access to computers and the Internet. By discussing issues of access it becomes apparent how encompassing the digital world has become over the last twenty years, developing at a staggering rate to seemingly incorporate all aspects of life. Exploring these issues also demonstrates that bridging the digital divide, in order to facilitate economic and social development and inclusion, can no longer simply be a case of promoting policies of universal access (Damarin, 2000). There are still a large proportion of disconnected people in society demonstrating that such policies do not seem to be accomplishing all they set out to achieve. For example, according to van Dijk (2012, p.205) between twenty and thirty per cent 'of the populations of the most advanced high-tech societies' are unconnected and excluded.

Those who are digitally excluded in society¹⁵, in terms of access to ICT and the media, 'are remarkably similar to those who can be characterized as being socially excluded in most non-technological aspects of society' (Selwyn, 2003, p.351). They are the ones most likely to be living in some of the most deprived areas in the UK where much of the ICT (and other) regeneration policy over the last twenty years has been directed (Dabinett, 2001; Cabinet Office, 2005; 2010). The underpinning assumption by government, and other funding bodies, is that by 'introducing technology to disadvantaged communities, the digital divide will be removed and people will go online' (Keeble, 2003, p.76).

¹⁵ Similar to van Dijk's (2012) findings, a wide body of research has established that the key digitally excluded groups are typically those who are also socially disadvantaged. They tend to be older people, people in the lower social class, people who are likely to live alone and people who have low level qualifications (Frontline, 2008).

Gaining access will help the excluded to create new social networks, 'developing social cohesion and inclusion of residents within and around a specific location' (Hamilton, 2001, p.31, Dabinett, 2000). Similarly, acquiring new ICT skills can make excluded communities become more economically competitive in, and attractive to, a globalised market place. Both of these aims have been deemed necessary measures to avoid further social divisions and to ensure social and economic inclusion in the information society (Dabinett, 2001; DfEE, 2000; 2001).

2.5.5 Situating community

A key tenet of various policy responses over the last two decades to challenging the digital divide, both in the UK and elsewhere, has been focused upon the role of the voluntary and community sector. This is mainly because community relations have continued to figure highly in policy debates to tackle social exclusion and deprivation, whether under the previous Labour government or under the new Coalition. The central aim has been to develop local projects designed to provide 'public access and support for the adoption of ICT by those currently excluded' (PAT 15, 2000, p. 64; Cabinet Office, 2010b). As a result communities themselves have become central to regeneration efforts using technology to help bridge the digital divide (Loader and Keeble, 2004). The importance of communities in assisting with this task is explained by Loader and Keeble (2004, p.4) who state:

'Communities are an intermediate space between the individual/family and larger social structures, such as government, and are important for fostering many life opportunities'.

It is through this space that the potential 'transformative qualities of ICT and the Internet for community development, economic regeneration, democratic renewal and social support is enacted' (Loader and Keeble, 2004, p.5). Because communities can often be found central to such policies, it is only reasonable to view communities as the medium through which any kind of assessment of such policies can take place. However, the definition of

community itself is much contested and in turn needs to be examined (Plant *et al.*, 1980). As such, the next subsection outlines the disputed nature of community and explores its importance to this research.

2.6 Community: a diverse concept

'A few minutes spent browsing through any local newspaper will show how over used the word 'community' has become. 'Community policing', 'care in the community', 'the local community', 'the black community'; all sorts of groups invoke the 'C' word to legitimate their aims' (Payne, 1994, p.16).

The concept of community has had a long and varied career within sociological and other academic areas, for the past 200 years (Bell and Newby, 1971; Stacey, 1969; Crow and Allen, 1994; Cohen, 1985). The classical sociologists of the nineteenth century produced a discourse lamenting the passing of community with the onset of industrialisation and development of capitalism. However, as the above passage makes clear community has far from disappeared, and, if anything, has regained a contemporary resonance within the current social, economic and political landscape.

In order to begin to understand this reasoning it is necessary to ask, what is a community? Gerard Delanty (2003), in his book *Community*, gives one of the fullest single explanations:

'The many expressions of community have varied from alternative and utopian communities to traditional villages and urban localities in industrial cities to transnational diasporas and virtual communities. Communities may be based on ethnicity, religion, class and politics. They may be large or small; have 'thin' or 'thick' attachments that underlie them; may be locally based and globally organised; be affirmative or subversive in their relation to the established order; they may be traditional, modern or even postmodern' (Delanty, 2003, p.2).

In other words, there is little that cannot be called a community, as long as the reference is to groups of people. This description was aptly illustrated by Hillary (1955) nearly fifty years ago, when he found 94 ideal type definitions of the term community and concluded that the only thing they all had in common was people¹⁶. From this, it is not difficult to see why the term community can be viewed as a highly contestable one. This has led many academics – social and political scientists, historians and philosophers – to question its usefulness as a concept at all (Stacey, 1969). Yet, 'virtually every term in social science is contestable and to reject the word community is to replace it with another term just as challenging' (Delanty, 2003, p.2).

2.6.1 The sociological roots of community – community lost

The concept of community was introduced, at least partly, as a means of expressing anxiety about the social effects of industrialisation in the 19th century (Nisbet, 1967). The two key advocates were Tonnies and Durkheim. Durkheim's ideas of societies were based on 'mechanical' and 'organic' solidarity and Tonnies' community (*gemeinschaft*) and association (*gesellschaft*) were part of this process. Durkheim believed that society was developing progressively towards a complex society based on organic solidarity (Durkheim, 1988). In contrast, Tonnies' framework was perhaps the most pervasive and addressed the social relationships most directly:

'All intimate, private and exclusive living together, so we discover, is understood as life in *Gemeinschaft* (community). *Gesellschaft* (society) is public life – it is the world itself. In *Gemeinschaft* with one's family, one lives from birth on, bound to it in weal and woe. One goes into *Gesellschaft* as one goes into a strange country. A young man is warned against bad *Gesellschaft*, but the expression bad *Gemeinschaft* violates the meaning of the word.' (Tonnies, 1955, p.33)

¹⁶ Here, Hillary is utilising Redfields' (1947) development of Tonnies' original ideas – a rural-urban continuum upon which social settlements could be placed.

Tönnies' thesis concerning the loss of community has been quite influential in romanticising a world that was lost, investing a moral superiority in the rural past. With the rise of industrialisation came the development of mass society with an unstable social order. Wirth (1938, p.12) described these new types of urban relationship as 'large-scale, dense and heterogeneous', and the urban patterns of behaviour as 'impersonal, superficial, transitory, and segmental'. The loss of community also included a decline in associations between family and neighbours, traditionally geographically bound by tradition and solidarity. This type of analysis helped community to gain its connotations of 'motherhood and apple pie' (Fulcher and Scott, 1999, p.408). A view supported by Elias (1974, p.xi) who stated that 'community was a symbol of a simpler, warmer and more homely society, easily contrasted with the discontent and suffering associated with urbanization and industrialization, a symbol of a past and a better age.'

Like Tönnies, when investigating the effects of industrialisation, Durkheim introduced a dichotomy between traditional and modern societies. Durkheim (1988) was interested in what held society together establishing a division between the old type of society and the new, mechanical and organic solidarity. The former is based upon 'similarities and shared location, the latter upon differences and shared interests' (Allen, 2010, p.123). For Durkheim (1988) there are two key ideas in society: similarity (mechanical) and difference (organic). Pre-industrial society was defined by similarity, or mechanical solidarity, characterised by a set of common values, which included very few personal differences, little competition and high egalitarianism. From this commonality, or community, is developed by people sharing and reinforcing each other's feelings (Allen, 2010). As society progressed and became more complex through an increasing division of labour, mechanical solidarity gave way to one based on difference, or organic solidarity. Here, 'differentiated social units (people) are held together through shared need and abstract ideas and sentiments' (Allen, 2010, p.123). As such people become mutually dependent on each other.

It is through the work of Tonnies and Durkheim that the idea of solidarity has been viewed as central tenet in the definition of community and is still popular in sociological literature¹⁷. Parsons (quoted in Fulcher and Scott, 1999, p.107) refers to community as a 'wide-ranging relationship of solidarity over a rather undefined area of life and interests'. Solidarity, in this sense, could be viewed as relationships between people who acknowledge that they have something in common; that they feel a sense of camaraderie and solidarity. As a result community can be related to terms such as social cohesion. Etzioni (1993) captures the essence of this in his description of community as the positive connotations of togetherness and community spirit. He defines community as 'webs of social relations that encompass shared meanings and above all shared values' (Etzioni, 1998, p.13).

Many writers continue to stress the importance of solidarity in contemporary society¹⁸. For example, Willmott (1986) defines three types of community: place (or locality defined by where we live, our neighbourhood); attachment (a measure of the level of interaction with others, and the sense of identity); and interest (a group of people with common interest). Willmott's first definition, the community of place, implies physical boundaries and the definition of the community by geography. Most people, if asked, would think of community as their immediate neighbourhood, their block of flats or housing estate (Young and Willmott, 1962; Willmott, 1986). These are usually physical artefacts such as large roads, rivers, or specific buildings. Alternatively they may be socially or politically defined divisions such as church parishes or council boroughs (Willmott, 1986). Place can also be explained as a small or large community; a village, town, region, nation and even a group of nations such as 'the European Community' (Gellner, 1983). However, the larger the 'place' becomes, the more questionable the definition becomes. Moreover, this was the starting definition for community used by the UK government in its pilot network connectivity project 'Wired-Up Communities' (Johnston, 2001).

¹⁷ For example, see Hillary (1955), Lee and Newby (1983) and Etzioni (1994).

¹⁸ For example, Willmott (1986), Cohen, (1982) and Payne (2000).

The second definition, community of attachment, can be explained as who you know and identify as family or a friend, independent of geographical locality. This usually refers to emotional ties between individuals (Willmott, 1986). These are the forms of collective association and action that take place between individuals through a community of shared identities. Communities of attachment may also go beyond people to include non-human elements, such as religious or linguistic territories, or historical ties to places; 'they may be thought of, rather, as existing in the minds of the beholders' (Cohen, 1982, p.12). A community of attachment necessitates social interaction. Such social interaction can develop a reserve of emotional obligations and mutual support through ongoing participation, contact with others (Willmott, 1986) and the nurturing of trust (Fukuyama, 1996). This can be referred to as 'social capital', defined as the level of productive investment in social relations and access to social resources (Lin, 2001). Here, social capital can help ease transactions and assist individuals accomplish unrelated goals (Field, 2003).

The third of Willmott's (1986) definitions is that of a community of interest, that is, a group of people sharing and meeting to pursue similar interests. These can be religious, political, based on hobbies, or shared work associations. Some would argue that this is one of the most significant forms of community (Putnam, 2000) and as such can help to produce high levels of social capital. Communities of interest can be discerned as a group of people talking over the Internet about football; a church group debating the nature of God; or a national disarmament organisation discussing how to get rid of nuclear weapons. This form of community does not require the participating individuals to share the same geographical locality, but merely communicate their shared interest in a knowledge domain.

Communities could be defined more or less extensively around these three concepts, separately, in combination, or at the very extreme simultaneously. However, a definition in which all three concepts coincide has little relative value as a sociological tool, mainly because the reality is always likely to fall short of such an idealised standard (Crow and Allen, 1994, p.5).

2.6.2 The rise of community – community found

Nevertheless, it is from such idealisation that the pervasive 'loss of community' thesis gains credibility in contemporary society. Current visions of community have been reinforced with conservative and nostalgic 'communitarian political and ideological discourses' (Morris, 1996, p.229). Communitarianism believes that social policies should be developed to encourage a resurgence of community. This has heralded a return to viewing community romantically, as a place of warmth, intimacy and social cohesion (Poppo, 1995). As such, it has become very influential in social policy in recent years, evident in areas such as community care, community work, community policing, community development, community education and community politics.

Politically, Tony Blair spoke expressively of community as people sharing and working together. This could be discerned from his address to the Labour Party Conference in 1997: 'A decent society is not based on rights; it is based on duty – our duty to each other. To all shall be given opportunity, from all responsibility demanded' (quoted in Lister, 1998, p.222). Similar comments were being attributed to community by Blunkett (2007, p.3) 'in an ever increasingly global economic, social and cultural environment, the anchor, stability and security of community has never been more important'. These types of political rhetoric complement fully the communitarian work of Etzioni (1993). They also help illustrate the commitment to reinforcing the relevance of civil society, 'people helping people, creating mechanisms and institutions to reflect the needs and aspirations from their own lives, and joining together to make a difference through mutual action and common purpose' (Blunkett, 2007, p.3). As such, communitarian ideology became a central tenet of the community development agenda, to be found in regenerative policies such as 'A New Commitment to Neighbourhood Renewal' and 'New Deal for Communities' (Social Exclusion Unit, 2001; Batty *et al.*, 2002).

A similar sentiment can also be found within the new Coalition government's Big Society remit towards community (DCLG, 2010). In 2010, the Coalition Government put in motion 'The Localism Bill', which sets out the 'beginning of

a power shift away from central government to the people, families and communities of Britain'¹⁹(DCLG, 2010, p.12). This includes a 'transfer of power, money and knowledge to those best placed to find the best solutions to local needs: such as, elected local representatives, frontline public service professionals, social enterprises, charities, co-ops, community groups, neighbourhoods and individuals' (DCLG, 2010a, p.5). There may be subtle differences between the successive governments, but the underlying message still has the community at the heart of these policies. More importantly, both hark back to Tonnie's Gemeinschaft, emphasising responsibility, duty, localism and people working together for the common good.

This renaissance of community in contemporary society has not been without critique. Traditional communities are often described as 'a world where goods and services were fairly distributed, authority was justly exercised, where each member identified with the living body of the community' (Morris, 1996, p.233). However, traditional communities were not as romantic and good as they were often made out to be. Frequently these types of community could be bigoted, patriarchal and restrictive. Bauman (2001) highlights the fact that whilst a community often provides its members with a sense of security, it is also the place that can deprive them of freedom and the right to be who they are. This was particularly true of excluded members such as the disabled, ethnic minorities and gays. The concept of community needs to be treated carefully otherwise it can be overwhelmed by 'representational, uninterrogated reconstructions of the past, which succeed in presenting a world that never was' (Smith, 1995, p.64).

Much of the criticism aimed at the concept of community can be found in the way many scholars choose not use it. Instead, discussions of community have recently been overshadowed in many areas of academic and public life by those relating to social capital. The focus moved into taking stock of a community's 'social capital' and building on this as a means to unite and empower communities, thus helping to (re)create civil renewal. In fact, it

¹⁹ This was only focussed on Britain due to the devolved nature of other parts of the United Kingdom.

would be true to say that we are now more likely to speak of 'social capital' where once we might have said 'community' or, more simply, 'neighbourhood'²⁰.

2.6.3 Community and social capital

Social capital is closely connected to many recognisable terms to be found within sociology. For example, it captures the essence of concepts such as social support, solidarity, social cohesion and community, similar in nature to the ideas of Durkheim and Tonnies outlined above (Lin, 2001). However, despite the widespread usage of social capital there is also a great deal of deviation and confusion over how best to define and operationalise it²¹. Although divergent, most explanations have the idea that social capital refers to 'connections' among individuals, to social networks and norms of reciprocity and trustworthiness that arise from them (Healy, 2001). This is supported by McDonnell (2004, p.29) who confirms that 'the basic idea of social capital is that interaction enables people to build communities, to commit themselves to one another, and to knit the social fabric'. Similarly, Field (2003) refers to social capital as a way of conceptualising the intangible resources of community, the shared values and trust upon which we draw in everyday life.

One of the main implications for social capital from an academic or policy perspective is to understand and develop civil engagement (Gilbertson *et al.*, 2005). Those concerned with social capital have looked to the density of social networks that people are involved in; the extent to which they are engaged with others in informal social activities; and their membership of groups and associations. Utilising different types of social capital has helped understand the connections between people and how these function. Putnam divides social relationships broadly into two types: the strong social ties between family, close friends and associates – 'bonding social capital'; and the weaker,

²⁰ They may also relate social capital to social energy, community spirit, social bonds, civic virtue, community networks, social ozone, extended friendships, community life, social resources, informal and formal networks, good neighbourliness and social glue (Office for National Statistics, 2001, p.5)

²¹ See, for example, Field, 2003 and Coleman, 1988.

extended ties between different social groups – ‘bridging social capital’ (Putnam 2001).

Bonding social capital is ‘exclusive’ and reinforces membership of a specific group. This enables a group to function cohesively, bypassing or enhancing other forms of capital. For example, this might occur through the sharing of skills and information, reciprocal favours, or voluntary activities to mutually improve the common environment (Field, 2003). A high level of bonding social capital is generally seen as a positive attribute of a healthy neighbourhood, enabling support of individuals and the development of a community. Excessive levels, however, can be negative, reducing tolerance of outsiders, stifling innovation, supporting unhealthy norms, and causing people to reject alternatives (Cavaye, 2004). Interestingly, within a communitarian perspective, the presence of strong bonding capital is considered to outweigh the negative possibilities (Etzioni, 1993).

Bridging social capital on the other hand is ‘inclusive’, linking separate communities. According to Stone and Hughes (2001, p.67), ‘bridging social capital involves overlapping networks in which a member of one group can gain access to the resources of another group because of overlapping membership’. These links extend a community’s reach by opening up contacts to different individuals and organisations that could offer opportunities or services not available within the local community. It is said that bonding social capital helps people to ‘get by’, while bridging capital helps people ‘get ahead’ (Field, 2003). Woolcock (2001) argues that a balance of bonding and bridging social capital is required to ensure community sustainability. A strong close social circle is important but so is a ‘tolerance of diversity and a willingness to forge cooperative relations with outsiders’ (Field, 2003, p.28).

Bridging social capital can also be divided between ‘intra-community’ bridging local community ties, and ‘intercommunity’ bridging ties across the borders of local communities (Woolcock, 2001). Sometimes the latter is referred to as ‘linking’ social capital and has been considered useful when attempting to understand the role of social capital in communities facing rapid change.

However, other researchers have debated whether this really a separate form of bridging capital (Flora and Flora, 2004). Bridging social capital may also be subjected to questioning, to deduce whether it provides 'lateral' bridging between equal partners, for example, neighbouring residents' groups; or 'vertical' bridging between more and less influential groups, for example, the city council and a local residents' group. Social capital can be understood as a convenient shorthand for describing the reciprocal relationships among persons and groups with similar backgrounds, such as similar ethnic groups or social characteristics; which links diverse community groups to each other and to groups external to the community (Flora and Flora, 2004).

Also, while some researchers describe social capital as the glue that holds other forms of capital together it is possible for people to live in the same area without feeling any emotional ties to one another (Putnam, 2001). This forms the basis for the 'loss of community' debate concerning places we inhabit but have little attachment to. The argument is that communities of locality have become less socially significant with the development of transportation technologies and may continue to decline as information technologies develop (van Dijk, 2012). As our social circles widen it becomes easier to choose whether or not to participate in our community of place, and instead turn more to communities of attachment. This clear division between locality and attachment draws attention to an important point: that community is always imagined (Anderson, 1983). Communities are not fixed, but defined, discussed, and redefined throughout time.

It would seem that social capital – whether bonding, bridging or linking – is being taken very seriously by government departments and other funding bodies²² associated with community development. For example, it is viewed as one of the central tenets of the Department for Communities and Local Government (DCLG). The DCLG has a powerful remit to promote social inclusion and community cohesion and equality, normally within disadvantaged areas. Taking stock of a community's social capital and

²² Such as Objective 1 South Yorkshire

building on this is viewed as a means to help unite communities and (re)create civil renewal, often with the emphasis on empowering people to take responsibility for their own actions and their area. This can be seen from the government and European funding bodies' remit to ensure that local communities have the powers they need to respond to challenging economic, social and cultural trends (DCLG, 2010; GOYH, 2004). It would seem that one of the main implications for social capital as a tool, whether academic or policy based, is to contribute to understanding and developing 'civil engagement' in order to help (re)generate an almost 'functionalist' ideal of society (Gilbertson *et al.*, 2005, p.7). Without interaction between people, it would seem, trust decays and eventually this decay begins to manifest itself in serious social problems (McDonnell, 2004).

This last point is important concerning the degree of concern over the perceived decline in social capital and community over the last 50 years. For Putnam (2001) this can be viewed primarily in relation to a decline²³ in the active membership of associations like teacher-parent associations, football teams, trades unions, community groups and political organisations. Respectively, there have been corresponding increases in divorce, suicide, time spent in solitary commuting and individualised leisure activities, such as watching television (Putnam, 2001). In effect, and what Putnam (2001) alludes to, is that society has become fragmented and individualised creating a severe weakening of social capital.

Evidence points to the fact that communities with a good stock of social capital are more likely to experience lower crime figures, better 'health, higher educational achievement and better economical growth' (McDonnell, 2004, p. 29; Gilbertson *et al.*, 2005)²⁴. There are also greater levels of income equality (Wilkinson 1996, Kawachi *et al.*, 1997), improved child welfare and lower rates of child abuse (Cote and Healy, 2001), less corrupt and more effective government (Putnam, 2001) and enhanced economic achievement through increased trust (Fukuyama, 1995). Moreover, from a policy point of view,

²³ Chiefly in the USA, but also to some degree in the UK.

²⁴ Most of the evidence used to support this has been calculated via quantitative research.

social capital can seemingly contribute to reducing dependency on the state, particularly welfare, by strengthening individual self-sufficiency (Tracy and Tracy, 2000). The cumulative effect of these various research outcomes point to the fact that the 'well connected are more likely to be housed, healthy, hired and happy' (Woolcock, 2001, p.12). It is in this context that ICT and the Internet are viewed as having considerable potential for changing the way in which 'community' and 'social capital' can be (re)created and maintained in contemporary society (McDonald and Malina, 1997).

2.6.4 Community technology centres

The problem of including the excluded in the information society has been approached from a number of different positions, but most have been based within the confines of a local community or neighbourhood. This is because 'public access' to ICT is viewed as central to community networking or learning new ICT skills, and the primary strategy in many deprived communities has been to establish community technology centres²⁵ (CTCs) (Pinkett, 2002). CTCs have been the focus of numerous studies relating to computer and Internet access and use, and their effectiveness has been well-researched and documented (Pinkett, 2002).

Funding bodies, the previous Labour government and the incumbent Coalition, have to-date focused largely on two key methods of creating access to ICT and the Internet for disadvantaged communities. These are via 'wired up' projects or through public sites where shared access to technology is made available. 'Wired up' projects are where homes in a community or location are connected together using a range of technologies. They include the 'sourcing and roll out of the technology along with the development of a community website proved to be the primary focus for local project implementation' (Devins *et al.*, 2003, p. 8). For example, this has been accomplished using new or recycled computers with either: dial-up or cable modems; ADSL or

²⁵ There are a variety of different names given to community based ICT schemes including: community informatics, community networks, network community, place based community network, place based virtual network, community-based ICT initiatives and local net.

wireless facilities; or set-top boxes to access the Internet via digital satellite or terrestrial television (Devins *et al.*, 2003).

Community technology centres offer resources to help bridge the digital divide primarily through the public's ability to access computers and the Internet. The aim of ICT is to increase and widen levels of ICT use amongst excluded population – those with 'low levels of income and education, ethnic minorities, the elderly and the physically challenged' (Selwyn, 2004, p.21). In this way, public ICT sites play a key role in facilitating ICT use for non-users. They have become a key part of what is now referred to as digital inclusion strategies, such as the current governments 'Digital by Default' programme (UK Online Centres, 2012). The key defining feature of public sites is that they all provide physical and supported access to ICT in a social place away from home or work (Selwyn, 2003).

There are several reasons why place based initiatives are an attractive model for the deployment of ICT by policy makers and funding bodies. For example, they are much more cost-effective when compared to placing computers in the home. The responsibility for maintaining computer resources is often assumed by an expert situated in the CTC. Similarly, it is the CTC which also provides knowledgeable staff members to offer technical support and training. Furthermore, CTC's are normally based within the community itself, creating a meeting place where peers and other community members can congregate in creating a pleasant social atmosphere (Selwyn, 2002). It is through these types of centre that ICT skills can be learned and the Internet used, which according to government policy affords people more opportunities to improve their lives in a range of areas. For instance, it can help in furthering their education, widening social contacts and finding employment.

2.7 Conclusion

The perceived arrival of the information society has led to a worldwide policy concern focused on the creation of a computer literate society. The main anxiety lies in the fact that many disadvantaged people do not have access to ICT and the Internet and are digitally excluded as a consequence – being on the wrong side of the digital divide. Being ‘connected’ enables people to access information and services. They can increase their social networks, take advantage of consumer savings and enhance their digital skills for personal or professional reasons. However, people who do not, or cannot, participate in the information society are most likely to be already socially excluded in most non-technological aspects of society. Policies aimed at introducing them back into mainstream society have focused on universal ‘one size fits all’ schemes. In addition, the original definition of the digital divide has also been explored and found to be too simplistic a term to distinguish between information ‘haves’ and ‘have-nots’, and a more complex set of digital inequalities is seen to divide society, just as a more complex set of social inequalities divide the non- technical world (van Dijk, 2012).

Nevertheless, there has been an array of social policy aimed at using ICT and the Internet as a regenerative tool. Much of the policy has concerned itself with utilising ICT and the Internet to help socially and economically regenerate deprived communities; particularly in relation to strengthening social networks and up-skilling the workforce to combating social exclusion. To help in understanding this thinking, the concepts of community and social capital have also been examined. The use of ‘community’ as a medium for many regenerative strategies can be gleaned from the literature; whilst it has become evident that the concept of ‘social capital’ has recently come to the forefront of many governmental strategies aimed at combating social exclusion.

Similar regeneration policies can also be found in other funding bodies which have engaged with the digital divide and the economic and social regeneration of deprived communities. As such, Chapter 3 presents a summary of the

European Union Objective 1 Programme in South Yorkshire, mainly because of the 'case' nature of this study. The central aim of this review is three-fold: to examine the economic decline of the region leading to its designation as an Objective 1 region under 'European Structural Funds'; to highlight the role of the Structural Funds, particularly their aims, objectives and allocation; and to examine the nature of how ICT was deployed via the programmes Priority 3 – Measure 21. It is through this, and the preceding literature review, that the research area and questions for this thesis are defined and the subsequent chapters on methodology and methods are constructed.

Chapter 3 Objective 1 Structural Funds

3.1 Introduction

This chapter is concerned with Structural Funds emanating from Europe, which have a direct bearing upon this thesis. With this in mind, the first section of this chapter will outline some of the economic factors behind the granting of Objective 1 status under this funding regime to South Yorkshire. This is followed by a brief explanation of the European Structural Funds (Objectives 1, 2 and 3), explaining their aims, objectives and allocation. The second section will pick up the thread of using ICT as a tool with which to socially and economically regenerate deprived communities from Chapter 2. This entails a detailed examination of Objective 1: Priority 3 – Measure 21²⁶, which provided for the deployment of such technology through funded projects. Section three briefly outlines the similarities and differences between government and Objective 1 funded projects.

3.2 South Yorkshires' economic decline leading to Objective 1 status

The sub-region of South Yorkshire is made up of four single-tier metropolitan district councils that were created in 1974. These are Barnsley, Doncaster, Rotherham and Sheffield. At the time of the Objective 1 programme Sheffield was by far the largest in terms of population with the Office of National Statistics indicating that 513,234 live in the city. Doncaster had 286,866 inhabitants, Rotherham 248,175 and finally Barnsley with 218,063 inhabitants (Office of National Statistics, 2001). The three smaller districts incorporate a number of geographically separate industrial towns and villages. A substantial part of the sub-region is rural. Two-fifths of Doncaster and one-fifth of Rotherham are Rural Development Areas, while one-third of Sheffield and the Western part of Barnsley is part of the Peak District National Park (South Yorkshire Forum, 1999, p.17). South Yorkshire was administered from 1974 by an upper-tier of local government – the Metropolitan County of South Yorkshire. This did have responsibility for strategic planning and the

²⁶ Formerly known as 'Priority 4a: Measure 21', this measure aims to develop ICT as a tool to fight social and economic exclusion.

coordination of the fire and police service and public transport. The Metropolitan County Councils were abolished in 1986 and the Metropolitan Districts assumed the role strategic planning within their own areas; while the other services remained South Yorkshire wide.

From the 1980s onwards South Yorkshire suffered serious economic decline (Chandler, 1997). South Yorkshire had been strongly identified with coalmining, which dominated the economy of Barnsley and was a major component of the industrial bases of Sheffield, Rotherham and Doncaster. At the same time, heavy engineering and steel making was at the heart of the economy for both Sheffield and Rotherham. In 1971 the two industries of coal and steel provided direct employment for 121,000 people, almost a quarter of all jobs in South Yorkshire (South Yorkshire Forum, 1999, p.18).

However, between 1980 and 1993, steel and much of the heavy engineering industry faced collapse. The restructuring of the steel industry caused by the world recession in the early 1980s was compounded by the then Conservative government's decision to reduce overproduction in steel. The consequence of this was plant closures resulting in massive job losses – particularly in the Lower Don Valley, an industrialised corridor linking Sheffield to Rotherham (South Yorkshire Forum, 1999). Chandler (1997) supports this view, pointing to the decline in the proportion of workers employed in the Sheffield 'travel-to-work' area in steel and metal goods manufacture, which fell from sixteen per cent to eight per cent of the total workforce between 1985 and 1994.

The decline in the steel industry was not isolated. The coal industry in South Yorkshire also began to deteriorate in the face of global economic downturns, albeit more gradually. The coal closure programme announced at the end of 1992 all but extinguished one of the main coal producing areas in the UK (South Yorkshire Forum, 1999). The decision to substantially reduce coal mining in Britain as a preface to privatisation in 1993, impacted hugely on the coal mining areas of Barnsley, Rotherham, Doncaster and Sheffield. Between

1989 and 1996 over thirty thousand jobs were lost in mining²⁷ (Chandler, 1997, p.33).

These economic catastrophes were further exacerbated by problems in other sectors of the South Yorkshire economy. For example, Viners, the last mass production cutlery firm in Sheffield, closed its doors for the last time in 1985. Similarly, other firms involved in the manufacture of glass and refractories for the steel industry also closed; as did the rail engineering works in Doncaster which shut down in 1994. The overall effect was the loss of sixty per cent (187,000) of the total number of industrial jobs between 1971 and 1997 (South Yorkshire Forum, 1999, p.18). The lack of economic diversification in the region was the result of 200 years of industrialisation and a consistent buoyant market for the end products. Diversification into the service sector was considered unnecessary mainly because it was thought that there would always be a job whenever one was needed in coal or steel industries. However, the service industry did make an appearance within the region, increasing by forty-two per cent between 1971 and 1997 with 95,000 service sector jobs created throughout the region (South Yorkshire Forum, 1999). Yet, by this time almost one-fifth of the total number of jobs in South Yorkshire had been lost (South Yorkshire Forum, 1999).

Between 1991 and 1996 employment fell in South Yorkshire by just under three per cent compared to an increase in Great Britain as a whole of just over three per cent (Office of National Statistics, 2000). Analysis by the South Yorkshire Forum in 1999 forecast a continuing fall in employment in the region up to the year 2000 and reported that the sub-region had the worst prospects for expected job creation in England (South Yorkshire Forum, 1999). Additional work indicated that South Yorkshire had an incidence of employment vulnerable sectors which was more than forty per cent higher than the UK norm. Even in 'employment growth sectors' South Yorkshire was thirty per cent below the UK average (South Yorkshire Forum, 2002).

²⁷ See Chapter 4 for more details.

The speed of economic decline left South Yorkshire in a vulnerable position. The loss of manufacturing jobs had not been matched by a corresponding increase in service sector jobs, whilst those that had been created tended to be low paid in comparison to previous earnings (South Yorkshire Forum, 1999). Furthermore, there was still an over-dependence on production industries and declining sectors of the economy, which continued to leave South Yorkshire susceptible to downturns in the business cycle (South Yorkshire Forum, 1999).

Another aspect affecting economic conditions in South Yorkshire was related to the area's population and migration over the same period. Population consistently fell throughout the sub-region during the 1980s, exacerbated by the recession and coal and steel crisis. In 1981 the population of South Yorkshire was approximately 1,317,000 people, by 1991 this had declined to 1,288,700, decreasing further in 2001 to 1,266,338 (Office of National Statistics, 2003). This shows a decline of 3.8 per cent of the total population over two decades. In comparison, the population of England in grew by just under 5 per cent over the same period. Within South Yorkshire all districts declined during the 1990s, with slightly steeper falls in the former coalfield areas of Barnsley, Doncaster and Rotherham (Office of National Statistics, 2001).

Add to this a number of other factors, such as low levels of investment in the area and a GDP falling significantly against the UK and EU averages, and the overall picture was one of relatively poor economic prospects for the region (South Yorkshire Forum, 2000, Chapter 1). Table 1 illustrates this in the case of GDP:

Table 1 Levels of GDP in South Yorkshire and the UK

Year	South Yorkshire GDP per head (EU=100)	United Kingdom GDP per head (EU=100)
1995	74.4	98.2
1996	69.3	96.0
1997	72.3	98.6
1998	75.1	102.0
1999	74.8	102.2

Source: Eurostat (2002)

There is little doubt that South Yorkshire suffered tremendous economic decline resulting in deprivation on a massive scale during the 1980s and 1990s. High unemployment rates and lack of alternative employment opportunities (particularly full-time and well-paid opportunities) led to a sustained increase in social problems throughout the region. For example, in places crime rates soared to twenty per cent above the national average and anti-social behaviour became increasingly visible (Coalfields Task Force, 1998).

The above factors are aptly reflected in the South Yorkshire Objective 1 Single Programming Document, which sums up the socio-economic conditions in the region thus: 'the problems facing South Yorkshire are not just a case of localised decline, but rather one of cultural crisis with contraction so rapid that both state and market solutions have struggled to revive the economy' (South Yorkshire Forum, 1999, p.4). The consequences of this were that some local authorities, Barnsley for example, had a GDP on a par with Greece and areas of the former East Germany (South Yorkshire Forum, 1999). It is with little surprise then, that social and economic regeneration efforts were viewed as extremely important in getting the economies of the South Yorkshire sub-region back on track. Along with government assistance, a successful case was made to the European Commission by South Yorkshire Forum for South Yorkshire to be designated as an Objective 1 region in the 2000-2006 programming round of the Structural Funds.

3.3 Structural Funds – their aims, objectives and allocation

One of the main approaches taken by the European Union to overcome social and economic disparities between member states and their constituent regions is delivered in the form of the Structural Funds. The Funds were established by European Union's regional policy to achieve economic and social cohesion. To this end, the European Union uses the Structural Funds in an attempt to reduce the disparities throughout the Union. These funds include:

- European Regional Development Fund (ERDF, established in 1975);
- European Social Fund (ESF, established in 1957);

- European Agricultural Guidance and Guarantee Fund (EAGGF, established in 1957);
- Financial Instrument for Fisheries Guidance (FIFG, established in 1993);
- Cohesion Fund (CF, established in 1992).

The importance of the Structural Funds is demonstrated by the fact that added together they constitute the second largest item of expenditure in the European Union's budget (European Commission, 1995). Together, these funds contribute to the economic development of disadvantaged regions of all member states including the UK. In the 2000-2006 funding round a region could have access to one or more of the four Structural Funds, depending whether it has Objective 1 or Objective 2 status, while all regions could obtain Objective 3 status²⁸. The aims of the Funds, and in which priority 'Objective' area they could be spent, are set out in Table 2 below:

Table 2 Aims and availability of Structural Funds

Fund	Aims and availability
The European Regional Development Fund (ERDF)	The ERDF aimed to improve economic prosperity and social inclusion by investing in projects to promote development and encourage the diversification of industry into other sectors in areas lagging behind. This fund was available in Objective 1 and 2 areas.
The European Social Fund (ESF)	ESF funded training, human resources and equal opportunities schemes to promote employability of people in both Objective 1 and 3 areas. In Objective 2 areas ESF could be used to complement the ERDF activities.
The European Agricultural Guidance and Guarantee Fund (EAGGF)	The EAGGF was available in Objective 1 areas to encourage the restructuring and diversification of rural areas, to promote economic prosperity and social inclusion, whilst protecting and maintaining the environment and our rural heritage. In areas outside Objective 1, the EAGGF (Guarantee section) provided funding within the England Rural Development Plan.
The Financial Instrument for Fisheries Guidance (FIFG)	FIFG funded projects to modernise the structure of the fisheries sector and related industries and to encourage diversification of the workforce and fisheries industry into other sectors. It also aimed to ensure the future of the industry through achieving a balance between fisheries resources and their exploitation.

Source: Beutel (2002)

²⁸ Objective 3 operated everywhere except where Objective 1 had been allocated (Beutel, 2002, p. 7).

3.4 Objectives of the Structural Funds: Objectives 1, 2 and 3.

Between 2000 and 2006 most Structural Fund spending was targeted on specific regions, designated under the headings Objective 1, 2 and 3. Areas eligible for Objective 1 funding were those that have less than 75% of the European Union's average Gross Domestic Product (GDP). It was the highest level of regional funding available from the European Union and was aimed at promoting the structural adjustment of those European Union regions lagging behind in development (Beutel, 2002). In the United Kingdom areas that qualified in the 2000-2006 period were Merseyside, Cornwall and the Scilly Isles, West Wales and the Valleys, and importantly for this study South Yorkshire²⁹. In total, the United Kingdom received over £3.9 billion of Objective 1 money between 2000-2006³⁰.

Objective 2 aimed to support the economic and social conversion of areas facing structural difficulties. It was the second highest level of funding available from the European Union and areas could qualify for Objective 2 funding under four strands – industrial, rural, urban and fisheries (Beutel, 2002, p.3). This objective covered nearly fourteen million people in the United Kingdom. In addition, areas that had Objective 2 (or 5b) status in the previous programming period (1994-1999) but no longer qualify were eligible for transitional funding until 2005. Including transitional areas, Objective 2 covered well over nineteen million people in the United Kingdom. In total, the United Kingdom received over £3.1 billion for Objective 2 and transitional Objective 2 areas for the period 2000 – 2006 (Beutel, 2002).

Objective 3 involved only the European Social Fund, which aimed to help firms and workers adapt to new working conditions and so compete more effectively in global labour markets. It was directed at the long-term unemployed and those facing particular barriers to finding fulfilling employment because of their

²⁹ Prior to receiving Objective 1 status in 2000, South Yorkshire obtained Objective 2 status between 1994 and 1999 (together with other parts of Yorkshire and the Humber) in an effort to reverse the effects of the industrial decline outlined above. However, although this made a significant contribution to the development of the region, South Yorkshire's economy continued to decline, which created the trigger for Objective 1 status (for more information on Objective 2 see, GOYH, 2004).

³⁰ Interestingly, the UK is the sixth largest EU beneficiary of Structural Funds, receiving 8.5% (or £10 billion) of the EU expenditure between 2000-2006 (Beutel, 2002).

disability, racial origin, or sex (Beutel, 2002, p.3). Accordingly, the United Kingdom benefitted from just under £3 billion of Objective 3 money for the period 2000-2006 (Beutel, 2002).

In terms of administration, it was the responsibility of the Department of Trade and Industry (DTI) to co-ordinate overall United Kingdom government policy regarding the Structural Funds. Here, the DTI took the lead on many issues affecting more than one fund or more than one part of the United Kingdom. The Department for Work and Pensions (DWP) had overall responsibility for the European Social Fund and the Department for Environment Food and Rural Affairs (DEPPA) led on the EAGGF Guidance section and FIFG (DTI, 2002). However, implementation of the Structural Fund programmes was devolved to the Scottish Executive and the National Assembly for Wales. In Northern Ireland, the Department for Finance and Personnel (DFP) implemented the programmes, while in England the Office of the Deputy Prime Minister (ODPM) took the lead on the ERDF, operating through the Government Offices in the Regions (Department of Trade and Industry, 1998).

In the case of South Yorkshire, this responsibility fell within the remit of the Government Office for Yorkshire and the Humber (GOYH)³¹. At the regional level, the implementation of Structural Funds programmes took place through the Single Programming Document (SPD). The main thrust of this involved a partnership of European, central government and sub-national actors, including regional and local authorities and economic and social partners (GOYH, 2004). Here, 'partnership' was the key element in the implementation of the Structural Funds, with the overall aim to produce a more strategic approach to specific socio-economic problems or opportunities (European Commission, 1995). The financial assistance from the European Union, via the Structural Funds, was seen as complementary rather than a substitute for national government action. Therefore, all European Union funding had to be matched by the nation state, with assurances that the funds go only to the intended regions (European Commission, 1995).

³¹ Additional information can be found at: <http://www.goyh.gov.uk/objective1>.

The South Yorkshire Objective 1 Single Programming Document (SPD) was prepared by the Regional Development Agency Yorkshire Forward and submitted to Brussels for inter-service consultation and approval by the European Commission (South Yorkshire Forum, 1999). This document was effectively the contract between the UK government and the European Commission and sets out a vision for the region and a programme of activity for achieving this. On July 24th 2000, the South Yorkshire Single Programming Document was formally approved and the programme launched on July 25th 2000. In attempting to address some of the problems alluded to above, the Single Programming Document for South Yorkshire put forward four strategic objectives:

- To increase employment and income through a radical reshaping of the economic base;
- To achieve a step-change in the sub-region's education, training and skills base;
- To help communities and individuals share in, and contribute to, the renewal of South Yorkshire; and,
- To recognise and respond to the diversity and distinctiveness of the urban, rural and coalfield environments.

In attempting to achieve the above objectives the Single Programming Document initially put forward six priorities containing thirty-two separate measures. In 2003 these six priorities were changed into three teams although the measures remained the same (GOYH, 2004). These are outlined in Table 3 below:

Table 3 Objective 1 Teams

Business and Enterprise	(formerly Priorities 1 and 2)
1. Stimulating new growth and high technology business sectors. 2. Modernising business by enhancing competitiveness and innovation. (This team had £203 million of European Structural Funds to invest, which was 29% of the total available.)	
People, Communities and Skills	(formerly Priorities 3 and 4)
1. Building a world leading learning region that promotes equity, employment and social cohesion. 2. Developing economic opportunities in targeted communities. (This team had £287 million to invest, which was 40% of the total available.)	
Development and Infrastructure	(formerly Priorities 5 and 6)
1. Supporting business investment through strategic spatial development. 2. Providing the foundations for a successful programme. (This team had £202 million to invest, which was 29% of the total available.)	

It is not within the scope of this study to examine each of the thirty-two measures that constitute the overall priorities involved in the Single Programming Document. However, more does need to be said concerning the People, Communities and Skills Team, particularly Measure 21, because of its direct relevance to this thesis.

3.5 Objective 1 Priority 4 – Measure 21

Priority 4 was focused on the development of economic opportunities in some of the most deprived communities in South Yorkshire. This Priority was about giving local communities the ability and confidence to access activities being undertaken in other Priorities and across the region as a whole. It was concerned with using communities themselves as key agents in the overall scheme of economic regeneration and local development initiatives (Priority 4, 2002, p.3). As such, it recognised that activities taking place at the local level, especially in the most deprived areas of the sub-region, were vitally important in order to meet the wider aims of the Objective 1 Programme (Objective 1 South Yorkshire, 2006). The impetus behind Priority 4 was to turn the skills and capacities of communities into a tool for building social and economic renewal. In order to create this Priority 4 was divided into eight different measures³², all of which engaged with a particular issue within the Priority's remit.

Measure 21 was one of the funding measures concerned with developing ICT as a tool to fight economic and social exclusion. It aimed to ensure that excluded communities could create, form links with, and benefit from, opportunities arising from new ways of learning and working. In this way, 'they will become better equipped to contribute to the growth of a knowledge-driven economy' (Objective 1 South Yorkshire, 2006). To meet these strategic aims the following objectives were devised:

- Promote active participation in the development of a knowledge driven economy in South Yorkshire
- Implement community-based IT strategies to raise ICT awareness and develop capacity of communities

³² Appendix 1 outlines all thirty-two measures of this priority.

- Develop the interface between communities and public services
- Accelerate the development of commercial and public service delivery tailored to the needs of excluded communities

Measure 21 was set out in terms similar with much of the social policy implemented by the last Labour government and incumbent Coalition outlined in Chapter 2. For example, it was based on the idea that many disadvantaged communities were being left behind in the information society and people with no ICT skills were being excluded from the opportunities presented by the growth of a knowledge-based economy (Objective 1 South Yorkshire, 2006). The context of Measure 21 closely resembled the report by the Social Exclusion Unit '*Closing the Digital Divide*' (Social Exclusion Unit, 2001). For example, it based many of its ICT measures on building social capital and upskilling the local population of deprived communities; something ubiquitous throughout the aims of Measure 21 and government policy (Social Exclusion Unit, 2001). There was also the need for 'output targets' as a determinant of the success of the endeavours. It was through such targets that funded communities could be seen to be progressing, 'up the ladder of capacity and maturity...able to access opportunities generated in other parts of Objective 1 activity' (Objective 1 South Yorkshire, 2006).

However, while there were similarities between Measure 21 and government policy this does not mean they were identical. For example, government policy concerning the deployment of ICT and the Internet was viewed as 'top-down' in nature, a 'one-size-fits-all' approach. Measure 21 on the other hand demonstrated a strong emphasis on a 'bottom-up' and 'participative' approach to regeneration (Objective 1 South Yorkshire, 2006). Local communities were approached and issues discussed before policy was formulated from their perspective (Objective 1 South Yorkshire, 2006). The Priority 4 team wanted to know about the local communities 'needs' and 'wants' regarding the way ICT and the Internet were to be deployed (Objective 1 South Yorkshire, 2006). The rationale for this was to help empower residents of disadvantaged communities to have greater control over the regeneration of their areas. For example, initial consultations within these areas outlined the lack of access to ICT and the Internet within deprived communities of South Yorkshire. These

were for the main part former mining and steel communities, but also included communities within communities.³³ According to Priority 4, a great many of those consulted had never used computers or the Internet. This led to an ICT framework that based its projects within deprived communities to raise ICT awareness and develop the capacity of these communities (Objective 1 South Yorkshire, 2006).

3.6 Conclusion

This chapter has explored the economic issues surrounding the granting of Objective 1 status to South Yorkshire in the 2000-2006 period. In order to understand why it gained this status, it has been necessary to explain the economic decline of the sub-regions over the last few decades. Moving on from this, European Structural Funds, their aims, objectives and allocation were discussed. Finally, a brief assessment of Objective 1 policy concerning the use of ICT and the Internet as a tool to socially and economically regenerate deprived areas was undertaken. This was in many ways very similar to policy initiatives outlined by the present and previous governments concerning ICT and Internet deployment. However, there were subtle differences which highlight the importance of analysing both types of community based projects.

The next chapter involves looking more closely at a particular area which has been the recipient of both government and Objective 1 regeneration policies regarding the deployment of ICT and the Internet. It therefore explores the decline of the coalfields. From this, the community where the actual research was undertaken is also outlined along with the units of analysis and the research questions.

³³ These were designated as deprived areas hidden within affluent areas (Priority 4, 2002).

Chapter 4 Coalfield communities and the village of Grimethorpe

4.1 Introduction

Chapters 2 and 3 have provided information regarding the way ICT and the Internet are being utilised as social and economic regenerative tools by government and European policy. This chapter explores the coalfields one of the key areas these measures have been applied to due to the sheer scale of poverty and social exclusion to be found within their borders. Investigating the decline of the coalfields and resulting regeneration strategies helps to contextualise the research and also define the research area. From this, the chosen units of analysis are outlined.

4.2 The collapse of the UK coal industry

The collapse of the coal industry within the UK in the 1980s and 90s brought hundreds of occupational communities to an end after decades of existence (Bennett *et al.*, 2000). At the beginning of the 1980s there were 170 collieries and 171,400 miners employed in the industry. By 1999, only fourteen collieries remained, employing less than 10,000 men (Francis *et al.*, 2002, p.2). In 2004 this fell to just 12 working pits employing around 6,000 men (BBC, 2004). By 2013, the now privatised coal industry UK Coal operates just two deep mines in England³⁴ (UK Coal, 2013). What is striking about this is the fact that between 1981 and 2004 over 90 per cent of all the coal industry jobs held by men had disappeared in all English coalfields (Beatty, Fothergill and Powell, 2005). In several areas coal industry employment was eliminated entirely. In most coalfields, these coal job losses accounted for a large proportion (typically 20-35 per cent) of all the jobs held by men in 1981 (Beatty, Fothergill and Powell, 2005).

³⁴ UK coal was responsible for three deep mines in England until 7th March 2013 when a fire caused the closure of Daw Mill bringing an end to 47 years of coal production at the mine. UK Coal also owns Harworth Colliery, near Doncaster, and is currently exploring the viability of reopening this mine (UK Coal, 2013).

The sheer scale and speed of the industry's decimation was socially and economically devastating because of the specific nature of these communities. Coalfield communities tended to be more isolated and mainly reliant on one type of industry, where everything was provided by the employer, including jobs, healthcare, housing and social facilities. According to the Coalfield Regeneration Review Board (2010, p.5) 'when the industry declined, so did everything else, together with the closure of many local businesses and shops'. The economic impact was felt throughout the whole community – from income disparities; the erosion of community identity and structure; to the breakdown of social ties because of high out migration (Shucksmith *et al.*, 2010). Rising crime levels and anti-social behaviour ensued and local housing became run down as residents moved from the area to seek new job opportunities. One of the clearest signs of this demise could be seen in the health of many local people.

It is well documented that in areas of low unemployment and high wages levels of health are much better than in more deprived areas. Even now people living in former coalfield communities are more likely to report having a limiting long-term illness compared to people living in other types of communities (Riva, 2012). The closure of the pits created a situation where older generations of miners were affected by their former work³⁵ and younger generations by poor employment opportunities and low expectations (Rowlands and Huw, 1995). Moreover, levels of joblessness in several of the coalfields were in excess of twenty per cent, although unemployment figures did not confirm this (Coalfields Task Force, 1998). Lack of alternative employment and the realisation by many miners of the low benefit rates paid to the unemployed had the effect of creating what Beatty and Fothergill (1995) labelled the 'hidden unemployed'.

To explain, 'If [former miners] had an ailment, registering as permanently sick [was] an attractive alternative to long-term unemployment, not least because the sickness related social security benefits are more generous than Income

³⁵ For example it is well known that miners suffer disproportionately from illnesses such as silicosis and pneumoconiosis from years of inhaling coal dust (Dennis *et al.*, 1956).

Support, the means-tested benefit paid to the unemployed who have been out of work for more than a year' (Beatty and Fothergill, 1995, p.635). In other words, men who had previously been holding down demanding jobs in the coal industry were now registered as sick and therefore not counted in unemployment figures. This did not mean that former miners were acting fraudulently; all needed to be certified by medical practitioners (Gore *et al.*, 2007). It meant that in 'difficult labour markets such as the former coalfields, many men and women with health problems or disabilities who might have held down a job are marginalised onto incapacity benefits' (Gore *et al.*, 2007, p.17).

Environmental issues also added to the misery. Many pit heads and tips have been cleared, but the inheritance of years of industrial production, spoil topping, poor quality housing, restricted road access and isolation from major economic centres did not disappear overnight. Equally unattractive is the fact that some of the former pit areas were given over to opencast mining, resulting in dusty and noisy conditions (Francis *et al.*, 2002, p.3). Pay, health and education were all severely affected by the downward spiral of economic and social conditions. All conspired to impact on local communities, resulting in serious social and economic deprivation and the urgent need by government to address the multiple problems facing coalfield communities.

4.3 The regeneration of the coalfields

It is little wonder that the social and economic regeneration of the coalfields became a key priority to policy makers at local, regional, national and international levels. For example, local authorities in coalfield areas of the United Kingdom first engaged with the problems facing such communities by forming the Coalfields Communities Campaign³⁶. This body was formed to articulate the needs of Britain's deprived industrial areas by lobbying a wide range of government, parliamentary and EU bodies. The primary reason for doing this was to attract resources to assist in the economic, social and

³⁶ This is now part of the Industrial Communities Alliance (ICA) which was formed by the merger of the Coalfield Communities Campaign and Steel Action (but also includes former textile, shipbuilding and manufacturing areas). Over sixty local authorities, across nine regions, make up the membership of the ICA.

environmental regeneration of these areas. According to Francis *et al.* (2002, p.2) this 'was arguably the major factor in the European Union's decision to fund the RECHAR programme', which targeted declining coalfield areas throughout member states in the 1990s. Over two phases (1990-93 and 1994-97), RECHAR provided a special programme of assistance for the regeneration of coalfields.

National government has also responded to the problems of coalfield decline with a range of policies. With the election of the Labour government in 1997, the coalfields, dominated since the 1920s by the Labour Party and the National Union of Mineworkers, were close to the top of the political agenda. The Coalfields Task Force was set up and its 1998 report spelt out the case for the coalfields. It was a bleak story:

'we have been left in no doubt about the scale of deprivation and decline...the coalfields have a unique combination of concentrated joblessness, physical isolation, poor infrastructure and severe health problems (Coalfields Task Force, 1998, p.7).

This account was substantiated by other reports. For example, Bennett *et al.*, (2000, p.4) wrote of the way that the 'coalfields still remain marginalised places, uncertain whether they are caught in a period of transformation, or just trapped on the long road of decline'³⁷.

The Coalfields Task Force visited coalfield areas across England to listen to the issues, concerns and problems of local people and the organisations and agencies working with coalfield communities. From their report, the government announced a 10-year programme to combat deprivation in the former coalfield communities³⁸. The main aim of this agenda was to create local partnerships to develop innovative and flexible ways of helping people

³⁷ On the strength of these concerns it should be of little surprise that two of the designated 2000-2006 Objective 1 regions in the UK had significant coalfield communities within them – South Yorkshire and West Wales and the Valleys. Objective 1 funding is allocated to areas, which have a Gross Domestic Product (GDP) of less than 75 per cent of the European average. The programme began in both regions in 2000 and finishes in 2006/8.

³⁸ Over the period 1999-2008, in excess of £350 million of additional money was made available because of this report and was combined with the £3 billion already given to local authorities with responsibilities for coalfield areas to give a significant boost to coalfield regeneration.

and the places they live. Only through effective partnerships would successful regeneration of the coalfields be able to take place (Coalfields Task Force, 1998). And only through community based initiatives that deal with social issues (education, employment, debt, crime and health) would real community empowerment be achieved (Coalfields Task Force, 1998).

To manage this, the government set up Regional Development Agencies (RDAs) in April 1999 'to coordinate the work of regional and local partners in areas such as training, investment, regeneration and business support' (Department of the Environment, Transport and the Regions, 1997, p.9). These non-departmental governmental bodies took on the regional responsibilities of English Partnerships³⁹, the regeneration programmes of the Rural Development Commission and the administration of the Single Regeneration Budget (SRB). The RDAs remit was to draft a Regional Economic Strategy to enhance and support national policies in ways that met regional and local needs.

Two other coalfield initiatives were established to help deliver this programme. These were the Coalfields Regeneration Trust (a Great Britain-wide charitable body independent of government) and the Coalfield Enterprise Fund (which supported coalfield-based firms with high growth potential) (Bennett, Beynon and Hudson, 2000). Other potential sources of investment included the Housing Investment Programme, which targeted coalfield housing with a view to repairing many dilapidated properties and investing (with the private sector) in new builds in former coalfield areas⁴⁰.

³⁹ English Partnerships remained in charge of the colliery site reclamation work which was the biggest element of the Coalfields Programme.

⁴⁰ These initiatives were also supported by a series of 'cross-cutting' area-based initiatives, focused on the most deprived areas that continued to be bypassed by mainstream programmes. The Cabinet Office's Social Exclusion Unit's 1998 Report, *Bringing Britain together*, looked at the problems facing the poorest neighbourhoods and at ways of alleviating them through two programmes – Sure Start (to support young children in poor neighbourhoods) and the New Deal for Communities. In addition to these the government introduced the idea of 'zoning' to encourage new ways of working. These include Health Action Zones, Education Action Zones and Employment Zones (Bennett, Beynon and Hudson, 2000).

These strategies have had positive impacts in some of the coalfield areas. For example, they have created new employment and improved built and natural environments; as well as improving transport infrastructure and affecting an increase in factory development (Shucksmith *et al.*, 2010). By 2005, approximately 60 per cent of the jobs lost from the coal industry since the early 1980s had been replaced by new jobs (Beatty, Fothergill and Powell, 2005). For instance, in the first years of the new millennium several major regeneration initiatives (such as the English Partnerships National Coalfields Programme) came to fruition alongside sustained national economic growth. The effect saw the rate of new job creation in the coalfields almost double (Beatty, Fothergill and Powell, 2005, p.7).

However, this has not stopped a growing dissatisfaction with the results of New Labour's regeneration efforts. For example, although the Coalfields Task Force (1998) argued that partnerships are powerful and cost effective vehicles for identifying programmes that reflect the specific needs of local people, many felt the real power still lay with the government. This could be seen in the way the Office of the Deputy Prime Minister defined how RDAs must have 'the freedom to decide for themselves how they can most effectively operate and meet the objectives we set them', demonstrating how the overall direction and control of RDAs was based in Westminster (Coalfields Task Force, 1998, p.43). As a result, there is an increasing recognition that existing 'top down' approaches have so far not led to the 'successful' regeneration of the coalfields (Shucksmith *et al.*, 2010). Regeneration bodies have not been totally successful in 'terms of training, employment creation and new business start-ups. There has been little growth of small and medium-sized enterprises in the former coalfields and, of such new business, very few have been in (high tech) manufacturing' (Shucksmith *et al.*, 2010, p.5). Consequently, persistent economic inactivity, poverty and related problems continue to typify many former coalfield villages and towns.

Additional problems became evident with the economic downturn in 2008. The National Audit Office (2008) noted that people in the coalfields claiming Job Seekers Allowance had increased by 50 per cent since the start of the

recession and 65 per cent of coalfields had experienced a fall in economic activity. According to Shucksmith *et al.* (2010, p.5), 'little progress has been made in rebuilding the productive capacity of the former coal district around new economic activities. As a result, high rates of unemployment, low rates of economic activity, low wages and the environmental and social problems that stem from poverty remain'. It would seem that past approaches have had at best partial and uneven effects in transforming the economic landscape of the former coalfields.

With the change of government in 2010 and subsequent constraints on public spending, the emphasis of regeneration in the coalfields has also changed. Previous government thinking sought to target the UK's most deprived places through encouraging partnership working, community empowerment and area-based initiatives that promoted 'joined up' approaches to the needs of local places. However, there is evidence that many regeneration partnerships failed to engage with local communities (Bennett, Beynon and Hudson, 2000). Often these 'top down' partnerships were perceived by local people as being mere extensions of the local authority and as simply 'funding-driven' initiatives (Francis *et al.*, 2002). Current policy, with regard to the coalfields is based on Government's 2010 White Paper '*Local Growth: realising every place's potential*', which establishes the new national strategy on sub-national economic growth. What this aims for is a new rebalancing of power between local, regional and national scales in Britain⁴¹. The Coalition government are committed to a decentralisation process that is intended to empower local authorities and communities in the delivery of planning and development policies using a 'bottom-up' approach.

As this brief overview demonstrates, the collapse of the coal industry has been met with an array of regeneration programmes and measures over the last two decades. Considering this helps to position the research reported in this thesis within a coalfields context and underlines the notion of community being

⁴¹ One of the clearest changes brought by this new strategy was the abolishing of Regional Development Agencies in March 2012. This was because the coalition government felt the regional level was considered inappropriate for managing local affairs.

central to public funding structures; reiterating the importance of this for the focus of this research. It also demonstrates how 'top down' approaches to the regeneration of communities are often called into question for not delivering what communities want or need. The next section moves on to outline the characteristics of the chosen case study area – namely, the village of Grimethorpe, a former mining community in Barnsley⁴². The initial reason for choosing this area in phase one of the research was based on the fact that three types of community technology centres could be found within its boundaries. These offered the opportunity to engage with each centre and also examine them in a comparative manner⁴³.

4.4 Grimethorpe – an introduction to a former pit village

Grimethorpe is a small ex-mining village situated to the north east of Barnsley, one of three villages that make up the Brierley Ward – Shafton and Brierley being the other two. As with many of the villages in South Yorkshire, their entire existence was originally owed to the development of coal production and associated industries within the area – namely, iron, steel and chemical works. Grimethorpe (and its neighbours) grew steadily over the last century with the development of Grimethorpe and Houghton Main Collieries, and expanded rapidly with the location of the National Coal Area HQ and Coalite Coking Plant within its perimeters. However, according to the Grimethorpe, Shafton and Brierley Community Partnership Community Action Plan (GSBCP CAP, 2002) the ending of coal production in 1993 took its toll on Grimethorpe, economically and socially, leaving it devastated. The severity of the problems facing the village in the mid-1990s were highlighted in a 1994 European Commission study, which ranked Grimethorpe as one of the poorest villages in Europe (Hignett, 2010). With this in mind, what follows is a brief overview of the socio-economic dimensions that helped formulate this judgment. This also includes updated material across the different dimensions to take account of the return to Grimethorpe in phase 2 of the research.

⁴² The methodology underpinning this research is discussed at length in Chapter 5.

⁴³ Phase two of the research was also undertaken in Grimethorpe as discussed earlier.

4.4.1 Economic and social problems relating to Grimethorpe

4.4.1.1 Work

The dependence of Grimethorpe on coal for employment can be gleaned from the census figures. Since the 1970s an estimated 6,000 jobs have been lost at Grimethorpe and Houghton, with 2,000 since 1993. In 1951 there were 8,000 people directly employed in coalmining, by 1991 that figure had fallen by a quarter to 6,000. Yet, move forward just two years to 1993 and there were none. In 1993 the collieries of Grimethorpe and Houghton Main closed with subsequent losses at Coalite and Shafton workshops. A direct consequence of this is represented in Grimethorpe's declining population throughout outmigration with 10,000 people in 1951, 4,900 in 1991 and 3,242 in 2001 (Office of National Statistics, 2001). At the present time, 2013 the population stands at approximately 1,831 (Office of National Statistics, 2011).

The effect of the pit closure can also be gleaned from unemployment figures for the area. In 2005 unemployment figures stood at 33 per cent compared to the Barnsley average of 12% (Office of National Statistics, 2006). Residents within the Brierley Ward were 70 per cent more likely than the Barnsley average to be deprived of work and 168 per cent more likely than the national average, if national and Barnsley Borough average is held at 100 (Barnsley Metropolitan Borough Council, 2001). To further support this consequence, 46 per cent of households were in receipt of housing benefit, which rose to 50 per cent if council tax benefit was added (Barnsley Metropolitan Borough Council, 2001).

In 2002 the average salary in the area was approximately £8,000 compared to £20,000 at borough level. By 2012, this had risen to £14,000 compared to £22,000 at the borough level (Barnsley Metropolitan Borough Council, 2012). The employment opportunities have also increased dramatically between 2005 and 2012, mainly due to new businesses setting up on the large Park Springs Industrial Estate on the fringes of the village. This has brought many jobs to the area, and includes several distribution warehouses for Sash, Asus,

Next and South Yorkshire based furniture company Symphony. Other employment can be found within the retailers and businesses on the High Street in Grimethorpe, The Acorn Centre, Holstead Nursing Home and Carlton Brickworks. Out of those economically active in Grimethorpe in 2002 (37 per cent) less than 1 in 5 actually worked outside the local area (GSBCP CAP, 2002); by 2012 this had increased to 2 in 5 (Barnsley Metropolitan Borough Council, 2012).

4.4.1.2 Housing

Grimethorpe today is characterised by three main housing estates, the original village, Red City and White City. The original village is still dominated by terraces typical of colliery housing built at the turn of the last century, that is, 'built close to the pit in blocks or long rows built cheaply to the minimum standards current at the date of their erection' (Carr, 2001, p. 48). The 1920s saw an investment by the council in an estate of red brick semi-detached houses – the red brick giving the estate the title of 'Red City'. During the 1950s, further expansion of the colliery created further expansion of Grimethorpe's housing stock and the construction of the 'White City' estate⁴⁴. The closure of the pit led to housing market failure with abandonment a major problem needing to be dealt with (Hignett, 2010).

More recently Grimethorpe has undergone its first major housing development for more than 50 years. New build housing for sale has been a key part of the village's regeneration strategy. Work began in 2004 through a joint venture between Barnsley Metropolitan Borough Council (BMBC) and Keepmoat Homes (formerly Haslam Homes) and was completed in 2012. This created 365 houses for sale on three sites⁴⁵, including the central site which was cleared of 250 houses and was formerly known as 'the village' by residents. On the back of this investment, Ben Bailey also developed a further 78 houses which were quickly occupied indicating a possible housing market recovery in

⁴⁴ So-called because of the grey-white pebble dash cladding on the top half of the houses.

⁴⁵ The new housing is built on three sites: land to the rear of Raymond Avenue, Carlton Street, Cudworth View and the old village site. The houses are a mix of 2, 3 and 4 bed dwellings.

Grimethorpe. Complementary to this, Chevin Housing Association replaced 43 old pre-fabricated homes in the Mount Pleasant area with 50 units for rent and shared ownership, a further 7 bungalows and 8 flats at Milefield and 11 family houses on the former Manor pub site on Brierley Road (BMBC, 2012).

Renovations have also been made to the older housing in Grimethorpe with improvements to the owner-occupied terraced housing; first at White City and then at the older terraces near to the new housing site in the centre of the village. Yorkshire Housing and Berneslai Homes have also both invested money in improving their remaining houses which has contributed to the wider regeneration strategy in this area (BMBC, 2012). In addition to these developments the village has seen the construction of a new medical centre, dental surgery and local village hall.

4.4.1.3 Education and skills

In 2002 there was 'a general lack of incentive to obtain decent levels of educational attainment amongst school leavers with 84% not achieving 5 GCSE passes at grade A-C compared with 44% at the borough level and 51% nationally' (GSBCP CAP, 2002, p. 6). One of the main reasons put forward for this was the lack of jobs in the area, which did not encourage young people to want to participate in traditional activities that could lead to attainment (GSBCP CAP, 2002). In 2008, statistics show there was a higher percentage of young people not in education, training or employment compared to the English average (BMBC, 2012). They also highlighted the fact that just over two-fifths of the population of Grimethorpe had no qualifications. This was 5 per cent higher than the borough average and 15 per cent higher than national average (Pitt, 2012). Today, only 14 per cent have a qualification above Level 3 (A Level), compared to a borough average of 17 per cent and a national average of 27 per cent (Pitt, 2012).

4.4.1.4 Transport infrastructure

Loss of, and lack of, local employment opportunities has also been the catalyst for the improvement of transport infrastructure that links the Brierley ward to the National Transport Network. Improvements have been made to the roads that provide access to the M1, A1, M18 and M62; countering earlier problems of local and strategic accessibility (GSBCP CAP, 2002). This has helped to increase inward investment and to enhance the economic opportunities for local people working in and out of the area, which can be seen from the influx of over 50 businesses to the Park Springs Industrial Estate (BMBC, 2012). Local transport has also been the focus of much attention, mainly because less than half of the population at the ward level have access to a vehicle (BMBC, 2012). The main improvements here have been through the Coalfields Communities Transport Initiative and Barnsley Dial-a-Ride providing a community based transport service that is both job-linked and social. At present there are 13 different services between Barnsley and Grimethorpe (Coalfields Community Campaign, 1997).

4.4.1.5 Social and leisure activities

The communities of Grimethorpe, Brierley and Shafton have suffered a downward spiral in terms of social, sporting and leisure activities since the decline of the mining industry. Where football or rugby was once viewed as weekly 'must do', with competitiveness thriving throughout the sub-region, this has now faded and is almost non-existent due to lack of spare income and contributions from sponsors such as the Coal Industry Social Welfare Organisation (CISWO). Having said this, in 2012 the local cricket club was still functioning and asking for players new and old to sustain it through the season. In many coalfield communities the local miners' welfares were hit hard and many have closed since the miners' strike. Grimethorpe has managed to keep its miners' welfare open, but this is hanging by a thread financially and may have to close in the very near future. More importantly, a link has been made between the decline in sport and leisure activities and the impact on the health of residents in Brierley ward. At the start of the

regeneration programme inhabitants were nearly 15 per cent more likely to suffer from long-term illness than the Barnsley average and 65 per cent more than the national average (GSBCP CAP, 2002).

4.4.1.6 Crime

Perceptions of safety and occurrence of crime in Grimethorpe have been a major concern since the closure of the pits, especially in relation to anti-social behaviour and drug related crime. As a result crime shot up from 30% below the national average to 20% above in the first decade after the pit closure (Chesworth, 2013). Table 4 below demonstrates how crime rates have steadily fallen over the last thirteen years (Office for National Statistics, 2006; Crime-Rate, 2013).

Table 4 Crime rates in Grimethorpe

Offence	2000*	2001*	2002*	2012+
Violent Crime	28	34	26	18
Crimes of Dishonesty	46	40	52	35
Sexual Offences	2	3	0	0
Burglary	110	101	62	29
Vehicle Crime	46	69	30	16
Shoplifting	3	11	5	11
Drugs Offences	13	5	5	43
Criminal Damage	93	109	79	33
Total	341	372	259	185

*Source: Office of National Statistics (2006) + Source: Crime-Rate (2013)

Although crime rates have fallen, the fear of crime appeared to be relevant to most inhabitants, but more so to the elderly (BMBC, 2012). Here, anti-social behaviour – groups of adolescents, drunken behaviour or rowdy individuals and groups, graffiti and rubbish – was at the top of resident’s list of priorities that needed to be addressed in relation to community safety (BMBC, 2012). This was followed closely by the need for more visible policing in the area, something picked up on by the ‘Think Local’⁴⁶ campaign run by Barnsley Metropolitan Borough Council (BMBC, 2012). Accordingly, they looked to address the concerns of the locals by introducing community policing. Officers

⁴⁶ ‘Think Local’ was a questionnaire distributed by the BMBC in 2004 gleaning the views of residents of Grimethorpe.

have patrolled Grimethorpe acting as a visible deterrent since 2003 (BMBC, 2012). One of the success stories of recent years has been the reduction in many crimes through the formation of a neighbourhood watch group. However, above 50 per cent of all recorded crime in 2012 was still anti-social in nature (Pitt, 2012).

The above exploration of the various social and economic problems within Brierley Ward, and Grimethorpe in particular, illustrates how the inhabitants have suffered from multiple forms of deprivation leading to a rise in social exclusion, a breakdown of community cohesion, lack of training and education, poor housing, initial high crime rates and a loss of identity. As already stated, there has been a tremendous effort to promote development, regeneration and sustainability to help engage with these problems. Strategic partnerships along with successful bids for funding have been utilised to help improve the quality of life for the residents of these and other areas, whilst making the locale more attractive to residents and inward investors⁴⁷. Economically, new jobs have been created via the construction of several large distribution warehouses and factories on the fringes of Grimethorpe. However, on further inspection, Grimethorpe still has more than double the national average of people claiming Job Seekers Allowance and over twenty per cent claiming incapacity and other sickness related benefits (Nomis, 2012).

Whilst there have been success stories over the period of this research, particularly in relation tackling crime, social problems are still exerting an influence over the everyday lives of many people living in Grimethorpe. For example, using the Indices of Deprivation measure in 2010, Grimethorpe was recognised as one of the areas that fell within the 15 per cent of most deprived areas in England (Pitt, 2012). Having received significant financial investment

⁴⁷ In 1995, Barnsley Metropolitan Borough Council appointed consultants to produce a regeneration strategy for Grimethorpe. The 1996 plan set out a 15 to 20 year plan to regenerate the colliery and village, including dealing with contamination associated with the colliery, building roads to open up development sites and developing private homes. A regeneration board involving the council and partner agencies was set up in 1997 to implement the plan (Hignett, 2010).

of public (and private) funding, it still remains in an overall deprived state according to this measure (Pitt, 2012).

In phase one of the research study a key aim was to explore the potential use of ICT and the Internet to help develop Grimethorpe economically and socially. The intention was to investigate public ICT policies aimed at facilitating deprived areas to overcome the digital divide through the use of community technology centres (CTC). As already mentioned Grimethorpe at the time possessed three different types of CTC, which offered the opportunity to investigate each centre individually and then comparatively. Since then, technology has rapidly developed becoming much more mobile and fluid, leading the research in a slightly different direction. In both phases of research the aim was to explore the relationship between people and technology. What the next subsection involves is outlining the different units of analysis employed in both phases of the research.

4.5 Embedded units of analysis – Phase 1

The GEVH, the Learndirect centre and the library, were all situated within the Acorn Centre on the main road through Grimethorpe's village. There were a number of other regeneration projects and businesses situated alongside these amenities, all within the confines of the old British Coal Headquarters (albeit, now regenerated and refurbished and called the Acorn Centre). For example, the Acorn Centre is home to a number of other initiatives which come under the auspices of the Grimethorpe Regeneration Executive (GRE) which brings together key partners that influenced the regeneration processes within the village and surrounding area in phase 1 of the research⁴⁸. There was also a car repair unit, a recycling unit, youth club, Grimethorpe Brass Band and a Connections Centre for young people.

⁴⁸ The GRE comprises of Grimethorpe, Shafton & Brierley Community Partnership, Yorkshire Forward/Renaissance South Yorkshire, Barnsley Council, BDA, Private Sector, UK Coal, Shevin Housing Group, Yorkshire Metropolitan Housing Association and Haslam Homes (GRE, 2006).

4.5.1 Grimethorpe Electronic Village Hall (GEVH)

Cited, even lauded, as a 'Flagship Project' by the Department for Trade and Industry (DTI) the GEVH has achieved critical acclaim for its innovative use of ICT (DTI, 1999). One of the first Electronic Village Hall's (EVH) in the UK started out life in 1992 as a computer club organised by several computer enthusiasts:

'It started off in my front room and the local pub. Five people who knew each other on a personal level through working for British Coal, who all had a really big interest in computers.' [Gary Interviewee]

By 1992, with the help of Andy Kershaw⁴⁹, the group had been given their own room in the Acorn Centre in which to meet once a week for one and a half hours. The group soon became well known within the local area and more and more people became interested in what they were doing with computers. By 1994 membership of the GEVH had passed fifty, they had moved into a permanent room and obtained an Internet connection (through donations and raffles and the kindness of Andy Kershaw). The GEVH arrived at the Acorn Centre in 1997 when members of the 'committee' applied for, and were granted, a National Lottery grant of £108,000 (alongside ERDF funding of £150,000). This created one of the first community owned and managed ICT facilities of its kind in the country and the model on which other initiatives have been based⁵⁰. Funding initiatives continued and the GEVH was awarded an Objective 1 matched funding grant in 2000 to continue and expand on their work.

Because some of the original members had links with local community groups the GEVH started providing technical support to the voluntary sector on a non-profit basis and soon had well-over 100 groups as clients. For several years

⁴⁹ Andy Kershaw was originally a development worker at Grimethorpe who became the centre manager of the then newly redeveloped Acorn Centre, he has since moved on to present a radio show in Sheffield.

⁵⁰ Interestingly enough, in 1997 the GEVH employed four full-time staff and had forty voluntary staff. However, when the researcher conducted the research in 2002 there were two voluntary and three full-time members of staff.

they worked on linking these groups up electronically and also diversifying into wireless connectivity. A key goal of the GEVH was to create a sustainable enterprise, providing Internet connectivity and supplying IT support and hardware to community groups in Grimethorpe and the surrounding areas.

The initial aim of the project was to bring the community together and to develop their IT skills, making them more attractive to employers. The GEVH saw its role as being able to provide a complete solution to the IT needs of community and voluntary sector groups locally. In their words, they provided 'a common and easily accessible base for people and organisations connected with the community, to develop further social intercourse and offer specialist advice on how information and communication technology may be relevant to their business or organisation' (DTI, 1999, p.178). On a more personal level the GEVH likes to think of itself as a place where anyone could drop in and learn.

There were a number of courses on offer to people from Grimethorpe, and the surrounding area, from basic computer courses to building your own computer and then maintaining it. They were open Monday to Friday between the hours of 10.30am and 4pm, with a Tuesday 'drop-in' session between 1 and 4pm and one on a Wednesday between 10 and 1pm for people to learn basic computer literacy.

4.5.2 Learndirect

Learndirect was developed by the University for Industry⁵¹ (UFI) with a remit from the Labour government to provide high quality post-16 learning which:

- reached those with few or no skills and qualifications who were unlikely to participate in traditional forms of learning;
- equipped people with the skills they need for employability, thereby strengthening the skills of the workforce and increasing productivity;
- was delivered innovatively through the use of new technologies.

Source: Ufi (2006)

⁵¹ In 2011, the UFI Charitable Trust (UCT) sold UFI Ltd and Learndirect to private equity house LDC, part of the Lloyds TSB Banking Group (Learndirect, 2012).

Like the GEVH, the Learndirect centre aimed to 'inspire existing learners to develop their skills further, win over new and excluded learners and transform the accessibility of learning in everyday life and work' (UFI, 2006). Operating a network of more than 750 online learning centres in England and Wales, Learndirect provides access to a range of e-learning opportunities. Flexible learning is available to individual adults wanting to improve existing skills or to learn new ones, and to employers looking for an innovative way to develop the skills of their workforce.

Learndirect offers more than 550 different courses covering a range of subjects, including management, IT, Skills for Life and languages, at all levels. Since its launch in 2000, 1.3 million learners have enrolled on almost three million courses. More than three quarters of the courses are available online allowing people to learn wherever they have access to the Internet - at home, at work or at a Learndirect centre (UFI, 2006).

Similar to the GEVH, Learndirect was set up to help in widening participation in learning and literacy in ICT and the Internet, which has an impact at both the social and economic level. According to the UFI (2006) 'the network of Learndirect and UK online centres is proving successful in reaching out to new and excluded learners. Through Learndirect, UFI helps individuals develop both personally and professionally, gaining new skills, new qualifications and new confidence' (UFI, 2006, p.1).

Learndirect centres can be found on high streets, in sports and community centres, libraries, churches and even at tourist attractions. They also proffer a wide range of facilities from crèches, cafés, parking (although not necessarily free) and free internet access (as long as you were 'signed up' for a Learndirect course), often with weekend and evening opening hours. They are designed to help people fit learning into their lives and around their everyday work, family and social commitments. Courses too, like GEVH, are deliberately flexible, and e-learning often appeals to people because of the independence and autonomy it offers. In effect, you learn as much as you want when you want to learn it, at a pace which suits you. There are no fixed

classes, traditional classrooms or teachers, but online or centre-based support is always available should you need it (UFI, 2006).

The Learndirect centre is situated above the reception area of the Acorn Centre as you entered from the main road in Grimethorpe⁵². Up a flight of stairs, or in the lift if disabled, the three rooms are given over to two suites of computers and an office for the Learndirect tutor and volunteer workers. Unlike the GEVH, the teaching sessions are not fixed. The centre is open 9-5pm, Monday to Friday and a member of staff (voluntary or employed by Learndirect) is always available to assist in any way necessary. In the three months the researcher participated he did not see more than four people in the Learndirect centre on any day he was present.

4.5.3 Library

Also situated within the Acorn Centre is Grimethorpe Library. To access this you can either enter via the rear of the Acorn Centre from the central car park or by the side of the reception area on the main street. During the first phase of the research the library received two computers that were connected to the Internet via broadband (several weeks into the research). These were provided as part of the Labour government's sponsored initiative *The People's Network* (funded through the New Opportunities Fund) that connected every public library to the Internet by 2003.

The use of the PC's was free, but there was a small charge for printouts (10p per A4 sheet). Sessions on the computers were available for a maximum of 2 hours per person per day with the last session ending 15 minutes before the library closed. As a precaution the library made it clear that it was advisable to book sessions in advance, especially at smaller branches like Grimethorpe (BMBC, 2006).

In contrast to the GEVH and the Learndirect Centre, the library did not have the staff to initiate any kind of training or teaching for using the computer or Internet, other than help with requests for information or searches. What is

⁵² See Appendix 4 for a plan of the Acorn Centre and location of the Learndirect centre.

more, the library only opened for two eight-hour days per week in 2002 but had expanded to five times a week by 2013, as Table 5 below demonstrates⁵³:

Table 5 Opening times at Grimethorpe Library

Opening Hours:	2002	2012
Monday	9.30 - 13.00 / 14.00 - 17.30	9:00-5:00
Tuesday	closed all day	9:00-5:00
Wednesday	closed all day	9:00-5:00
Thursday	9.30 - 13.00 / 14.00 - 17.30	9:00-5:00
Friday	closed all day	9:00-4.30
Saturday & Sunday	closed all day	closed all day

Source: BMBC Branch Libraries – Grimethorpe (2006; 2012)

Although there was a definite lack of ‘teaching’ at the library, this was, to some degree, compensated by the enthusiastic nature of the Librarian. The Librarian made it her business to know what courses were on offer and where you could study them at the other two centres within the Acorn Centre. She also had no qualms about conveying this to anyone who demonstrated an interest. This attitude of making sure people could get help with ICT, and other courses, was also to be found on the Barnsley council libraries web page where it stated, ‘many classes and facilities take place at the Acorn Centre, please contact the Centre reception on 01226 712575 for further details’ (BMBC, 2006).

4.6 Embedded units of analysis – Phase 2

Over a decade later the researcher returned to Grimethorpe in order to conduct further research on the relationship between ordinary people and technology. After visiting the Acorn Centre the researcher found much had changed. The buildings that formed the Acorn Centre were still the same and the library and Learndirect centre were still in place, but the GEVH had disappeared. On further investigation it was found that it had moved its base to Wathe-upon-Deerne, Rotherham where it was still providing systems and

⁵³ Although open at the moment Grimethorpe library is one of three libraries in Barnsley earmarked for imminent closure (unless alternative means can be found to run the venture).

network support along with website design and hosting⁵⁴. Similarly, when talking with the new librarian I was informed that the library would be shut by the end of April 2013⁵⁵. The Learndirect centre also had a new member of staff but there were still no people using the suites of computers, although she assured me they were very busy at other times. The cafe opposite the reception had also closed down due to a lack of patronage and the Connexions centre had moved to Barnsley. Having said this, a host of new businesses had moved into the Acorn Centre⁵⁶.

The result of the GEVH moving, the library closing down and the empty Learndirect centre meant the research direction needed to change. Instead of concentrating on the CTCs three families living in Grimethorpe became the embedded units of analysis and the focus of phase 2 of the research⁵⁷. The first family consisted of a married couple living in a two bedroom council house in the centre of the village, along with their youngest child who was twenty. The second family were a retired married couple who lived in their own three bedroom house at the top end of the village called Red City. The third family, also married, lived in their new build semi-detached house on Kingsway with their two children aged 7 and 5. These three families became central to exploring how the changes in technology were being experienced by individual family members and the family as a group.

⁵⁴ Although the researcher attempted to get in touch with the GEVH on several different occasions contact was never established.

⁵⁵ In July 2013 the library was still open having been given a reprieve to allow time for some entity to take over the running of it.

⁵⁶ These include: Grimethorpe Activity Zone, which provides advice, support and a range of activities for young people; ITN Plus a commercial catering repair service; CAHMS, a dedicated mental health service for young children and young people with learning disabilities; Blok 'N' Mesh, a company that supplies and installs temporary fencing and hording solutions; Glitz and Glam beauty suppliers; Acorn Auto Electrics; Diamond White Teeth Whitening and Arc Fire Welding.

⁵⁷ Feedback and suggestions from colleagues also prompted this change of direction, while time constraints and problems gaining access reduced the number of families participating.

4.8 Conclusion

This chapter has outlined the social and economic decline of coalfield communities along with relevant regeneration programmes efforts used to alleviate some these problems. This was undertaken to clarify and contextualise the research as well as validate the choice of community in which the research was based, namely Grimethorpe. From this the embedded units of analysis used in both phases of the research were outlined. Chapter 5 introduces the research approach used to conduct the research and answer the research questions. This includes a consideration of the methodological framework which informs the research methods, sampling technique, ethical consideration and finally the data analysis technique and data management procedure.

Chapter 5 Methodological decisions

5.1 Introduction

At the beginning of the research a number of different methodologies and methods were considered before settling on a qualitative research strategy. A careful process was undertaken to ensure that the methodological approach and the methods employed were suitable to answer the research questions. The initial aim of the study was to explore whether or not ICT policy could help regenerate, economically and socially, a deprived coalfield community. The focus here was based on the inclusive practice of third sector ICT provision in helping to overcome what had been termed the 'digital divide'. However, original research took place in 2002 and was felt to not to represent the general growth in new media and ICT in the intervening years. Therefore, further research was undertaken in the same community in 2013 to create a reflective account of these changes.

This chapter outlines the various design decisions taken in order to conduct the research. By examining this process the key choices made at each stage can be made explicit. Firstly, it discusses philosophical issues and identifies the epistemology and methodology used to conduct the research. Secondly, it details the type of research methods employed and why. Thirdly it discusses issues relating to access and ethical issues. Finally, this chapter concludes with a discussion of both the data management techniques and analytical strategy undertaken.

5.2 Paradigmatic decisions

Research methods are not neutral techniques but reflect both our view of the world and our conception of knowledge (Bryman, 2008). They are based within paradigms, which are perspectives or ways of looking at reality with 'specific guidelines on how to conduct research' (Prasad, 2005, p.8). Denzin and Lincoln (2008, p.31), based on Khun (1970), define a paradigm as a 'net that contains the researchers' ontological, epistemological and methodological

premises'. Ontology refers to how we view the world and what we think reality is made of (Denzin and Lincoln, 2008). It is concerned with the nature of existence and with the structure of reality. Epistemology concerns the theory of knowledge and its nature and limits (Marshall, 1998), how people develop and accept knowledge (Guba and Lincoln, 1985), and the relationship between what is researched and those who research it (Mason, 1996). In all research it is necessary to identify, explain and justify the ontological and epistemological position taken in order to be transparent about the choices made during the research process.

Because paradigms are the frames of reference used by researchers to organise their work, it is through these that the methodology and methods to be used by the researcher are often selected and applied (Babbie, 2004). As Weaver and Olson (2006, p.460) note, 'paradigms are patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished'. For some social scientists different research strategies have fixed epistemological and ontological implications that 'are inextricably intertwined and incompatible' (Bryman, 2008, p.604). For example, objectivism is seen to be mainly associated with quantitative methodology and methods and constructivism with interpretive modes of enquiry⁵⁸ (Denzin and Lincoln, 2003; Burgess, 1997).

Objectivism emphasises that 'social phenomena and their meanings have an existence that is independent of social actors' (Bryman, 2008, p.19). This implies reality consists of facts independent of consciousness and that 'researchers can observe and measure reality in an objective way with no influence of the researcher on the process of data collection' (Hennink, Hutter and Bailey, 2011, p. 14). Constructivism, on the other hand, claims social phenomena to be relative and dependent on the actor's perspective. This

⁵⁸ However, these differences are often viewed as being overlapped between the two strategies. For example, Bryman (2008) and Silverman (2013) both question the argument that research methods carry epistemological commitments, and that quantitative and qualitative research should not be integrated because their underlying assumptions, values and methods are inextricably linked and incompatible.

paradigm identifies the importance of close collaboration between the researcher and the participant and the subjective development of meaning (Denzin and Lincoln, 2008). It is concerned with the processes by which social reality becomes constructed through shared understanding, practices and language (Lincoln and Guba, 2000).

Consequently, there are academics who feel research methods cannot easily be divorced from their over-arching paradigm (Smith, 1983), and through this, paradigms themselves can constitute a double-edged sword, which both enables and constricts the research process⁵⁹ (Denzin and Lincoln, 2008). For example, quantitative methods are seen to be based within a positivist perspective and adhere to a clearly defined set of formalised procedures (Spradley, 1979). These emphasise the importance of scientific rigour including the measurability of data, the generalisability of findings and the replicable nature of the research process (May, 1993). This approach generally upholds the notion of causality and explanation through the application of universal laws, and embraces a view of the world that can be 'explained in the same way as natural phenomena' (May, 1993, p.6).

Whereas positivism places primary importance on the scientific method, interpretivism suggests that 'reality' exists within the social world. The essential difference between the two epistemologies can be considered in terms of their objectives in creating knowledge. Where positivists attempt to explain phenomena interpretivists aim to understand them (Spradley, 1979). For this reason interpretivism implies sensitivity towards the research setting of those being studied. It is concerned with the everyday experiences of the research subjects and how they construct their social world via shared meanings (May, 1993). According to Guba and Lincoln (1985, p.123) this form of knowledge is 'context bound and socially constructed between researcher and researched'.

⁵⁹ Which is why many researchers often consider using a mixed methodology, see Creswell (2013).

Choosing a particular paradigm to direct and guide the research can depend on a number of motives, but often it is based on the projects research questions (Bryman, 2008). As White (2009, p.1) states 'the questions that you pose are central to your research, dictating what kind of data you need and your methods of data collection and analysis'. In this study the central aims are to explore the inclusive properties of ICT policy within community technology centres to help overcome the digital divide and investigate the lived reality of ICT in the lives of ordinary people. Much of what has already been determined by policy makers concerning the creation and deployment of ICT policy is inherently positivistic and generated statistically (Selwyn, 2004). Similarly, repeated accounts of individuals access and usage of ICT and the Internet is often couched in statistical terms (Bunz, 2009; Zillien and Hargittai, 2009; van Dijk, 2012). For example, after nearly twenty years of ICT policies aimed at providing universal access to help overcome the digital divide and get people using computers and the Internet, at the beginning of 2010 just over ten million people in the UK had still not used the Internet (BBC, 2011).

Statistical evidence is very clear with the facts of the matter, but not so good at getting to the 'lived experience from the perspective of the people themselves' (Hennink, Hutter and Bailey, 2011, p.14). Also, as van Dijk (2012) points out the digital divide is a complicated issue needing further consideration beyond concerns pertaining to access. In order address these issues and to move beyond statistical descriptions the chosen paradigm needed to facilitate a deeper understanding of the ways in which people access and use ICT. This meant that positivism and quantitative methods would be an inappropriate choice because the researcher intended to explore the issue in-depth in order to 'gather rich data to illuminate the origin behind many of the existing statistical representations' (Denzin and Lincoln 1998, p.47). This is not to say that qualitative research is in any way superior to quantitative, but as Silverman (2013, p.13) points out 'selecting a qualitative methodology is mostly a practical matter of deciding what works best'. Therefore, in order to gain a better understanding of the complexities involved in this investigation, it will utilise an interpretive mode of inquiry.

5.3 Methodology

Having decided on the approach to the research the next stage involves the selection of an appropriate design for the collection and analysis of data that would address the research fully. Within the qualitative field of research there is a variety to choose from including: action research, discourse analysis, narrative research, phenomenological research, grounded theory research, case study research and ethnographic research (Creswell, 2013). Each has its own particular history and associated procedures⁶⁰. In 2002 a methodology was needed that could investigate the community of Grimethorpe where the natural phenomena of everyday life could be observed in a contained field setting (Yin, 2009). At the time the emphasis was on exploring the relationship between public and third sector ICT centres and the inhabitants of the community on the wrong side of the digital divide. In 2012 this ethos had not changed. The research was still exploratory but this time centred on the advances in technology and how this had since impacted on people's lives and the wider community. The original methodology chosen to undertake this task was a case study design and there seemed little reason for this to change for the research undertaken in 2012.

5.3.1 Case Study design

Case study design has a long history of use in the social sciences (Stake 1995; Yin 2009). However, because it has been employed across different disciplines its precise use and classification is often difficult to define (Zucker, 2001). As such, the case study has been identified as a 'research design, research method, research strategy, data collection method and teaching technique' (Moriarty, 2011, p.15). Adding to the confusion are the differing methodological perspectives applied by different researchers. For example, Yin (2009, p.32) identifies the case study in terms of the process of 'empirical inquiry that investigates a contemporary phenomenon within its real-life context'. Stake (1995) on the other hand focuses mainly on the unit of study,

⁶⁰ For further information on different research designs, see Creswell (2013, pp. 13-15) and Bryman (2008).

or the case, as the defining characteristic. Similarly, for Bryman (2008, p.52) the case study can include detailed and intensive analysis of a single community, a single organisation, a single event, a single family, or a single person. Moreover, the case study can draw on a multitude of research methods from participant observation to statistical surveys and is equally at home within quantitative, qualitative or mixed methods traditions (Bryman, 2008). It is important then to clearly outline why this design was chosen and how it was used in this study.

According to Yin (2009, p.8) the conditions for choosing between research designs 'is dependent on the nature of the research question, the extent of control the researcher has over the circumstances of the research and the relative degree of focus on contemporary or historical events'. As already discussed the studies philosophical position was selected to deliver the best answers to the research questions formulated from the literature review. These questions were based the need to understand why certain ICT policy initiatives were viewed as being too simplistic in their application and therefore considered ineffective in helping deprived areas overcome the digital divide. Equally important was to explore the relationship between individuals and ICT and the Internet – that is, how they were accessing and engaging with technology. The purpose of the study was to answer 'how' and 'why' questions which lend themselves to a case study approach (Yin, 2009). Similarly, the 'case study is preferred in examining contemporary events...but when the relevant behaviours cannot be manipulated' (Yin, 2009, p.11). In both phases of the research the aim was to discover and interpret events and behaviours as they occurred naturally in the field, with no control over the actions of participants.

A further consideration of case study research lies in delimiting the object of study by effectively creating a bounded system (Bogden and Biklen, 2006). In the context of this study, the research was based within the community of Grimethorpe. According to Bryman (2008, p.53) 'the most common use of the

case study is with a location such as a community⁶¹. One of the key reasons for this is the enclosed nature of communities with their demarcated boundaries, either real or imagined (Anderson, 1981). Thus the community itself therefore becomes the case and embedded within were units of analysis selected for their suitability to provide answers to the research questions.

In the first phase the research was based in three different types of public or third sector centre each providing the community with access to ICT and the Internet. In the second phase, seven individuals became the units of analysis chosen to explore their relationship with developments in new media. There are two advantages of using what Yin (2009, p.46) calls a 'single case (embedded design)' for this study⁶². Firstly, it allows data to be analysed within each of the units of analysis separately and also collectively across the units. Secondly, it offers the rationale for an element of longitudinal research where the case can be 'investigated at two or more junctures' adding a comparative or evaluative angle (Bryman, 2008, p.56). Utilising such a design also allows for the collection of rich, detailed, localised accounts, the analysis of which 'serves to better illuminate the case' (Yin, 2009, p.50).

Despite this, case study design is not without its critics. Opposition is focused primarily on issues relating to validity and reliability. Tellis (1997, p.1) also points out how 'dependence on a single case renders it incapable of providing a generalising conclusion'. These condemnations are nothing new and merely reflect the general critique levelled at qualitative research as a whole (Bryman, 2008; Silverman, 2013). Supporters of case study design have retaliated by arguing the purpose of the design is not to 'generalise to other cases or populations beyond the case...but to generate an intensive examination of a single case' (Bryman, 2008, p.57). While others such as Williams (2000, p.57) suggest that case studies can be generalised from by 'drawing on findings from comparable cases investigated by others'.

⁶¹ Bryman (1998, p.52-53) also gives some useful examples of 'community case studies' such as 'Whyte's (1955) study of Cornerville in Boston, Gan's (1962) study of the East End of Boston, Stacey's (1960) research on Banbury, and O'Reilly's (2000) research on a community of Britons living on the Costa Del Sol in Spain'.

⁶² See Appendix 6 for a diagrammatic representation.

Similarly, one of the essential characteristics of case study design is the aim to preserve the 'wholeness' of the case under study (Yin, 2009). This is due to the recognition that the relationships between actors, the system and their context are often inextricably inter-linked. Accurate description and theoretical findings are possible because of the breadth and depth of the information collected. The case study approach provides mechanisms for ensuring that valid and reliable data could be collected. This is demonstrated in Table 6 below which has been adapted from Yin's (2009) description of design testing.

Table 6 Design Tests (adapted from Yin, 2009, pp. 40-41)

Tests	Objective	Action	Which phase?
External Validity	Establish the domain to which findings can be applied.	Multiple cases producing replication	Research design
Construct Validity	Appropriate operational measures/ methods	Multiple sources Link evidence Informants check	Data collection
Internal Validity	Establish causal paths, distinguishable from spurious relationships	Pattern matching Explanation building	Data analysis
Reliability	Operations of the study can be repeated with the same results	Investigator reflection Case study protocol	Data collection

Here, external and construct validity refer to the ability of the case study design to provide an accurate description of a phenomenon that can be placed into a wider context of events (Yin, 2009). Accuracy relies on the repetition of descriptive evidence. For example, there may be mutually supportive evidence from many different sources within each unit of analysis of the case study. Evidence may also be shown to be valid, and apply to a larger context, because it is exhibited by several different units of analysis within the case study. Internal validity works in much the same way but also establishes the accuracy of theoretical inferences (Yin, 2009). Reliability simply means if a 'later investigator followed the same procedures as described by an earlier investigator and conducted the same case study all over again, the later investigator should arrive at the same findings and conclusions⁶³ (Yin, 2009, p.48).

⁶³ Yin (2009) is quite specific here that the emphasis is on doing the same case over again, not on 'replicating' the results of one case by doing another case study.

However, qualitative research is not experimental in nature and therefore not easy to replicate. The choices one researcher makes may not necessarily be those adopted by another. One way to overcome this is to make clear what was done, how it was done and why it was done. This not only improves the readers trust in the analysis it also provides helpful guidance for other researchers entering the field (Silverman 2013). The following section therefore outlines a detailed description of fieldwork. Here, issues relevant to the types of methods used, access to participants and ethical considerations are discussed.

5.4 In the field

As already mentioned, the fieldwork was conducted in two phases, the first in 2002 and the second in 2013. The first phase involved researching three embedded ICT centres each providing access to ICT and the Internet to the surrounding community. Two were viewed as community technology centres (CTCs) and one was a library. The field contact for the first phase lasted approximately six months from February 2002 – July 2002 with each of the cases visited regularly over a period of seven months⁶⁴. The second phase was more concerned with investigating individual people within the community and their lived reality with ICT and the Internet. The field contact for the second phase lasted for four months from February 2013 – May 2013 with each of the seven cases visited at least twice. The two phases of the research design aimed to ensure the research questions could be answered, but also allowed changes over the time period to be reflected upon.

Across both phases of the research a range of qualitative methods were employed as outlined in Table 7 below. The vast majority of data was gathered through documentary analysis, familiarisation visits, semi-structured interviews, (participant) observation and informal discussions. All data instruments were piloted in both phases of the research and revised as

⁶⁴ For the GEVH this was 2-3 times a week, normally for half a day. The Learndirect centre and the library were more *ad hoc* due to issues of access discussed in more detail later in this chapter.

necessary. Below the specific data collection methods are outlined along with the difficulties and limitations they posed for the study.

Table 7 Volume and Type of Research Methods

	Phase 1 Embedded Units		Phase 2 Embedded Units	
Documentary Analysis	Internal documents (e.g. minuted meetings, newsletters, bids, etc.) External documents (e.g. Government /council policy documents, community group documents /reports)		External documents (Government/council documents, community group documents /reports)	
Semi-Structured interviews		No. of interviews		No. of interviews
	GEVH	17	Members of three families in Grimethorpe	11
	Learn Direct	4		
	Library	1		
Members of community	8			
Observation		No. of observations		No. of observations
	Internal events (e.g. teaching observations, staff meetings) External events (e.g. Observing people coming and going in the Acorn Centre, local amenities – cafe, pub, shops)		21	External events (e.g. re-familiarisation with Grimethorpe community). 3

5.4.1 Documentary analysis

Documents have always been used as a source of information in social research often in 'conjunction with other methods' (Sarantakos, 1998, p.274). In both stages of the research documentary analysis was used. Utilising a 'reflexive approach' and 'searching out underlying themes' in the documents used supported reasons for choosing the research design, data collection methods and data analysis (Bryman, 2008, p.529). Key policy documents from local, national and international government bodies were examined to explore the debate surrounding the deployment, access and use of ICT and the Internet. Local histories, local newspapers, minutes from various local

community meetings and reports produced by local community groups, were also employed. These helped inform the literature review and frame some of the key themes of the study. They also assisted in contextualising information concerning several key actors and provided a useful timeline of events of the history of CTC's in Grimethorpe (Bowen, 2009). Conducting documentary analysis also provided a broader understanding of wider socio-cultural issues within Grimethorpe.

5.4.2 Interviews

According to Bryman (2008, p.436) interviews are 'probably the most widely employed method in qualitative research'. This is unsurprising due to the flexible nature of the interview and its ability to collect data that would otherwise be difficult to obtain using other methods like observation or documentary analysis (Ritchie and Lewis, 2003). For example, they offer the opportunity to understand the nature of relationships between different participants and can help explain observed behaviour. In both phases of the research, the semi-structured interview format was used, along with an interview guide⁶⁵ to ensure there was some comparability across the different unit of analysis. Nevertheless, it was also essential to keep the guides flexible so that revisions could be made in light of what was being learned.

The adaptability afforded by using an interview guide allowed lines of enquiry to be modified to greater effect in specific contexts, situations and in view of issues raised (Patton, 2002). This also meant flexibility and control over the general direction of the interviews, guiding as and when applicable, but also having the potential to allow participants time to talk and expand in their own time upon their understandings and experiences (Denscombe, 2007; Denzin and Lincoln, 2003). Following most interviews, recordings were listened to and ultimately transcribed verbatim.⁶⁶ Listening to the recordings, before transcription proved to be extremely valuable as it enabled a certain level of familiarity with the data to be acquired (Flick, 1998). It also proved helpful to

⁶⁵ See Appendix 9 for copies of interview guides from both phases of the research.

⁶⁶ A number of interviews were undertaken without being recorded and needed to be written-up from scratch notes made at the time (Bryman, 2008).

listen to the voice of the participant at a later date to help clarify the meaning and context of what was being said. Finally, it allowed the generation of new ideas and concepts to emerge from the talk (Glaser and Strauss, 1967). These were written down as memos and where appropriate integrated into subsequent interviews.⁶⁷

5.4.3 Observation

Observation is one of the oldest methods of data collection originally 'employed by social anthropologists' and later among ethnographers and other social scientists (Sarantankos, 1998, p.207). There are a number of typologies of (participant) observation that have been formulated to reflect the different levels of participation this method allows (see for example, Gold, 1958; Gans, 1962; Adler and Adler, 1987). The location on the continuum depends on the type of research undertaken (overt or covert). In both phases of this study observations were overt.

In the first phase, non-participant observation was initially used to familiarise the researcher with Grimethorpe (Gans, 1962). Observations within all three CTCs were then undertaken on various occasions. Firstly to watch and learn about the general day-to-day activities of the people, but then to monitor more closely the relationship between people who worked and attended the centres (Agar, 1996). The researcher was trying to understand and interpret the socio-cultural context of the settings under observation (Bryman, 2008). From this, and other observations in the wider community, useful supplementary data was gathered which helped inform the description of the three centres as well as feed into developing questions for the interview guide (Mullhall, 2003). For example, after watching a client at one of the centres carry out a certain task on a regular basis I was able to incorporate this into the interview guide to find out why this was being undertaken.

⁶⁷ I summarised fieldwork and documented the 'memos' and other observations. These helped me to recognise and reflect upon the assumptions which were becoming significant during the fieldwork, highlighted things I did not understand that could be posed at a later date and also assisted with the analysis of the data. A pro-forma copy can found in Appendix 7.

In the second phase of the research non-participant observations were mainly in the wider community in order that the researcher could refresh his knowledge of the area and note any significant changes. Although no direct observations were undertaken with the interviewees knowledge of this method complimented the interviews undertaken. For instance, when considering relationships between interviewees and their partners, friends or family non-verbal communications can be just as revealing as the responses made during the interview process (Hennink, Hutter and Bailey, 2011). One example could be seen in the 'knitting-together' of eyebrows from a member of one interviewee's family present at the time who was obviously questioning the responses being made.

5.4.4 Access and field relations

5.4.4.1 Phase 1

When the case study to be used for the research had been identified the next important step was to undertake the fieldwork and gain access to the various unit of analysis in both phases of the research (Burgess, 1984). Here, the researcher often needs to 'engage in negotiations that have political, ethical and practical implications' (Denscombe, 2007, p.76). As a result, these procedures can be a trying and drawn-out process and should be approached cautiously and with due care and attention. For this research there were two problems associated with access that needed to be addressed. The first was that of securing entry into the three CTCs in which the research was to be conducted. The second problem, which affected both the first and second phase of the research, was persuading certain individuals to be interviewed.

Phase one of the research began with a visit to the Grimethorpe Electronic Village Hall⁶⁸ (GEVH). The main reason for this was based on the centre

⁶⁸ Initially the researcher tried contacting the centre via e-mail but unfortunately this was returned unread. Telephoning was the next step but again this was unsuccessful as the line was continuously engaged. At this point the researcher decided to go in person to the GEVH centre and talk to a member of staff. On arrival, the researcher explained his situation to Gary, a founding member of the GEVH,

receiving funding from Objective 1 and the study itself being part funded by Objective 1. This approach lent support to the request for access to the GEVH giving the researcher 'credibility' and 'legitimacy' when making the proposal (Patton, 2002). It also formed an initial problem around mistrust where the researcher did not want to appear as some kind of emissary for Objective 1 (Punch, 1994). However, this worry proved unfounded because once entry to GEVH had been obtained all requests for access to individuals, settings and documents were granted with no noticeable attempts to hinder the researcher or research aims.

Gaining access to the library was very similar. The initial contact with the librarian and explanation of research was received with great enthusiasm. Although on this occasion the researcher relied more on his academic role rather than 'the known sponsor response' executed at the GEVH (Patton, 2002). The librarian was very knowledgeable about the community of Grimethorpe even though she lived in Barnsley. Throughout the fieldwork, many informal chats and conversation took place and a good relationship and rapport was established.

The same could not be said when trying to get access to the Learndirect centre. Here, the researcher was faced with several problems. Initial contact with the manager had been via email which had been obtained from a member of staff at the GEVH. However, regardless of emails or visits to the Learndirect centre no contact was ever made with the manager. Appointments were continually cancelled and no reasons given. Members of staff who taught at the centre along with some of their clients were met on the initial visits. Yet, once the researcher had explained the nature of his business they were reluctant to do or say anything without permission from their manager. This was eventually overcome through the persuasive techniques of another worker at the Acorn centre who vouched for me. Although not a part of the Learndirect centre the woman in question had an office in the same building and was well known to most people. There is little doubt that without the help

who was enthusiastic about the research and was to play a key role in the time spent at the centre (Wellington, 1996).

of this extraordinary woman the partial access obtained would have been impossible. Even so, several of the interviews with staff were strained and difficult to complete, mainly because they refused to allow the interviews to be recorded.

After carrying out the fieldwork at the CTCs the researcher also undertook several interviews in the wider community to try and determine why most people attending the centres were from outside of the actual village. This was a much more difficult exercise and the researcher was refused on many occasions, sometimes quite explicitly. One of the most interesting replies for not wanting to participate came from a man who was 'sick of being interviewed' (Greg, a man who refused to be interviewed). This attitude is not uncommon in areas like Grimethorpe where a great deal of research had already taken place and they are suffering from research fatigue (Clark, 2008). This meant trying to obtain access another way. For example, with the GEVH the people I wanted to speak to were readily available and already attending the centre. Staff consented to being interviewed and observed, but also played an intrinsic gatekeeper role in facilitating observations and interviews with clients at the centre (Silverman, 2013). In the wider community it was only after trial and error that the researcher, along with the help of a well-known local acting as a gatekeeper, was able to access participants⁶⁹.

5.4.4.2 Phase 2

The second phase of the research proved to be extremely difficult due the change in direction of the research and the difficulty in finding people who would participate. In the end three families became the embedded subunits for the research. Access to the first family was achieved by looking up one of the participants from the first phase of the research. He agreed to be interviewed and after meeting with the rest of his family, discussing the purpose of the research and seeking permission from his wife and son, we set a date and time for interviewing to take place. The second family which

⁶⁹ Appendix 10 details the various research participants from both phases of the research.

consisted of a retired man and women was enlisted on the recommendation of the first. The third family to take part was acquired much more serendipitously. The participation of this family was only made possible by talking to a gentleman in the local Asda store on High Street while stood in the checkout queue. Making small talk on this occasion led to him wanting to know more the research and ultimately to him and his wife agreeing to take part.

5.4.5 Sampling techniques

In both phases of the research the participants were chosen by what Bryman (2008, p.458) calls 'theoretical sampling'. Here, the researcher aimed to interview people who were relevant to the research and could help enhance the study with their understanding of the research area (Sarantankos, 1998). Potential contributors were chosen by the researcher to participate in the research on the basis that their knowledge and experience could further the collection of relevant information. When all possible interviews had been undertaken at the centres the research continued beyond the confines of the initial units of analysis and into the wider community. This allowed the researcher to address a number of issues that had emerged from the data, beginning with the lack of people actually from the community participating at the centres. It also helped to address the gender and age disparity apparent within the centres, where women were outnumbered three-to-one and over three quarters of the participants were aged over forty.

In phase two, the same kind of sampling was also employed. Initially, several participants from the first phase were approached, but only one would consent to be re-interviewed. This led to the selection of the second family unit and finally the third family was acquired by a chance conversation in the local shop. The sampling techniques used were completely unrepresentative of the community under study using none of the rules of probability theory associated with quantitative methods. However, employing theoretical sampling meant the researcher took advantage of the opportunities that

presented themselves in both phases of the research in order to find in-depth, meaningful answers to the research questions (Miles and Huberman, 1994).

5.4.6 Ethical considerations

Ethical issues can be found within most research methods books because they 'relate directly to the integrity of a piece of research' (Bryman, 2008, p.113). However, researchers can differ quite markedly on what they think is and is not ethically acceptable. For example, ethical guidelines are viewed by many practitioners as ambiguous and open to interpretation even when set down by professional associations and governing bodies (Bryman, 2008). However, for others these same guidelines are viewed as too restrictive and need to become more generalised (Gilbert, 1993). In terms of ethical issues, these usually revolve around four recurring themes in relation to researchers and research participants. The main areas of concern 'relate to: harm to participants, lack of informed consent, invasion of privacy, and deception in the context of collecting and analysing data' (Bryman, 2008, p.113). Underpinning these themes is the essential concern with honesty about the purpose of your research, something that was at the forefront of this study (Curtis and Curtis, 2011).

Before fieldwork could begin the research needed to be cleared by an ethics committee which placed a great deal of emphasis on informed consent and outlining clearly to participants what was expected of them and the choices they had. All of the people who took part in the research were adults and gave their (signed) consent to be interviewed and observed. Before the observations took place in phase 1 an explanation was given of what the researcher was doing and permission sought from those present. Similarly, prior to the interviews in both phases commencing participants were informed of the purpose of the interview and asked if the interview could be tape recorded. The researcher also answered any questions fielded at this point as honestly as possible. Participants were also told they could stop the interview at any point or leave at any time. They were also informed they did not have to answer any questions they did not want to. All of those who contributed

were also told that that information gained through these methods could be used in the research study or other publications. It was also made very clear that this information was confidential and would be kept in a secure location only accessible to the researcher. Similarly, all participants were informed that their identities would be changed to provide them with anonymity.

Throughout the fieldwork there was a conscious effort to try and create a more equal balance between researcher and participant where the research was based on participants as collaborators rather than mere subjects of the research (Denzin and Lincoln, 2003). For example, recruitment of participants was on a voluntary basis and participants were able to agree or decline to take part in the research – the choice was theirs (Curtis and Curtis, 2011). Time was also spent reassuring the participants that the researcher was discreet, honest and dependable which helped in building relationships of trust and mutual respect (Hammersley and Atkinson, 1995). Interview scripts were transcribed and offered to participants to read through for accuracy and understanding. This process offered participants more control over what they felt was admissible to the research.

Research ethics are 'a set of principles that assist researchers in deciding how to conduct ethical research' (Christensen, Johnson and Turner, 2011, p.96). These were identified by the researcher in terms of a set of moral obligations which needed to acknowledge the implications of his actions during the research process, but especially during the fieldwork (Miles and Huberman, 1994). Honesty and trust were essential elements incorporated into the above processes and practices to support an ethically sound research process.

5.5 Data analysis procedure

Because data analysis is such an important part of the research it is essential that there is clarity around the processes and practices involved. In qualitative data analysis there is no single right way to proceed due to qualitative approaches being incredibly diverse, complex and nuanced (Holloway and Todres, 2003). However, the analytical framework chosen is usually

influenced by the philosophical tradition the researcher is working within, where the 'research epistemology guides what you can say about your data, and informs how you theorise meaning' (Braun and Clarke, 2006, p.14). Along with this the purpose of qualitative data analysis is to uncover 'emerging themes, patterns, concepts, insights and understandings' (Patton, 2002, p.47). With this in mind, grounded theory provides a flexible and useful analytical tool to provide a rich and detailed, yet complex account of the data. Furthermore, this method is attuned to the underlying constructivist approach of the research (Braun and Clarke, 2006; Charmaz, 2000). According to Bryman (2008, p.541) grounded theory is by far the 'most widely used framework' to analyse qualitative data. Based on the work Glaser and Strauss (1967) it is an analytical strategy that uses 'a set of techniques which emphasise the creation of theoretical statements from inspection of the data' (Seale, 2012, p.393).

Theoretical sampling informed the data collection in both phases of the research. Here, data collection and analysis took place in an alternating sequence but these stages were not linear (Christensen, Johnson and Turner, 2011). They are best described as being part of an iterative cycle, which consisted of collecting data and constantly comparing between results and new findings in order to guide further data collection saturation was achieved⁷⁰ (Bryman, 2008). For example, as the researcher began to collect and order data new observations and thoughts became apparent prompting the direction of further research and allowing for the refinement of ideas (Charmaz, 2000). In this way conclusions emerged from a repetitive process of reading the data in a manner that was reflexive, progressive and iterative (Strauss and Corbin, 1998; Bryman 2008).

Data management throughout the study was processed manually. This was based on my choice not to use computer software designs available such as Nvivo. The main reason being this type of software seemed to offer no real advantages to manual techniques. For example, using software meant I was still responsible for deciding upon the analytical codes to be used and the

⁷⁰ Saturation refer to the point at which further data collection ceases to generate any new insights or concepts, and simply repeats what is already known (Glaser and Strauss 1967).

analytical process was still down to me (Silverman, 2013). After each observation, interview and document reading a contact summary account was written as advocated by Miles and Huberman (1994, pp.51-54). This not only described what had taken place, it helped clarify important issues and support preparation for future work in the field.

An important part of grounded theory lies in coding the data. Coding is the first stage of data analysis helping the researcher to move away from particular statements to more conceptual interpretations of the data (Seale, 2012). Charmaz (1983, p.186) demonstrates how codes are a 'shorthand device to label, separate, compile and organise data'. Here the data are considered as 'potential indicators of concepts which are constantly being compared to see which concept they best fit with' (Bryman, 2008, p.542). Charmaz (2006) distinguish between two main forms of coding practice – initial coding and selective or focused coding. Initial coding tends to be a meticulous, line by line, exploration of the data; whereas focused coding 'entails emphasising the most common codes and those that are seen as the most revealing about the data' (Bryman, 2008, p.543). During focused coding, new codes can be formulated from combining together initial codes. According to Charmaz (2006) the data can then be re-examined and re-evaluated in light of the new selective codes. What is important to bear in mind is the way grounded theory involves a progression from producing initial codes that stay close to the data 'to more selective and abstract ways of conceptualising the phenomenon of interest' (Bryman, 2008, p.543). It is through the constant comparison of indicators and concepts that allows the generation of categories, which are deemed saturated when no more properties can be included (Seale, 2012, p.397).

Throughout the two phases of the study data analysis and data gathering occurred at the same time in an iterative process. Not only did this assist with the actual fieldwork, it avoided trying to do coding all in one go which can often cause 'the researcher to get sloppy, resentful, tired and partial' (Miles and Huberman, 1994, p.65). The analysis began with the initial collection of observation data and the first few interviews in both phases. These were

subjected to open coding which was very descriptive in nature and produced an abundance of concepts⁷¹. Subsequent analysis concentrated on producing more focused codes which used the initial codes as a foundation. New categories were added when the data revealed a repeated idea that the existing themes did not reflect. The process of coding and developing categories was supported by written memos created throughout the research period. From this a careful evaluation between respondents' statements and between codes and categories was undertaken. The main aim of this was to bring together, in a coherent fashion, the coded data and search for connections between the categories that had emerged (Charmaz, 2006).

In terms of theory, a grounded theory is explicitly related to the data from which it has been generated. In other words, it has been grounded in the data using the above techniques (Glaser and Strauss, 1967). Grounded theory can be used to build both substantive and formal theory. Substantive theory constructs generalisations on observation of a particular area providing a theoretical explanation that can be used to clarify issues in that place (Bryman, 2008). Formal theory, on the other hand, is more abstract and formulated from the collection and analysis of data in other research settings (Bryman, 2008). The focus of a formal theory is to produce a more general theory that can be applied to wider range of disciplinary concerns and problems (Strauss and Corbin, 1998). Substantive theory can be used to help develop formal theory (Charmaz, 2006). As Glaser and Strauss (1965, p.276) point out 'if one wishes to develop a systematic formal (or general) theory of awareness contexts, [the researcher] must analyse data from many substantive areas'.

In this study a substantive theory was developed that uses the interpretation of the data to focus on a particular area – the relationship between ordinary people and their access to and use of ICT and the Internet. It would also be true to say that most grounded theories are substantive in nature as they tend to focus on particular problems in a specific area (Charmaz, 2006). If the

⁷¹ It should be noted that although several codes were predetermined based on the broad research questions, the remainder emerged from the data.

research had perhaps utilised a different methodology there may have been the possibility to move from the substantive to the formal that would be generalisable across a broader spectrum.

There are limitations associated with grounded theory, for example the process is viewed as time consuming, too objective or lacking in methodological strength⁷² (Bryman, 2008). In response to these claims, this study made sure there was time to undertake the cyclical process associated with qualitative research. It also followed the methodological guidance of Charmaz (2006). For example, it made use of theoretical literature to inform the study rather than leaving this until data had been collected and analysed something associated with the earlier work of Glaser and Strauss (1967). It also believes that 'concepts, categories and theoretical level of analysis emerge from the researcher's interaction with the field and questions about the data' (Charmaz, 2000, p.522). In other words, Charmaz (2006, p.10) does not support the view that theories are discovered, but are in fact part of a process of construction formed 'through our past and present involvements and interactions with people, perspectives, and research practices'. This recognises that reality is 'socially constructed as people's experiences occur within social, cultural, historical or personal contexts' (Hennink, Hutter and Bailey, 2011, p.15).

5.6 Conclusion

This chapter has documented the underlying philosophical and methodological choices taken to inform the research design. It has also made evident the methods used, the data analysis technique and data management procedure, along with sampling and ethical considerations. The structure of the methodology chapter outlined the research process fully and provided an explanation of the theoretical position of the researcher and his commitment to integrity. Chapter's 6 – 8 focus explicitly on the analysis of the data produced

⁷² Braun and Clarke (2006) produce a strong argument for the use of 'thematic analysis' which lacks academic credibility but shares a great deal with grounded theory and is often passed off as grounded theory.

in the first phase of the research and have been organised thematically around three key areas. Chapter 6 discusses whether or not the CTCs at Grimethorpe are helping to increase the social capital within Grimethorpe. Chapter 7 focuses on whether or not the CTCs are helping to increase the ICT skill levels in the area. Chapter 8 forms a discussion with local residents which identifies potential barriers to motivating digitally excluded people from accessing ICT and the Internet.

Chapter 6 Grimethorpe: the digital divide – it's all about access!

6.1 Introduction

Chapters 2 and 3 outlined the importance placed on creating universal access to ICT and the Internet by policy makers and funding bodies, particularly in relation helping those excluded from ICT and the Internet to overcome the digital divide. For example, Objective 1 South Yorkshire's support of various ICT schemes⁷³; or the previous Labour government's commitment to UK 'Online Centres' and 'The People's Network'; not to mention the 'Race Online 2012' initiative instigated by the serving Coalition government (Capgemini Consulting, 2012). The ability to access and use ICT and the Internet has become a defining factor of the political commitment to make sure all citizens can participate in the information society. This chapter examines the issue of physical access in more detail through research undertaken in 2002 at three community technology centres (CTCs) to be found in Grimethorpe – the Grimethorpe Electronic Village Hall (GEVH), the Learndirect centre and the Library. Section one investigates how the three centres operated and offered access to ICT and the Internet to the wider community. Section two considers the reason why participants attended particular centres. Section three discusses if social capital within Grimethorpe was increasing due to the practices of the centres.

6.2 Universal access – a solution to the digital divide

Over the last twenty years, a variety of official and academic reports have agreed that providing universal access to ICT and the Internet is the best way to help excluded individuals overcome the digital divide (DTI, 1999; GOYH, 2004; Cabinet Office, 2010a). For the UK government shared public access sites, made available at little or no cost in local communities⁷⁴, have been the preferred method of deploying new technology for this purpose. Working in

⁷³ See Appendix 3 for details of the different schemes funded by Objective 1 South Yorkshire.

⁷⁴ Other schemes have been augmented such as renting laptops and PCs to students and wiring up neighbourhoods, but actually placing ICT and the Internet within local community buildings has been the preferred method of operation due to costs.

tandem with a range of commercial 'for-profit' ICT public access points, government policy along with European funding bodies have created physical access in a number of different places across the country including: schools, cafes, libraries and CTCs (Selwyn, 2003). These were usually, but not exclusively, situated in communities with high levels of poverty and deprivation, places where barriers to the digital divide were most apparent (Day, 2006). The underlying purpose was to make physical access to ICT and the Internet much easier for 'those with low levels of income and education, ethnic minorities, the elderly and the physically challenged' (Mark, Cornebise and Wahl, 1997, p.27). Through these types of centres the digitally excluded could learn to use ICT and the Internet, which according to government policy and Objective 1 South Yorkshire would enable people to improve their lives in a range of areas. For instance, it could help to further their education, create and widen their social contacts and help them find employment.

Phase 1 of this research focussed on public and third sector CTCs found within the deprived community of Grimethorpe, funded either through the government or Objective 1 South Yorkshire. As already discussed in Chapter 2, these types of provision were relatively new to this country during the first phase of the research, but already had quite a long history in places like Canada and the USA where they had been around since the early 1980s (Mark, Cornebise and Wahl, 1997). The key defining feature of these sites is that they all provided physical access to ICT and the Internet in a 'social place' external to home or work (Selwyn, 2003). With this in mind the next subsection focuses on how each of the units of analysis offered access to ICT and the Internet to the digitally excluded to participate at their centre.

6.2.1 Accessing the Grimethorpe Electronic Village Hall (GEVH)

The GEVH has been lauded by some and much copied by other initiatives around the country since its inception in 1994 (DTI, 1999). One of the key reasons for the GEVHs success was identified as the ability of those that ran it to understand what their community wanted, rather than needed, in terms of access to ICT and the Internet (LIC, 1998; DFEE, 1999). As a result, the

GEVH became a place where individuals could drop-in and use the facilities developed at the GEVH whenever they wanted between 10:30am and 4:00pm, Monday to Friday. There were also two sessions per week held on Tuesday's between 1 and 4pm and Wednesday's between 10 and 1pm for people wanting to learn basic computer literacy⁷⁵. The main purpose of the GEVH from its inception was to help the people of Grimethorpe initially overcome their fear of computers. It was this according to Gary and Bill, the two key players at the GEVH⁷⁶ that was viewed as the main barrier in getting people from Grimethorpe involved in the use of ICT and the Internet. The GEVH offered a space outside of the home where individuals could take some time to begin to understand and familiarise themselves with new technological equipment and software. All the residents of Grimethorpe needed was the motivation to take that first step (van Dijk, 2012).

The initial computer club, which over a period of three years had morphed into the GEVH, understood the benefits that accessing and using ICT might bring to the people of their community. They understood the social and economic deprivation to be found within Grimethorpe – the low levels of income, the low levels of education, the lack of employment and lack of technological or computing skills (DTI, 1999). They also appreciated the social and economic benefits that could come from learning to use the new technology – particularly with regard to equipping people with the skills they needed to gain employment and to be able to use technology to broaden their social circles (UFI, 2006). They had identified the value of being able to provide a physical space in which a whole range of informal and formal activities could take place. But more importantly they knew for the GEVH to be of practical use they needed to involve the community from the very beginning, as Bill pointed out:

⁷⁵ Initially opening times had been between 9:00 and 5:00pm, Monday to Friday along with two evening sessions a week between 6:00 and 9:00pm to cater for those who did have a job. However, when the researcher was there changes to the Acorn Centre's 'locking up' policy and a lack of interest from the community meant the times were altered accordingly – these issues are returned to later in the chapter.

⁷⁶ Bill was the manager and Gary one of two technicians that ran the GEVH.

This building we're in now was a shell, a dirty shell, and the people from Grimethorpe, came down here and built all the equipment from scratch. They painted the walls, they put the carpets in, they put the curtains up, cleaned the windows, scrubbed the walls, you name it they did it all. You look at it and it looks a lovely place and it's impressive. I could have gone to PC World and bought that stuff off o' shelf. That ain't the point, that's their baby! It's their baby!

However, instead of using typical methods of consulting the community, such as community appraisals, forums or roundtables, this particular initiative was developed mainly by word of mouth. For example, when the GEVH initially setup in the Acorn Centre talk began to get around that a new CTC was being opened, which had the effect of making people in the community curious as Gary states:

'Word of mouth is incredible where it's the only way of getting information round, and when we first started it was word of mouth that brought all these people, people willing to help build up the GEVH. So, we relied on the word of mouth initially and obviously it has been the best way for us to move forward ever since'.

From this the GEVH began to gain a reputation in the community as a place where you could go and see a working computer and, if you wished, join in. Gary pointed out how one person would drop-in one afternoon and after having a chat about what was happening would disappear. The same person would turn up again the next day only this time might have one or two friends with him, who were also interested in finding out what was going on.

Initially, public access equated to making sure that all who came to the GEVH were first of all given time and lots of it. Here, time meant a number of different things to different people. For some it was time to understand computer hardware and become familiar with networking computers. For others, time was spent overcoming their fear of desktop units, monitors and mice, finding out that these were not alien or impossible to operate. Time was

also being spent on understanding how to use computer software, to become familiar with different programmes. As Gary explained:

The best way for a lot of people to learn, well a lot of people from here [Grimethorpe], is to tell them to click and play. They learn far more by clicking and playing and finding out the consequences of when they do X, Y and Z. By doing this they realise they can't break the kit and anything they do can be undone! After the playing we have two volunteer members of staff who help them with basic computer skills. Over the years, we found this was the best way to help others overcome their fear and use computers and the internet.

Others still, just wanted to go and spend time socialising with people they knew. This latter point was viewed by Bill as particularly important for the initial success of the GEVH. Because of the informality, the GEVH was viewed as a place where people who had worked together in the former colmine had a chance to meet up again with no cost to them and no pressure to join some accredited scheme – they could simply come and go as they pleased. For this reason the GEVH made a point of having a section of the centre devoted entirely to socialising⁷⁷.

The staff were concerned with getting people to participate at the GEVH doing what they wanted to do at a pace that suited them. The GEVH was primarily concerned with building the self-confidence of the people of Grimethorpe to become familiar with, and be able to interact with, ICT and the Internet. This was iterated by Bill:

Just turn round and look at that tutor there [points to James]. If I'd have said to him three years ago, 'come down here and teach these [other students] computers', he would have laughed and said, 'the only thing I've ever used right in my life is a seven pound hammer'. And that couple that just came in, when they first came in they were scared stiff o' computers, they're just building their own now. That's taken eighteen months. That's what I'm talking about,

⁷⁷ See Appendix 5 for a schematic of the GEVH.

it's about them doing their own thing in their own time.

And supported by Gary, who added:

Initially, we do a lot of hand holding to get them out in the community over their fear of computers and get them to understand they can't break the machines. They then get their self-confidence, that's one of the things we are very good at here, building self-confidence, even if this takes a year or eighteen months. Then, and only then, perhaps they will be ready for a more formal course.

This is not the normal remit of many ICT initiatives which often result in 'organisational imperatives that drive planning, design, implementation and development phases of community initiatives' (Day, 2003, p.3). The approach used by the GEVH was very community orientated or 'bottom up' from its inception and required a great deal of motivation, energy and patience over quite a long period of time to establish itself. Again, this is something that is not often possible for many community ICT projects due to the nature of short term funding (Day, 2006).

A great deal of time and effort was exerted by the staff of the GEVH to make sure that the community not only had physical access to the centre but also the opportunity to learn ICT skills at a pace that suited them in a friendly, supportive environment. For example, Gary explained that the GEVH wanted the people of Grimethorpe to be able to access the centre without having to commit to a 'year-long' course like those found within schools and colleges. It was the commitment to signing up to a course that he felt was a huge barrier to places like Grimethorpe. One of the main reasons put forward for this reluctance was based on the relationship the people of Grimethorpe had had with education in general over the years. Here, schooling did not often feature strongly in the lives of many miners because most pupils secured some form of work at the pit after leaving school (Strangleman *et al.*, 1999). Something supported by Gary '*I hated school and couldn't wait to leave and get a job down the pit*'. This was also the reason why members of staff were careful to

dress very casually. According to Gary, the culture of the GEVH was to make people feel comfortable and relaxed and wearing the right kind of clothes was part of that. He pointed out:

It's like tutors wearing a suit. Nobody comes in a suit here, as such. So, we're actually mixing with people, by us being dressed the same, casually, it's automatically taking a barrier away from ordinary people coming through the doors. You put them at ease because when they're coming to learn something they get very 'et up.

The pit had been closed for nearly a decade, but for many in Grimethorpe the idea of classrooms and teachers were still viewed as an objectionable thought. This type of behaviour is not limited to former mining communities either. In a similar vein, Hellowell (2001, p.12) demonstrates how many people from disadvantaged areas also had bad experiences of school making them less motivated to take up formal courses which are often viewed as 'not for people like them'. The staff team at the GEVH knew this instinctively from their own experiences of school and from growing up in the village. The GEVH offered physical access but was aware of cultural issues that could deter people from Grimethorpe entering the GEVH. As a result, they supported people to learn about ICT in a very informal, peer-led environment (Hellowell, 2001).

6.2.2 Accessing the Learndirect centre

The Learndirect centre was the second of the three units of analysis based in the Acorn centre and was situated above the entrance to the centre⁷⁸. As already noted in Chapter 4, Learndirect was set up by the last Labour government to help widen participation by targeting those not currently engaged in formal learning and those likely to have few or no existing qualifications (Ufl, 2006). This was complimented with a huge advertising campaign was launched through the national media alerting people to the existence of Learndirect. According to ECOTEC (2002) Learndirect used its centres as physical spaces for customers to access ICT and the Internet.

⁷⁸ See Appendix 4 for a plan of the Acorn Centre and location of the Learndirect centre.

These spaces were often placed within the most deprived areas of the country where physical access to ICT and the Internet had been designated a major barrier to crossing the digital divide. In terms of accessing the Learndirect centre at Grimethorpe, the community could use the facilities during the Acorn Centre's opening hours, which were Monday to Friday, 9-5pm.

Although the centre demonstrated several similarities to the GEVH, there were discernible differences to be found. For instance, where you could just drop-in at the GEVH at Learndirect centre you needed to be enrolled on a course before you could use any of the equipment. Only when you had signed up were you granted access to the two suites of computers at the centre or be able to access the course online from home or work. On questioning the process of signing up further this did seem to be quite straightforward. After completing some basic forms⁷⁹ the tutor would take these and assess the level of your skills. Following this the tutor would then have a chat with you about what course you wanted to do and what courses were available to you (depending on your current level). You would also be told at this point that you could learn from home or use the centre, or both. The final part of 'signing up' included setting a target for completion and setting up a user name and password in order to access the online content of the course. When asked if this could be viewed as a potential barrier to people living in Grimethorpe thinking about using the centre, Gwen (volunteer tutor at the Learndirect centre) replied along the lines of '*probably, yes*'; adding '*it is very easy to sign up and they can work from home*'. Considering the research undertaken in the community of Grimethorpe in 2002 by the Grimethorpe, Shafton and Brierley Community Partnership (GSBCP, 2002) this seemed highly unlikely, especially as a lack of physical access to ICT and the Internet had been flagged up as a key problem for the area.

This concern was mentioned in the interview with Jane (part-time tutor at the Learndirect centre) who was then asked how many people from Grimethorpe actually used the centre. Jane replied:

⁷⁹ One form would contain personal details such as your name and address. Whilst another form asked you rate your own skills level in a number of things including mathematical, English, ICT, etc.

'Now that's very difficult to say because people might register for a course here, do a couple of hours here, but then do the rest of the course at home'.

This seemed to evade the question, which was asked again and got the following response:

'As far as I am aware, there are not many from Grimethorpe, there are more from the surrounding areas – Brierley, Shafton, Carlton.'

When talking about the same matter with Gwen, she also pointed out that the *'people that come in here don't come from Grimethorpe'*. Both members of staff were asked why they felt this was the case but neither could give a reasonable answer. Some of the issues facing people who had no access to ICT and the Internet were discussed, including the fear a lot of people felt at using ICT equipment for the first time, and the fact that courses on offer at the Learndirect centre were not free at the point of access unless you were in receipt of certain benefits. These difficulties were understood by the members of staff. However, it was pointed out that although the staff were able to advise potential customers the rules meant they could do very little else until these people had actually signed up to a course. Once signed up customers could expect help in a number of ways. For example, from one-to-one teaching by the staff and a free-phone helpline number that operated 24 hours-a-day, seven days a week. Courses were also flexible allowing customers to study and learn in their own time, as Gwen made clear *'we allow students to go at their own pace, we help when needed'*.

Nevertheless, this did raise the question of whether the underpinning philosophy of the Learndirect centre really understood the needs of Grimethorpe community in relation to accessing ICT and the Internet. As a centre it was very much 'top down' in its approach and imposed on the community as part of a government initiative to help people overcome the digital divide. The site itself was quite formal and echoed a school classroom with rows of computers down the sides of the two rooms. Similarly, regardless of flexibility, there was an emphasis on course completion which was based

on being able to claim funding from the government – something which could be considered an added pressure on staff to concentrate on helping those already enrolled. All in all, the Learndirect centre seemed to be a place that ‘might work well for middle-class professionals, but will not work for people with different life experiences’ (Hellawell, 2001, p.36).

6.2.3 Accessing Grimethorpe library

The library at Grimethorpe was the third of the three units of analysis to be utilised in this research and was based across the courtyard from the GEVH⁸⁰. Because public lending libraries have been part of local communities since the mid-19th century they are a familiar presence to most people. Ask what a library is and the most likely answer would be a place where you can borrow books. However, as part of *The People’s Network*, the last Labour government’s initiative to help people overcome the digital divide, these public spaces have become home to computer hardware and Internet connections. In 2002, Grimethorpe library was connected to two Internet ready computers mid-way through the fieldwork period. Again, the policy emphasis was on providing people with public access – very much in line with Learndirect but on a much more informal basis.

At the time of the research Grimethorpe library was open on a Monday and a Thursday between 9:30am and 5:30pm. The brevity of opening hours seemed to go against government policy on creating public access and this was one of the first issues discussed with Polly (the librarian at Grimethorpe Library). When asked if she thought this was odd she replied ‘*No, not really. If people don’t use the library then of course the opening times will be affected.*’ Polly went on to explain how the Library had recently moved from the centre of the village to the Acorn Centre. Prior to moving the library had been open between 9:00am and 5:00pm, five days a week, but due to a lack of use this had since fallen to two days.⁸¹ Having said this, Polly was quick to point out

⁸⁰ See Appendix 4 for a plan of the Acorn Centre and location of the Grimethorpe library.

⁸¹ In 2013, under the Coalition government spending cuts the library has been marked for closure.

the library's patronage had not changed even though the opening times had. On enquiring who from Grimethorpe used the library Polly responded:

What kinds of people come in here? A very mixed bag, I find, socially. I think generally looking, not so much the young I think. We seem to have a big gap, babies with mums, then maybe a couple of school children. Then we seem to have a good bit of a gap in between, we seem to start again, maybe, looking at people, back up to the retired or older person.

Whereas the GEVH used the word of mouth as advertisement, the Learndirect centre and the Library were both given a great deal of coverage in the national media. Considering if this had helped to get people from Grimethorpe to come in and use the computers and the Internet, Polly pointed out how some people had been looking forward to being able to use the equipment. For example, she mentioned how one elderly gentleman had used the Internet to research his family tree and another lady had searched for job opportunities. However, Polly felt a lot of people from Grimethorpe were still unaware of the newly installed facilities. Although it was made apparent that over the coming months a number of events would be taking place at the library that highlighted the new technology. These included 'Internet awareness sessions' with an emphasis on using the Internet to support hobbies and interests, conducted by experts from Barnsley's central library

This raised the issue of helping people with learning to use ICT and the Internet. Polly was quite capable of showing people how to use the computer and the Internet and would invariably help those who requested assistance, but only if time from other duties allowed. In a similar vein, she was very clear that her role at the library was not that of a teacher. When questioned about this, particularly around how people wanting to learn about ICT and the Internet were dealt with, Polly simply directed them to the Learndirect centre.

Although public access libraries have a reputation for their informal manner and helpful staff, the small library at Grimethorpe was beset by two major problems in relation to physical access to ICT and the Internet. These are

based on the lack of opening times and the shortage of staff. Further discussions of Grimethorpe with Polly established a person who had a firm grasp of the social and economic problems affecting the community caused by the closure of the pit. However, work duties and library opening times constrained what Polly was able to do or wanted to do with the local community in relation to helping people access ICT and the Internet. This position may have been unique to Grimethorpe, but the lack of active engagement between libraries and digitally excluded people was not. For example, research by Dutch and Muddiman (2001, p.183) suggested libraries needed to move beyond their 'passive preoccupation with access to formulate a more active engagement with non-ICT users so the public library will indeed become open to all'. This would have been difficult given the circumstances at the Grimethorpe library.

6.2.4 The nature of the centres

The main purpose of the three centres was to create physical places where people on the wrong side of the digital divide had the opportunity to access ICT and the Internet. Similarities of practice were evident across the centre, although differences were also apparent. For example, the GEVH was very informal and committed to putting the community at the heart of its service, allowing their needs to dictate the type of centre it was. Of the three centres this one focussed the most on barriers they felt were stopping people accessing ICT and the Internet. The Learndirect Centre was more formal in its initial approach to access and gravitated towards getting people to subscribe to a course and seeing it through to completion. Although the social and economic problems to be found within Grimethorpe were known to the staff at the centre their main concern was with people already signed-up to courses. The library, like the GEVH, was very informal in its approach to access. When it was open you could use all of the facilities on offer including the two Internet ready computers. However, it was also similar to the Learndirect centre because you needed to pay for Internet unless you were in receipt of certain benefits. Time was identified as a major problem for the library, opening only two days a week and only having one member of staff detracted from being

able to engage with the community fully and offer reasonable help when needed.

Nevertheless, each of the centres was frequented by people utilising the services on offer. From interviews undertaken with participants at the GEVH and Learndirect centre various themes concerning access became apparent, especially in terms of reasons why people attended these centres⁸². Two of the main ideas relate to social and economic factors. The next subsection looks at the social reasons given for attending the centres while economic reasons are discussed in the next chapter.

6.3 Accessing the social side of the GEVH and the Learndirect centre

As already discussed, the GEVH's was very informal in its treatment of members of the community. As a centre, it was the people who were at the heart of what they did as Gary pointed out *'to me people are important not this equipment'*. The idea that this site provided physical access to ICT and the Internet in a 'social place' (Selwyn, 2003) was also supported by Gary. For him people came to the GEVH because they wanted to socialise as well as learn how to use a computer or the Internet.

Even though many of the people using the GEVH were learning ICT and Internet skills, the social side of the GEVH was recognised as extremely important by several of the members, including Tony (a retired miner from Brierley) who pointed out:

'I come here to learn how to use the computer. I know how to use word and excel and I've been on the internet, but, I mean, it's there [the computers] to be enjoyed as well not only used for work. We have a coffee and a chat; it's more about meeting up with friends than computers.'

⁸² Unfortunately, during this phase of the research no interviews were held with participants of the library due in part to no one using the computer equipment and others refusing to be interviewed.

And George (a retired miner from Royston) who travelled to the GEVH even though there was a drop-in centre at Royston. When asked why he came to the GEVH, he replied:

'They're friendly here. We like to come and Ian [volunteer tutor] is a good laugh, he's a lovely bloke. Basically they did start doing one [at Royston] but we would rather come here, we're happy here, we're with people we know.'

Whilst Joel (a retired miner from Shafton) who journeyed the 2 miles from his home in Shafton by bicycle added:

'There's nothing in Shafton [CTC] so I come all the way here to use the computers here. I could go to Barnsley, but its good here. The staff are very good, they're patient and make you feel like you can do it, you want to do it! They help if you need it and you can just drop-in and not even use the computers if you don't want!'

Similarly, Susan (a housewife from Brierley) pointed out how the teaching staff 'we're great' and 'what a good time they all had reminiscing and laughing when they couldn't do something on the computers'. But perhaps one of the best endorsements concerning the social side of the GEVH came from Martin, a sixteen year old youth from Great Houghton who had dropped into the centre to use the computers. He indicated how he liked the GEVH because the staff made him feel comfortable and he could come and go as he pleased with no pressure. Moreover, he mentioned how he would really like to eventually gain a qualification in computer networking not at a traditional college, but at the GEVH.

It would seem that all who came to use the computers at the GEVH did so because they wanted to, because it was a place where they could all meet up and perhaps share a joke or have a coffee. Even when other CTCs were much nearer to where they lived they still wanted to travel to the GEVH because they felt safe and not intimidated. They were comfortable in the

knowledge they could attend and do as little or as much as they wanted, the choice was theirs. In one respect this corresponds to research undertaken by Hall and Aitken (2001, p. 143) which found that 'in some areas it is clear there needs to be more emphasis on basic access without any explicit learning outcomes'. If anything, the GEVH seemed to fit this bill explicitly. The majority of people who attended were not on any course *per se*, but they were getting used to and becoming more confident with, the whole concept of what the computer is and what it could do for them. This included using relevant software programmes (word, excel, etc.).

On first inspection, the Learndirect centre seemed to be the complete opposite of the GEVH in appearance, especially with the formality of individuals having to sign-up to a course before being allowed to use the centre. However, there were striking similarities in relation to the social reasons given for attending the centre. For example, the tutor at the Learndirect centre, revealed how she felt the centre acted as a drop-in centre where people could come and work on computers or just sit and chat. This was confirmed in two further interviews conducted with customers attending the Learndirect centre.⁸³ James (a retired steel worker from Cudworth) made the point that:

One of the main reasons I come here is because it gets me out of the house and talking with other people, it is just the social aspects I come here for, the talking, I might spend only five minutes working and the rest of the time talking.

A similar story was also obtained from Becky (a retired housewife also from Cudworth) who travelled to the centre with James on a weekly basis. She explained how much she enjoyed the company of friends and felt happy and relaxed at the Learndirect centre. Both enjoyed spending time at the centre and often treated the experience as a social outing in order to meet up with other likeminded people.

⁸³ Although only two people would be interviewed they were part of a group of six friends who had been going to the centre for approximately eight months, meeting up on a weekly basis.

When told that Priory Campus and Barnsley College were nearer to them geographically and also did ICT and Internet training, they made it quite clear they were far happier at this centre. The main reason given for this decision was because they did not want to go to places '*full of kids*', as James pointed out. He went on to explain how at the Learndirect centre he was treated as an equal and not made to feel inferior, something he felt may happen at other CTCs like Barnsley College. Becky echoed this sentiment stating how she would feel uncomfortable being in a room full of kids. Even when it was pointed out that the sessions they would attend would probably be very similar to what they were doing at the Learndirect centre, with a varied age range, the answer remained the same – they would rather be at this centre.

The reasons for this centred on the social side of the Learndirect centre. For example James and Becky pointed out that their '*friends attended the centre*' and they felt comfortable '*coming and going*'. They also pointed out how they could do as much or as little work as they wished and how friendly and helpful the staff were. For example, Becky mentioned how she liked to work on her own, but if she was stumped with anything was not afraid to ask for help. It was also clear that though both were retired they could see some benefit in learning about new technology⁸⁴. James was undertaking a number of units on the ECDL course and also enjoyed using the internet, which he used to research the history of Cudworth and the surrounding area. Becky was also completing units on the ECDL, but thought the internet was too complicated for her and she didn't like it. Even though the tutors had spent time demonstrating the uses of Internet including highlighting relevant content (Becky collected blue and white pottery) she was not interested.

⁸⁴ Both James and Becky were able to participate on the course for free due to being pensioners and qualifying for funding.

6.4 Accessing CTCs and building social capital

One of the intended outcomes of this research was to examine the claim that ICT policies could enhance the development of some form of social capital within Grimethorpe. As already discussed in Chapter 4, there is evidence that the social cohesiveness and inclusion, interactions and participation in community life of Grimethorpe have changed dramatically for the worse since the closure of the pit. One of the aims of the CTCs therefore was to help try and rebuild some of these measures within the local community. A key part of this was based on raising awareness in the village of their facilities, people needed to know that they could access ICT and the Internet at these facilities. Through increasing participation the centres would then be able to develop the ICT capabilities of the people of Grimethorpe. At the same time this would help to facilitate the improvement of one or more of the related social capitals – bonding or bridging. These aims combined with economic regeneration were at the heart of the Objective 1 South Yorkshire's 'Measure 21' directive. They were also part of the previous Labour Government's and the incumbent Coalition government's ICT policy remit.

6.4.1 Bonding social capital

As already discussed in Chapter 2, bonding capital takes the form of strong social ties between family, close friends and associates (Putnam, 2000). Former mining communities were said to have high stocks of social capital before the pits closed, where longstanding residence and dense kinship networks 'reinforced traditions of mutual aid' (Waddington *et al.*, 2001, p. 71). This was no different in Grimethorpe as several participants who were interviewed demonstrated. They felt there was a *'better sense of community before the pits closed because people were closely knitted together'* – pointing to higher levels of bonding capital; and people were more willing to *'help if you needed it'* – referring to reciprocal actions. Others pointed to how you could *'leave your doors unlocked and feel safe in the wider community'* – alluding to higher levels of trust. A lot of these conditions were seen to break down or at least change for the worst after the pit closed and for many of the participants

these were felt very keenly. Of course, there could be an element of looking at the past through rose tinted spectacles, but it does serve to highlight the fact that bonding capital social capital was now perceived as lacking within the community.

At both the GEVH and the Learndirect centre there was evidence of how ICT and the Internet were helping to produce and reinforce bonding social capital, but this was on a small scale. For example, there were several voluntary workers at the centres who gave their time freely and shared their skills with others. Without these instructors, the participants at the GEVH would not have had anyone to teach them the basic computer skills they were learning. Similarly, the tutor at the Learndirect centre was only part-time and without the volunteer worker participants would have also found an empty ICT room when the tutor was not there. Each of the volunteers expressed how extremely proud of their work they were and how they had built up some very good relationships with the people attending the centre. It is this kind of behaviour that Field (2003, p.21) refers to as 'voluntary activities that mutually improve the common environment'. The volunteers were extremely happy to be in a position to help and the participants equally so having someone to teach them.

In a similar way ICT and the Internet can enable individuals to 'thicken' their existing ties and to generate new ones. For example, by accessing the Internet and using email people are able stay more readily in touch with close friends and family members (Hampton, 2002; Pew Foundation, 2006; Benckler, 2006). This was certainly true of the members of staff and the volunteer workers at the CTCs who used the Internet. For example, Bill and Gary kept in touch with friends and family via email whilst at work. However, none of the participants at any of the three centres had actually used the Internet and therefore any of the online facilities to enhance communication and cannot be thought of as having 'thickened' existing ties within their own families or communities⁸⁵. So, while some sociologists have represented the Internet as helping to create 'a revolutionary growth of social capital' (Lin,

⁸⁵ Having said this, one person at the Learndirect centre was familiar with the Internet but not for the purposes of emailing or creating any form of contact with other people.

2001, p.237) this can only happen if you are actually connected to and able to use the Internet.

6.4.2 Bridging social capital

Another aspect of social capital, bridging capital, represents weaker, extended social ties between different groups that could help foster inclusion. According to Stone and Hughes (2002, p.5) bridging social capital involves 'overlapping networks in which a member of one group can gain access to the resources of another group because of overlapping membership'. This refers to the ties that are formed with those from other social circles that provide important links to new sources of information and support. Bridging social capital is more 'outward-looking' than bonding social capital and can include people from across the social spectrum. It helps people get ahead by working together to resolve similar problems in a locality, such as forming a neighbourhood watch to deter vandalism or graffiti.

With regard to the three CTCs individuals attending had demonstrated this form of social capital much better than the bonding capital. Here, a geographically dispersed group of people had become very good friends by attending either the GEVH or the Learndirect centre. They had become used to and learned to trust other members of the group, looking forward to their weekly/twice weekly meetings in order to talk to and enjoy the company of likeminded people. However, they did not use ICT and the Internet to keep in touch either within or outside of the centres, mainly because none of the participants had a computer at home. Face-to-face contact was still the most prevalent form of communication for participants at the centres.

When discussing how the staff at the centres used ICT and the Internet the idea of how technology could enhance bridging social capital could be seen more clearly. All staff used emails for communicating between each other and family and colleagues, whilst Bill, Gary and Jane also used online discussion groups. According to Zillien and Hargittai (2009, p.5) online discussion groups come in handy to 'develop new ties to like-minded people in what are looser,

more fluid, differentiated, interest-based, elective and far-flung networks'. In this respect Bill and Gary used the same discussion group to talk to a widely dispersed group of people concerning community networking. Through this online discussion group they were able access and take advantage of information concerning the experiences of other people in the field. This resulted in some of the people holding a conference organised to discuss the viability of community networking. Similarly, part of Jane's work as a Learndirect tutor was to host online discussions concerning the courses she taught at the centre. She was also part of an online discussion group available only to Learndirect tutors and like Bill and Gary, was able to make acquaintances and contacts with a likeminded people from across the country. One of the main reasons for using the site was to share good practice and ask for solutions to problems that arose at the centres.

6.5 Discussion

One of the intended outcomes of this research was to examine the claim that ICT polices could enhance the development of some form of social capital within Grimethorpe. As already discussed in Chapter 4, there is evidence that the social cohesiveness and inclusion, interactions and participation in community life of Grimethorpe have changed dramatically for the worse since the closure of the pit. One of the aims of the CTCs therefore was to help try and rebuild some of these measures within the local community. A key part of this was based on raising awareness in the village of their facilities, people needed to know that they could access ICT and the Internet at these facilities. Through increasing participation the centres would then be able to develop the ICT capabilities of the people of Grimethorpe. At the same time this would help to facilitate the improvement of one or more of the related social capitals – bonding or bridging. As already mentioned, these aims combined with economic regeneration were at the heart of the Objective 1 South Yorkshire's 'Measure 21' directive and part of the previous Labour Government's and the incumbent Coalition government's ICT policy remit. Creating physical access to ICT and the Internet in local CTCs can play an important role in helping those who are socially excluded overcome the digital divide. For example,

Stanley (2003) makes clear that the social support found within CTCs is often viewed as a crucial part of developing the confidence in people to use computers and move towards information society inclusion – something clearly visible in the above accounts. Nevertheless, simply providing physical access to ICT and Internet at the centres does not necessarily mean people will automatically attend and use them (Selwyn, 2003). This is also something that is supported by this research where apart from several members of staff none of those attending the centres came from the actual village. This lack of attendance at the centres raises a number of questions concerning the success of government and Objective 1 South Yorkshire's actual policy aims.

6.6 Conclusion

This chapter has examined whether or not the physical access to CTCs in Grimethorpe has helped the residents join the information society. Investigating the way the centres operated and the reasons why people attended the centres, allowed a clear evaluation of how access to ICT and the Internet were being represented and used. This led on to an appraisal of whether or not ICT and the Internet were helping to build social capital within the community. Although bonding social capital was only evident in those who staffed the centres, bridging social capital was apparent among those attending. More importantly, what is evident from the above discussions is the fact that the CTCs were not being patronised by the residents of Grimethorpe. Policies aimed at providing access, raising awareness, increasing participation and developing the ICT abilities of the people of Grimethorpe were not seen to be working. In Chapter 7 the analysis is taken further by outlining the impact of Grimethorpe's CTCs on helping to build ICT skills of the local community.

Chapter 7 Grimethorpe: ICT and Employment

7.1 Introduction

The previous chapter investigated whether or not physical access to CTCs at Grimethorpe, and the use of ICT and the Internet, was helping to improve the social regeneration of the area by helping to create social capital. In this chapter, the same units of analysis are utilised to investigate the potential of ICT and the Internet to help regenerate the area economically. Here, the focus is on up-skilling Grimethorpe residents in order for them to be able to participate more equitably in the growing information society. The first section outlines the economic situation of the research area. This second and third sections assess how the GEVH and the Learndirect centre are providing help to achieve the goal of an ICT literate population.

7.2 The economic situation of Grimethorpe

There is little doubt that Barnsley borough as a whole had suffered from long-term economic problems due to the collapse of major industries in the area, particularly mining. According to the Community Development Advisory Group (CDAG) (2002), large parts of the Borough were recognised as suffering from social exclusion with 41% of the nine wards that make up Barnsley wards falling within the most deprived ten per cent of wards in England. These nine wards covered two areas: a main belt of seven wards which ran from Worsbrough to Brierley (the ward where Grimethorpe is situated) and the south and east sides of Barnsley town, including Athersley. The second area comprises the two wards of the Dearne and Thurnscoe, of which Thurnscoe was the most deprived ward in the Borough. A further thirty six per cent of wards (eight in total) fall into the category of 10-20% most deprived wards in England, and although these are viewed as average wards for Barnsley they are still very deprived in comparison to the national context (CDAG, 2002, p3).

As already discussed in Chapters 2 and 3, the significance of ICT in relation to economic regeneration cannot be underestimated and is well documented in policy 'action plans' from local to national levels. For example, in a report from the Labour Government's PAT 15 on Information technology it was argued that ICT offers the potential to support economic and social regeneration:

The development of ICT provide a vehicle for people living in deprived neighbourhoods to reconnect with society in a variety of productive and positive ways. To take advantage of this, Government, acting in partnership with regional and local organisations, the community and voluntary sectors and business, must act quickly to improve access to and uptake of ICT in deprived neighbourhoods. (PAT 15, 2000, p.61)

At the regional level, the Objective 1 Community Action Plan (CAP) programme provided support for 'capacity building' activities within the communities of South Yorkshire (GOYH, 2004). As already stated, the Community Action Plans involved area based regeneration of defined geographical communities with a specific aim of building community development capacity, overcoming social and economic exclusion, and ensuring that disadvantaged communities are able to contribute to and take advantage of economic regeneration (Chapman, 2005). The communities supported through this process, known at the time as Priority 4a communities, were selected on the basis of their ranking within the Index of Multiple Deprivation which included every coalfield ward in South Yorkshire including the research area of Grimethorpe.

At the local level and also part funded by Objective 1, the Community Economic Regeneration Team (CERT) of Barnsley Development Agency (BDA) initiated a series of projects around the community use of ICT and the Internet for economic regeneration. CERT was formed in 1998 to offer support to community groups and their activities that would hopefully result in jobs, community businesses and training opportunities and other specific projects that would improve people's quality of life within the borough of Barnsley. As well as supporting groups to develop projects around community enterprise a number of Intermediate Labour Market (ILM) projects were also

established by CERT. This kind of project is a type of special employment measure that would hopefully provide a bridge back to work for the (long term) unemployed and those on incapacity benefits. It was hoped that these initiatives would bring real jobs to the local economy and also help to remove obstacles that may be preventing individuals from wanting to return to work – be that through a lack of valid experience, qualifications, or a person's lack of confidence or low self-esteem. A key theme that ran through most of these projects was the use of ICT and the Internet to help build the capacity of individuals. The underlying premise of these schemes was based on the proposition that learning new ICT skills could make those excluded from the information society more able to compete in the labour market (GOYH, 2004). The three CTCs based at Grimethorpe were part of this policy application.

7.3 The GEVH, ICT skills and employment

As already discussed in the previous chapter, The Grimethorpe Electronic Village Hall was originally set up in order to allow the community access and use of ICT and the Internet facilities for free. The underlying ethos was one of a bottom-up community development approach which would allow community members to be able to learn about computers in order to improve their economic prospects in a burgeoning information society⁸⁶. It was a place where a few like-minded individuals had seen the potential that learning new ICT skills offered. For example, the working skills of former miners were generally not easily transferable to other jobs, but ICT skills were flexible and could be applied to various new forms of employment being created in South Yorkshire.

As a drop-in centre the GEVH was viewed as successful. According to Bill, the GEVH had had *'Seven thousand people through its doors since it started'*. Yet, when the research was undertaken only a handful of people were attending the centre on a regular basis and these seemed to have been taught as much as the volunteer tutors could teach. This was supported by one

⁸⁶ This was supported by the Objective 1 Community Action Plan (CAP) and was part of the Priority 4, Measure 21 remit – see Appendix 3.

participant who pointed out the only reason the participants still turned up to the two taught sessions was down to Ian, one of the volunteer tutors. He went on to say:

'Two weeks ago Ian said I've just about taught you all I know and wanted to know what we wanted to do, and everybody said they'd like Ian to carry on even if it meant going through it all again from scratch, which we've just started doing. Ian is trying to find out what we still remember because it's a few years since we first started'.

The point being made was the whole group was just about to begin recovering the basic ICT course that Ian had been teaching. It had taken the group approximately two years to cover several software applications including Microsoft Word and Excel.

This was discussed with Gary, one of the founding members, who then volunteered a very honest appraisal of the GEVH. He was adamant that the GEVH had achieved what it set out to and in the process had outgrown its use as a CTC. This was mainly because what was being offered at the centre was also being offered in numerous other places including the Learndirect centre, Priory Campus and Barnsley College. He went on to state that the only reason the GEVH still provided drop-in facilities was to make sure the participants who came to Ian's classes could continue to do so until they felt comfortable to access a more formal course at another centre. Gary felt the GEVH had run its course. Whereas once there was a need for the service, other avenues were now open to residents of Grimethorpe, as Gary put it:

'The reason we're here in the first place was to provide a service that was needed. It's the same if you look at alcoholics or a drugs counselling group, you know, one that's a community led one, you know. They'd have met because they've got this problem and they wanted to develop their own solution to it. I now think we have served that purpose and people are going elsewhere'.

On enquiring if people who had been to the GEVH had gained confidence with ICT and the Internet were progressing to more formal courses at places like the Learndirect centre, Gary became quite animated. He pointed out that *'people [from Grimethorpe] don't use that as far as I know, but it hasn't been there that long...those I talk to go to the Priory or Barnsley College to get on a course'*. He went on to say how the GEVH had been interested in becoming a Learndirect centre at one point, but were scuppered by the actions of Barnsley Metropolitan Borough Council. As he stated:

'We started to get involved in Learndirect, but the way that they get you is that they use this hub and spoke model, and of course, the beauty about the hub and spoke model is there's always spaces between the spokes where the undesirables can be put and never get anywhere. What the council did, because the council saw everybody else as competition in my opinion, they did a really shady trick in Grimey. They brought the DTI round, and we get it all the time, we're doing a visit can we come and see your place. They then got Learndirect status on this basis and built a bloody Learndirect centre across the road from the same Electronic Village Hall they used to get that status. So, we were shafted by the council'.

Gary was then asked if he thought having Learndirect status, which meant he could offer more formal qualifications, would create a situation where people from the community would use the GEVH. Although he said this might his main concern for the future was getting the Barnsley Electronic Village Halls (BEVH) up and running by making wireless technology available to all the surrounding villages.

It was obvious that Gary felt that the GEVH had been squeezed out of becoming a Learndirect centre, a place that could provide formal qualifications and provide more waged staff. Neither Gary or Bill were happy about this, especially when the GEVH was then being used *ad hoc* as a place people could go to in order to complete Learndirect courses, as Bill pointed out:

'They [BMBC and The Priory Campus] get people to sign up for Learndirect, right, and they come here and we don't get any money. They give 'em a list o' where they can go to get internet for free to do the course'.

The fact that the participants were re-learning work already covered over the last couple of years is in itself not a bad thing, after all doing anything that consolidates learning can only be recognised as a good thing (Hellowell, 2001). However, building confidence in using computers and learning about software programmes, such as Microsoft Word, does not demonstrate that people were becoming more 'up-skilled' in the use of ICT⁸⁷ in order to become more competitive in the job market. On further inspection all of the participants at the centre were not really interested in becoming ICT literate. For example, the volunteer helpers were not interested in employment due to the fact that they were both retired. They did enjoy passing on the ICT skills they had learned at the GEVH, but were not worried about being in payed employment. Similarly, for the most part the clients who attended the GEVH were mainly trying to '*feel confident with the technology*'. They were far happier using the sessions as a place to meet socially and to consolidate the ICT skills they were learning. If we consider the fact that Objective 1 funding of the GEVH placed an emphasis on building the capacity of people from Grimethorpe, the above does not seem to make much sense. However, as the previous chapter explained, people living in deprived areas were less likely to participate in learning about new technology due to socio-economic barriers, particularly with regard to educational attainment levels. This subject was broached with Gary who pointed out that the GEVH was not just a drop-in centre it also functioned as a registered Cisco Network Academy.

The Cisco Network Academy is a global education program that 'teaches students how to design, build, troubleshoot and secure computer networks for increased access to career and economic opportunities in communities around the world. The networking academy provides online courses, interactive tools, and hands-on learning activities to help individuals prepare

⁸⁷ As already mentioned the Internet was available at the GEVH but this was not being used by the participants.

for ICT and networking careers in virtually every type of industry' (CISCO, 2004). CISCO training is a validated course supported by Microsoft and is really about training people to be technicians who could then manage the infrastructure, networking and communications side of computers and ICT – basically how computers link together and talk with each other.

The course itself is based on training for employment, which means it targets people who are unemployed who want to learn about computer networking as a career choice. It is a worldwide recognised certification, and at the time of the research, was considered a reliable route to employment. The lack of highly skilled technicians in South Yorkshire (GOYH, 2004) meant that passing the CISCO training guaranteed employment. It would seem that around a dozen people from Grimethorpe had undertaken the CISCO training at the GEVH, but most had been reasonable young, as Gary indicated:

The majority of them tend to be in the younger category, but I still don't make that distinction. One of my previous CISCO students who completed semester 1 and did very, very well was in his 50's. Ok, I don't think he'll get a job in it because of his age, but he was really keen, really interested and wanted to learn. I got into trouble for it.

When pressed for more information regarding why he got into trouble, Gary was reticent to answer, but it would seem he should not have given a place on the CISCO course to the student in his fifties, it was aimed at younger candidates who were then able to build a career from the experience. It was interesting to see how Gary highlighted the fact that because the student was in his fifties he did not think he would be able to get a job. When Bill was questioned on this subject his first response was:

Remember the whole purpose o' this project [GEVH] is to get people engaged, to use ICT as a tool to get 'em into employment. We've had people that have gone from having no-hope of a job to having a job just because they showed an interest in networking and we could offer 'em a place on CISCO. They've turned into skilled technicians, one o' unemployed miners is head o' networking for M. P. Birch; we've

got technicians at university, technicians at hospital and our ex-local mayor Mr Tarn who's in charge of all City Learning Centres.

Nevertheless, as we can see both Bill and Gary were very positive with regard to the job prospects of clients who had undertaken, and were undertaking, CISCO training⁸⁸. They explained how nearly all of those who had passed through had since found skilled ICT employment somewhere in the region.

This suggested that some Grimethorpe residents had the requisite ICT and Internet skills to access and complete a CISCO course, which pointed to the fact that ICT and the Internet was not problematic to everyone living in the village. Speaking to one of the volunteer workers revealed several conflicting pieces of information regarding this point. For example, when asked if they knew anyone in Grimethorpe who could actually operate and use computers and the Internet like them, they replied 'no', apart from the staff at the centre. However, they also alleged that '*loads of people get help here [at the GEVH] an' 'ave learned 'ow to use computers.*' This was clarified by the following explanation.

Well, when they get qualified they move away, they get a job elsewhere and move away, that's why I think this place [GEVH] is important. What you have to remember is people who are interested in computers and learn to do networking and use computers are not here, they've gone elsewhere, they've gone where they can get a job and I don't blame 'em!

It would seem that the GEVH was not just a CTC which people could use for free, it was also a designated training facility that helped people to obtain relevant qualifications used to obtain jobs. The main problem with this was based on the fact that there were no related ICT jobs in the local economy for these 'skilled' individuals to take up. This being the case most left the area to take up positions in the wider South Yorkshire region (as far as London in one case) as soon as they had qualified.

⁸⁸ Both Gary and Bill were asked if there was a possibility of interviewing the current CISCO trainees, but these were on placement at throughout the research period. Several were contacted but no one wished to be interviewed.

The issue of a lack of related ICT jobs in the area was raised with Bill who was more than scathing about the state of the local economy and harked back to what he viewed as a decent wage that men from the village earned prior to the miner's strike:

'There aren't no tech jobs round 'ere, in fact I think the biggest growth industry in Barnsley over the last ten years has been McDonalds – you know when a site's arrived because there's a McDonalds on it! If you really wanted to be an entrepreneur and invest in growing places I'd be driving round borough looking for McDonalds and buying land round it. I mean, at one point a McDonalds opening made front page news in Barnsley Chronicle, cos that were the only thing they'd got to bloody crow about. Twenty people have got jobs serving fries and saying having a nice day. That were it and this was seen as a step to reindustrialising the borough, cos that's the way they looked at it, and this was 1996!'

This led to a conversation concerning the building of a new industrial estate on the edge of the town and the push by Yorkshire Forward, the BMBC and Objective 1 South Yorkshire to get firms to build on it, thus providing a variety of jobs included those requiring the use of ICT skills (Park Springs, 2004). Bill responded by pointing out that the jobs being created did not pay enough money for local people. They had '*a miner's mentality*' meaning they would not work for less than they once earned – '*a proper living wage*' he called it, and '*villagers*' would not work for anything less'. Skilled miners would not take up work opportunities which tended to be poorly paid, unskilled and quite often part-time. He spoke about the new call centres and how using a computer was vital for this type of work, but added the nearest of these were based in Barnsley and numerous former miners in Grimethorpe would not travel to Barnsley to work. Bill also pointed out how he felt this was perhaps a key reason why many people in Grimethorpe '*didn't think ICT skills were relevant to them*' because they couldn't see how they would be useful to their lives in Grimethorpe.

What this demonstrated was on the one hand that some people from Grimethorpe had utilised the GEVH, passed a credited computer course and then left the village to take up a position in another town or city, while others could not see the benefit of learning to use computers because jobs using them were not visible in the community. This issue was discussed further with Petra, the job club worker at Grimethorpe, who explained about the battles she had with Grimethorpe residents with what she termed a '*dependency culture*' (Strangleman, 1999). What she meant by this was the fact that Grimethorpe had been isolated as a mining community and totally dependent on those running the mine, in this case British Coal. She pointed out that many of her clients would argue against travelling anywhere further than the village to gain employment, thinking this an absurd suggestion. She went on to explain that:

'Under the management of local colliery jobs were local and miners could walk to work....Since the closure the same men don't want to do anything else...You have to almost force them to go for an interview half-an-hour down the road, particularly the older end'.

Paul, a client at the GEVH, pointed to the fact that British Coal sorted out everything for you, very much in support of what Petra was saying:

The whole ethos of a coal mining community is that you got your wages from one window, and then at the next you paid your electric bill to British Coal, the electric was supplied, generated on the premises, for the whole village; paid your rent to British Coal, you paid your Working Men Clubs Subs, you paid your Union Subs, there were no need to go anywhere else, everything were done in house.

Coming back to increasing the ICT skill levels within Grimethorpe Petra was asked if she felt learning about ICT and the Internet could help people to get a job. The reply was very useful in demonstrating the relationship between technology and the social world in which it operates:

'I think computers have a place. They're good for job searches, but a computer cannot speak for you

at an interview and a computer can't fill in an application form for you. When they come to me they need to learn transferable skills....computers have got a place but not in my Job Shop, it doesn't do anything for people having a computer in here. Its people skills they need'.

Petra believed interpersonal skills were more important for former miners than learning about computers and Gary was also quick to point out how ICT and the Internet were not a panacea to social ills such as unemployment:

'The trouble is everybody, including the government, thinks that all problems will be fixed by sticking ICT in it, and they think that's gonna fix everything. It's absolute cobblers cos if you sit someone in front of a computer who can't read and write no amount of technology is gonna make them any better. All it's gonna do is make that person feel more isolated and alienated'.

The lack of employment opportunity at Grimethorpe had led to a large outmigration from the village, creating a decline in the population of 14% between 1991 and 1999 (GSBCAP, 2002). Many of those who remained appeared to view gainful employment outside the village as unheard of, most probably due to the nature of how the community functioned economically prior to the coal mine closing down. Nevertheless, in discussions with people from the CTCs and the Job Club this 'mindset' often came across as related more to the older generation; those who were forty plus or who had actually experienced working at the pit. For many younger people, if they could gain a recognised ICT qualification like the CISCO award they would be more likely to move away in order to take up a position of work.

This is not to say that those attending the GEVH on a regular weekly basis were not forward thinking, or unaware, of the potential use of computers and ICT skills. For example, Frank, a volunteer tutor at the GEVH indicated:

'Computers now are just like mobile phones once were, I mean eighteen months ago they were very expensive and a luxury but now, I mean its, there's not many people you can say who hasn't got a

mobile now, and it'll be the same with these [points to computers]'.

A view supported by another participant:

'I think it's becoming accepted now that most people will be using a computer in future, especially with the Internet where they can get information that they want without going out o' house or ought, they can do shopping, they can do anything on 'em'.

The importance of computers had not been missed by people attending the GEVH, but because nearly all of those attending were either retired, in receipt of incapacity benefit or not actively seeking employment they felt it was something for the future and future generations. The fact that they might be able to learn to use a computer and gain valuable ICT skills was obvious in their continued attendance at the centre. However, this was not for any kind of employability it was mainly to be able to socialise.

7.4 The Learndirect Centre, ICT skills and employment

The Learndirect centre, like the GEVH, aimed at using ICT to help up-skill the local populous in order that they could participate in the growing information society. Discussions with the staff and two people attending the centre also explored the idea of ICT and the Internet in relation to work. One of the first points discussed with Jane, the Learndirect tutor, considered the nature of courses and the European Computer Driving Licence (ECDL) in particular. Jane pointed out that the ECDL was a globally recognised computer literacy certification programme provided by ECDL Foundation and offered by all Learndirect centres (ECDL Foundation, 2013). According to Jane, this was the course that most people wanting to learn about ICT and the Internet would be enrolled on when they joined the centre at Grimethorpe. She identified this qualification as the one most employers were now using as a benchmark to demonstrate that candidates had the relevant level of ICT skills. She supported its credibility further by saying how she felt *'everyone today should be able to use a computer and most jobs do want certain basic skills in computing'*. Jane placed a great deal of faith in the Learndirect centre's ability

to help with this and was quite emphatic that the acquisition of ICT skills could help people to get ahead in the employment market.

Gwen, the volunteer tutor, was as convinced as Jane concerning the role that ICT skills played in gaining employment as she pointed out:

'You need to have computer skills like word processing or using excel in order to get a job today. There's so many jobs out there that need these skills'.

She was also very enthusiastic about the possibilities to be gained by passing the ECDL course. Here, her own experience of feeling unemployable with no relevant up-to-date skills had prompted her on to the EDCL course. She enjoyed the challenge of the course a great deal and when asked to help those who were not as confident with the material as she was, she became a volunteer tutor. Having said this, Gwen made it clear she could only help those who were taking the modules that she had already completed. In terms of future employment, Gwen was positive she would find employment as soon as she had completed the course. She also indicated how she would really like to be paid for what she was already doing. In her words: *'I'm already a registered volunteer helper at this Learndirect centre and I love it, I love helping people. It would be great to do this kind of work'.*

One of the final points discussed with Gwen and Jane was to ask how many people had completed the ECDL course at the Grimethorpe Learndirect centre and from their responses it was clear that none had. Jane was reluctant to say and Gwen pointed out how she was one the furthest along at the centre having completed four of the seven modules that comprise the ECDL⁸⁹. However, Gwen did indicate that people from Grimethorpe did not use the Learndirect centre, but when asked why offered no reasons for this.

⁸⁹ These modules included: IT user fundamentals, Security for IT users, Word Processing - Microsoft Word, Spreadsheets - Microsoft Excel, Presentations - Microsoft PowerPoint, Databases - Microsoft Access and finally using email and the Internet.

When discussing similar issues with the two clients James and Becky, there was less concern about the role ICT could play in helping to get them a job because like most participants of the GEVH they were both retired. With James the conversation began by talking about the reasons he was enrolled on an ECDL and him replying *'because it keeps your mind active, you're always learning new things'*. Having said this, he was aware that computer skills were becoming necessary for most types of contemporary employment, but was also quick to point out the lack of this type of job in the area:

'If this were a big city it would probably work a lot better and people would get work from it. But, because we're in a small village [uses hands in open, palm up gesture] I don't think there's that many computing jobs in this area...If you want a job from learning about computers you've probably got to travel a lot further afield unfortunately.'

Becky also provided some insights into the benefits of gaining ICT skills in relation to employment. She was very aware of the growing importance of needing to know how to use a computer and how important computer skills were becoming in today's job market – in her mind if you had ICT skills *'you could do anything'*. However, as already stated, both James and Becky were retired and did not need to get a job. The main purpose of the Learndirect centre was directed towards the socialising aspect that the centre offered and being able to help their grandchildren (who had computers in their houses).

7.5 Library, ICT and employment

The library had very little impact on the research. The limited opening hours and lack of staff made this task impossible. This aside, the librarian was very optimistic about the role that ICT skills now played in everyday life. Polly pointed to the fact that she herself had needed to undertake several ICT courses in order to *'keep up with technological advances to do with [her] job'*, and how they were *'essential if you wanted to get decent job...because so many now needed computer skills such as word, and the ability to use the Internet properly'*.

7.6 Discussion

In terms of the GEVH we can see that the proprietors felt they had achieved their initial goals in Grimethorpe, particularly in relation to opening up access to computers to the community. In terms of up-skilling the community many of the people who could have been taking advantage of the centre were not being seen to do so (as already discussed in Chapter 6). The GEVH did offer a CISCO training course, but this was limited in actual places on the course and also emphasised the fact that those who applied were already competent in using ICT. It also became apparent that as an organisation the GEVH would have liked to have become a Learndirect centre. Obtaining this status would, in the proprietors opinion, have opened up the scope of the GEVH by allowing people from Grimethorpe to obtain formal qualification and not just introductory computer training. However, Gary made it clear this was not what they really wanted to do and their future was focussed on overseeing and managing the Barnsley Electronic Village Hall. Had they got Learndirect status it would have been interesting to see how this would have linked with the 'bottom up' philosophy used by the GEVH. For those attending the centre on a regular basis, the idea of learning new skills to obtain gainful employment was not a priority, even though they understood the importance of these skills in relation to employment in today's society. They were happier to meet, socialise and consolidate their learning as already discussed in Chapter 6.

The Learndirect centre was initially set up to provide access to ICT courses according to government policy (UFI, 2006). This was less 'bottom up' and more in line with a structural approach that demanded uniformity across the country. Courses on offer were aimed at engaging people and affording them the opportunity to learn new technology, gain a globally recognised qualification and make themselves more attractive to potential employers. When considering the participants in the research, it is difficult to gauge the overall impact of the centre on Grimethorpe. The two clients who were interviewed were very similar to those at the GEVH, retired and uninterested in learning the new technology for employment purposes, but rather enjoying the social side of the centre. However, they understood the importance of these

skills to gaining employment in the contemporary market place. In terms of up-skilling, the volunteer tutor was perhaps the best example of someone using ICT skills in an effort to secure employment; although she pointed out she '*had a long way to go*'. Since no one from Grimethorpe was using the Learndirect centre would things have been different had the GEVH got Learndirect status?

There is no getting away from the fact that the GEVH, the Learndirect centre and the library in Grimethorpe were all party to specific local, regional and national policies surrounding the role of ICT and the Internet and the economic regeneration of communities suffering from the deprivation. These three entities were funded to raise ICT and Internet awareness in Grimethorpe in order to help up-skill the local population and create an ICT literate workforce able to compete for new jobs being created within the South Yorkshire region (Priority 4, 2002, p.4; BMBC Lifelong Learning, 2006; UFI, 2006). Teaching former miners ICT skills these projects could help them overcome the inflexibility associated with skills learned down the pit enhancing their employability in the wider region. However, other problems were identified and many could be associated with why the CTCs were not being used by Grimethorpe residents. For example, even with ICT skills there was a lack of available employment in the local area and many of those who had experienced working at the pit were viewed as reticent to travel further afield for employment – referring to what Petra had called a '*dependency culture*'. This was compounded by the fact that many of the jobs that were available were not considered to pay a working wage by former miners in Grimethorpe.

7.7 Conclusion

This chapter has focussed on the potential of ICT and the Internet to help 'up-skill' the local residents for them to be able to participate more equitably in the information society, particularly in relation employability. Due to the high levels of unemployment in Grimethorpe ICT policies were implemented to help build the capacity of the local community. The research demonstrated this was not happening and a number of reasons were put forward including lack of local, well-paid employment and a dependency culture constructed around previous

employment at the pit. In the next chapter the research focus moves away from the CTCs and talks to members of the community in order to explore these points and other issues raised in Chapter 6 and Chapter 7.

Chapter 8 Grimethorpe: CTCs and community participation

8.1 Introduction

The purpose of this chapter is to explore issues raised in Chapter 6 and Chapter 7. This includes why people from Grimethorpe were not using the centres and to discover what they understood about ICT and the Internet in relation to their lives. In the first section issues of access to the CTCs at Grimethorpe are investigated. The second section explores the role of social capital in the lives of the participants. While the third section looks at employability among the participants discussing some of the benefits associated with learning ICT skills. The final section discusses the barriers to accessing ICT and the Internet which became evident from the discussions and support ideas formulated in the previous two chapters.

8.2 Issues of access to the CTCs at Grimethorpe

As Chapters 6 and 7 demonstrated those attending the GEVH and the Learndirect centres were not actually from Grimethorpe. Discussing this issue with the participants from Grimethorpe it soon became apparent that everyone was familiar with the GEVH, the Learndirect centre and the library. They also knew where each was situated and understood that computers were based within them. However, none had any real idea about what they actually did at the centres, except for Tom. No participant had ever accessed the centres apart from Tom who had visited the GEVH primarily to ask Gary for help, not to actually access any of the services on offer. In the case of the GEVH this immediately raised concerns about the success of ICT policies aimed at widening participation in Grimethorpe. To explain, in order to obtain funding from Objective 1 South Yorkshire one of the key selection criteria for communities proposing ICT projects was to make sure the community was properly consulted and fully endorsed the proposals (Objective 1: Priority 4 – Measure 21, 2002).

Discussions with Jackie Mould, head of Objective 1 Priority 4's Programme Executive, made it clear that the people of Grimethorpe had been consulted. It was also pointed out that all ICT projects funded by Priority 4 – Measure 21 were based on the ICT needs of the community and approved by the community. However, speaking to the participants highlighted this did not seem to have been the case. When asked if they or their families had been invited to give their opinions about proposed ICT projects at the GEVH all of the participants said no. All knowledge about the centre had been gathered from small talk and conversations with friends and relations, not from any community consultation exercise. For example, one participant said that she knew the GEVH '*did something with computers*' but added '*I don't know what they do in there cos I've never been!*'

Similarly, the Learndirect centre was also recognised by all the participants mainly because they frequented the cafe housed in the same building – as one participant pointed out '*the Learndirect centre is down there [points down corridor] just follow the signs*'. Like the GEVH the participants all understood the Learndirect centre had something to do with computers but had no clear understanding of what courses were on offer and no intention of wanting to find out. In terms of the library, no one interviewed knew about the new Internet ready computers on offer there, although two of participants used it on a regular basis with their children⁹⁰. However, the government had run a highly visible campaign in the national media explaining the new services at both the library and the Learndirect centre, yet none of the participants mentioned having seen any of these.

Other questions relevant to issues of access were based on whether or not the participants were already competent with ICT skills, had a computer at home or went elsewhere to learn them. However, when asked none of the participants owned a computer or had any tangible ICT skills or attended other ICT centres outside of Grimethorpe. In fact most were very disparaging when asked about learning ICT skills. As one participant pointed out '*Why would I*

⁹⁰ This supported what the librarian had said about people being unaware of the new Internet ready computers because they had only just been installed.

want to learn how to use a computer?', a sentiment shared by another who said *'there's nothing I want to do with a computer'*. This is not to say no one had ever used a computer because several participants had in a very limited way. For example, one had tried typing on a friend's computer but found the whole experience *'dull'* and *'boring'* a view held by several others. In fact, all of the participants felt that using or learning about ICT and the Internet was not for them. It was not considered to be something that would help improve their lives in any way and nearly all were derisory about what ICT and the Internet could do for them either socially or economically.

8.3 Grimethorpe residents, ICT and social capital

In Chapter 6 the idea of how learning new ICT skills at the local CTCs could enhance social capital within Grimethorpe community was discussed. The findings demonstrated that although aspects of social capital⁹¹ were demonstrated at the centres it was not evident among excluded groups within the community at large; mainly because no one from Grimethorpe was actually using the centres. When discussing this fact with the participants from Grimethorpe they could see no reason for learning about or using ICT and had never considered attending a centre either at Grimethorpe or elsewhere (apart from Tom's fleeting visits to the GEVH to obtain information from Gary). Moreover, none owned a computer at home and only Tom demonstrated an interest in this area *'I wouldn't mind having a computer at home for the kids, but we can't afford one'*. Asked about purchasing a cheap one from Gary, Tom was insistent he could not afford one.

However, ICT policies implemented by the government and Objective 1 South Yorkshire were designed to help people just like Tom and other digitally excluded people. For example, developing the ICT skills of individuals would help increase social capital within Grimethorpe by enhancing new forms of online interaction and communication and creating stronger social networks (DFES, 2002). The Internet is a natural medium for providing opportunities of

⁹¹ Bridging social capital was evident among those attending the CTCs – see Chapter 6.

this kind and for developing linking social capital (Foley and Alonso, 2005). The obvious lack of ICT skills among the participants clearly limits the success of such ventures. Nevertheless, this did not mean that social capital was not present in, or relevant to, the participants. If anything there was a good demonstration of bonding social capital and some degree of bridging social capital, but very little in the form of linking social capital (Putnam, 2001). Participants were very aware of their own social networks and how these helped and supported them in their everyday lives.

For example, Tom's father, mother and two younger brothers all lived in the village along with his grandmother. His grandfather and father had both worked at Grimethorpe colliery until his grandfather retired and his father was made redundant when the pit closed. His mother and father lived a few doors down from him whilst his two brothers lived in homes owned by housing associations further across the village; all within easy walking distance. He said he was in regular contact with all of his family in the village, often ringing his brothers and meeting them at his parents' home at weekends. When speaking of his parents, Tom said he had relied on his mother a great deal when the children were young and still did when his wife was at work and he was on an afternoon shift and did not finish until 10pm. His wife is a cleaner at the local school so every third week the children would go to his mother's house after school until she picks them up after completing her work. Similar reliance on parents, particularly the mothers, was also expressed by the other participants. Grace was asked if she was close to her parents and she responded *'I wouldn't know what to do without me mother....she's round everyday making sure I'm alright and phones me most nights to see how I am'*. This was echoed by the other participants who all relied on their mothers to help them with childcare, cooking, cleaning and financial assistance – as Karen demonstrated *'If I'm skint I can always ask me mother to lend me some money'*.

When asked how they got on with their neighbours several of the participants were all very complimentary. Tom emphasised how *'he knew everyone in the row'* and that they *'were all sound'* but there were *'some right twats living next*

door to his brother'. He went on to say how a family had recently moved in on the street where his brother lived and were causing a great deal of trouble for those living there. He pointed out how the family were always *'shouting and swearing, getting pissed and off their heads on drugs'*. When asked where the family had come from but he couldn't remember although they were not from the village. This was interesting because Ian, the volunteer tutor at the GEVH, also made a comment about families being *'shipped in'* from other places to fill vacant houses in Grimethorpe; houses that nobody else wanted:

You've got here quite a bit of old colliery housing that nobody wants to live in, terrace houses. So, they're vacant and they're cheap. Housing associations take 'em over, which is a good idea, but these housing associations then want to fill 'em. And if they've got a problem family somewhere else like Wakefield or Leeds, it's where can we put 'em where it's cheap enough for 'em to afford – well there's some at Grimethorpe let's bang 'em in there. It doesn't need many like that, you know, before you've got problems affecting all o' village.

Grace, who lived in the same row as Tom, also commended the people who lived around her saying *'they're lovely'*. She pointed out how you could always rely on them for help if you needed it *'Well, I had no bread yesterday and [the lady] across the road gave me half a loaf to put me on'*. Sheila was also complimentary about her neighbours, but she did point out not knowing everyone on her street, and not wanting to know a couple of the families who she considered to be *'nothing but trouble'* and *'didn't give a shit about their kids'*.

Karen and Denise were old friends who lived practically next door to each other and were always popping in and out of each other's homes; helping each other out with childcare whenever possible. While they did not know all of the people on their street they got on well with ones they did. Similarly, Chris knew most people on her street to say hello to and many more around the village, but felt it was her family who she relied on the most if she needed help. It would seem that regarding bonding and bridging capital all of those

interviewed were very secure in the knowledge that they had a lot of contact, help and support from family and friends living in close proximity to them. However, this was not to say that everything was perfect in Grimethorpe.

As a group the participants were well aware of the problems the village had, particularly in relation to drugs, anti-social behaviour and underage drinking. As Tom pointed out *'I could take you places now where they'll be half a dozen teenagers sat up a tree drinking, smoking, taking drugs'*. Chris also identified pockets of what she called *'troublemakers'* highlighting how a few older teenage kids were often the cause of disturbances where she lived. She said the week before a wooden sandpit had been set on fire in the middle of her street and the kids had run off when a neighbour confronted them. Yet, this did not seem to deter how she all felt about the village. Sheila was perhaps the most troubled by *'neighbours from hell'* pointing out how there were two families where she lived that were *'out of control'* with people often fighting and drinking and *'going there to buy drugs'*. These were identified as families not from the village originally but who had moved in from outside the area. She commented on how the police were there most weekends and sometimes during the week but nothing ever seemed to get done about it. However, in direct contrast to this, she also said she loved living where she was and had friends and family close by who she could rely on. A view echoed by several other participants.

8.4 Grimethorpe residents, ICT and economic prospects

As already outlined the CTCs at Grimethorpe were viewed as places that could help improve, even regenerate the area economically, a key aim of the Objective 1 South Yorkshire and government policy. The main idea was to use ICT and the Internet at these centres to help *'up-skill'* local residents for them to participate more equitably in the information society burgeoning in the South Yorkshire region. The levels of poverty and unemployment in Grimethorpe meant that it was viewed as a community that was being left behind and placed firmly on the *'wrong side of the digital divide'* (Budget Speech, 1999). Therefore, the idea of introducing projects which focussed on

teaching ICT skills to people who did not have access to computers or the Internet was not without merit.

However, as Chapter 7 demonstrated those attending the centres were not actually from Grimethorpe or really interested in becoming ICT literate for employment purposes⁹². They appeared more concerned with using the sessions to socialise with other members. In terms of participants from the community only one person was actually in work and his name was Tom. Tom had been to the GEVH on several occasions, not to access the computers or the Internet but to chat with Gary. On the last occasion he had gone specifically to ask Gary for help in trying to find him a good second hand car on the Internet. He did not recognise the usefulness of the technology to help in the search for a vehicle he simply responded to discussions with Gary who had told him he could find him a good second hand car using the Internet.

Although Tom knew about computers and the Internet he could not visualise himself using them because to him they were complicated and for the most part not relevant to his life. Tom was quite adamant that he would never need to use a computer at work because the job he did was manual, not office work. He explained that his experience of computers had proved them to be *'too much like hard work...too much head work'*. When asked if he would ever consider working in an office environment he made it very clear that he was a manual worker and enjoyed working within this remit. He associated his job with physical labour not mental work which is how he understood office work. For instance, he stated *'I'm used to physical work not sitting on me arse all day pressing buttons'*, declaring he would rather be *'on the dole'* than working in an office environment.

Alternative reasons were given by the other participants for not wanting to learn about ICTs and the Internet including their experience of schooling. For example, one participant was aiming to go back to work when her daughter

⁹²Although it is worth remembering that there were people attending the GEVH who were enrolled on a CISCO course, but these had little input/influence on the research due to being on placement at the time it was undertaken.

went to school full-time but had no intention of ever going back into any kind of educational environment to help her achieve this. She put this down to finding school a very difficult place to be at, one in which she *'learned nothing'* eventually being pleased to leave with no qualifications. I asked if she felt learning new ICT skills might help benefit her future plans to find work, but she was quite resolute she would never do any kind of educational course whether ICT or otherwise.

This response was similar to the one given by another participant Grace who also disliked her formative education. She pointed out how she had *'had enough o' school when I were at school, couldn't stand it! It were awful...I hated the teachers, hated the lessons, it were crap, I hated it!* Grace was a 26 year old single parent who used to work at the Lyons factory in Barnsley before leaving to care for her daughter full-time. Grace's daughter was due to start full-time school in another year and she made it very clear that she felt she could always return to her old job. Explaining if this wasn't possible then learning ICT skills could perhaps help her get another job, Grace replied *'I don't need computers for that. If I wanted a job I could get one'*. She had already explained how she felt computers were *'boring'* and like Tom and several other participants felt they had no place in her life.

Karen was also a full-time single parent and vociferous in her condemnation of ICT's. She highlighted the fact that although she had used a computer she felt they were of little use to her. In her words, she basically couldn't *'be bothered with them'* because *'she had more important things to do like look after her children'*. I asked her about future employment, but she wasn't interested in getting job at the present because she was a full-time mother. This sentiment was shared by Denise, Karen's best friend, who said *'I've got a full-time a job looking after [her son] he's a right bloody handful'* and adding *'I don't have time to work'*. When asked about the possibility of learning about ICT skills Karen was totally against learning in any form. She had left school under a cloud and like Grace refused to entertain the idea of going back into any kind of education. Denise on the other hand did say she *'wouldn't mind doing something like looking after children'* but in her mind this had nothing to do with

learning ICT skills. It was explained that she would undoubtedly come into contact with ICT and have to learn the basic skills to operate a computer, something she could be doing now at one of the CTCs if she wanted. However, she was quite certain that she did not want to do this or any kind of training/retraining at the present. Even when told she would be able to leave her son at the crèche whilst she did this would not change her mind. The idea of free childcare at the Learndirect centre was also raised with two other participants who had children, but this had no effect on their desire to want to learn about ICTs and the Internet.

Other questions about what kind of content the participants might find useful were also discussed in an effort to demonstrate the uses of the technology, but this had little impact. For example, explaining to how hobbies and interests could be pursued online merely produced negative responses. None of those interviewed could visualise any positive reasons for wanting to learn ICT skills because they could see no benefit of using computers or the Internet in their lives. As far as they were concerned ICTs and the Internet had no meaning to them at that time or in near future.

8.5 Discussion

According to Stanley (2003) access might be a precondition for ICT and Internet use but supporting activities are just as important. For example, there needs to be a strategy in place that raises the awareness of these centres to the community, which could then help increase the motivation and desire to want to use the technology (van Dijk, 2012). The Grimethorpe participants were all aware of the CTCs existence but only one of them vaguely understood what services were available at each. While the staff at the centre only ever discussed how knowledge about the GEVH and its services was created purely by word of mouth; nothing was ever stated concerning community consultation. However, Objective 1 South Yorkshire conducted a consultation with the community to find out exactly what they needed regarding ICT and Internet requirements. The fact that the GEVH provided this was one of the main reasons it received funding from Objective 1 South

Yorkshire. Yet, none of the participants had been privy to any kind of consultation. The Learndirect centre and the Library were also both part of a national awareness campaign orchestrated by the previous Labour government using television, radio, newspapers and the Internet. Again, none of the participants recollected having seen or heard an advertisement in the national media promoting ICT skills at the Learndirect centre or the library. This lack of awareness could help explain the lack of motivation of the participants to want to learn more about or use ICT and the Internet at the CTCs.

Having said this there are other barriers to the adoption and use of ICT and Internet by the socially excluded groups usually correlated with socio-economic or positional factors (Hellawell, 2001; van Dijk, 2012). Such factors include low-income levels and unemployment, both of which were considered problematic when the research was undertaken. For example, many of the people living in the village were in receipt of unemployment or incapacity benefit, or were retired. In 2005, those seeking Job Seekers Allowance stood at around 40% compared to the Barnsley average of 12% (BMBC, 2006). Moreover, this does not include figures for those in receipt of incapacity benefit or the retired which would probably inflate the figures further. Tom pointed out how he would like to get a computer for his daughter, but couldn't afford one, while other participants never even considered owning a computer. Having said this, the CTCs in Grimethorpe were free to access. Although this meant that anyone from the village could walk into any of the three centres and use the equipment (although they would need to sign up to a course in the case of Learndirect), it would seem that none did at the time of the research.

Another socio-economic or positional barrier that could help explain the lack of attendance is poor educational attainment. For example, 84% of school leavers in Grimethorpe do not achieve 5 GCSE passes at grade A-C compared with 51% at the Barnsley level and 44% nationally (GSBCP, 2002). In mining communities a large proportion of post 16 education was once provided by the employer prior to the closure of the pits (Coalfield

Regeneration Review Board, 2010). The lack of employment opportunities in Grimethorpe since the pit closed could justify the lack of incentive to obtain decent levels of educational (GSBCP, 2002). For instance, only one of the participants had left with any qualifications and none seemed to have had a pleasant experience of formal schooling. It has been well documented that negative experiences of education makes it difficult for participants to undertake further education or training (Sadovnik, 2007; Arthur and Patterson, 2012; Arthur and Davies, 2010).

Moreover, mining communities were renowned for not seeing much point in having an education to work down the pit (Francis *et al.*, 2002). Something supported by Bateman (2012, p.14) who points out 'there were no interviews or exams or qualifications or references, if you could walk you could get a job in the pit'. This lack of incentive combined with poor educational experiences could also offer a reasonable explanation as to why people did not want to attend the CTCs. Furthermore, although basic use of ICT and the Internet do not require high levels of educational attainment they do require basic literacy skills. Research has indicated that people living in deprived areas are often quoted as saying they have 'no interest' in wanting to access or use ICT and the Internet (Hellowell, 2001). This was very much evident with the research participants and perhaps this response is merely disguising low levels of education.

A further barrier to motivating the participants to access and use ICT and the Internet could be based on personal inequalities of the participants (van Dijk, 2012). This was not based on age or gender or disability, although these are important social factors in the debate about access and use of ICT and the Internet (van Dijk, 2005). In this research the personal inequality related to the personality or attitude of the participants. Research undertaken by PAT 15 (2000) indicated that socially excluded groups are often resistant to adopting and using new technologies. This is demonstrated through their levels of awareness, interest, knowledge and acceptance of ICT and the Internet. For example, many people who claim they have never used the Internet usually state this is because they are not interested and nothing would make them

want to access the technology (Enders Analysis, 2001). Answers similar to this, along with some more contemptible, were quoted by participants as reasons why they did not want to learn new ICT skills. Most of the participants were simply not interested, they had no motivation or desire to use the centres or learn about ICTs and the Internet.

The lack of participation also prevented the ICT policies implemented by the government and Objective 1 South Yorkshire successfully achieving several of their key ICT aims. For example, increasing the social capital within Grimethorpe or helping to create a workforce that was ICT literate and able to participate in the information society and overcome the digital divide. Simply providing physical access to computers and the Internet does not in itself guarantee that digitally excluded people will automatically access the sites (Selwyn, 2002); something demonstrated by the above participants from Grimethorpe. Similarly, the technologically deterministic stance found in much ICT policy views universal access as the best way to help the digitally excluded overcome the digital divide (Klecun, 2008). However, this often fails to effectively deal with the needs of the digitally excluded that fear technology, are on low-incomes or unemployed, or are poorly educated (Loader and Keeble, 2004; Davis, 2004). Although the CTCs at Grimethorpe served a useful purpose for those who were attending, digitally excluded residents were seemingly not being reached and therefore unable to overcome the digital divide.

Before this can take place the digitally excluded need to be made aware of the benefits that ICT and the Internet can bring to their social and working lives. Raising awareness and understanding among excluded groups has often been considered the best way of motivating them to take their first steps towards wanting to learn and use new technology (van Dijk, 2012). Selwyn (2003) demonstrates that people need to have a 'compelling proposition' to want to learn ICT skills and that this requires some form of 'purposeful activity'. Allaying fears of technology, overcoming personal and positional barriers, demonstrating the usefulness of the technology are problems that need to be discussed with members of the community who are digitally

excluded. According South Yorkshire Objective 1 a community consultation did take place in Grimethorpe which supported the need for a drop-in centre, but this did not engage with the above participants. Had it done so, perhaps some of the issues discussed above could have been dispelled.

8.6 Conclusion

This chapter has provided some of the answers to the questions produced in Chapter 6 and Chapter 7 and determined some of the reasons for the lack of participation at the local CTCs. This involved discussing how barriers to accessing the CTCs and ICT and the Internet in general were evident among Grimethorpe participants. It also demonstrated how public ICT policies were ineffective in motivating the participants to access ICT and the Internet, preventing an increase in both ICT skills and social capital. Possible solutions to overcoming these perceived obstacles were then acknowledged beginning with raising the awareness of how of learning about ICT and the Internet could benefit the participants. In Chapter 9 the thesis moves on to the second phase of the research which discusses more recent developments in technology and whether or not these are helping people overcome the digital divide.

Chapter 9 – Grimethorpe a decade of technological change

9. 1 Introduction

In the phase 1 of the research the investigation was focussed on how access to CTCs, suites of computers wired to the Internet, could help the digitally excluded of Grimethorpe overcome the digital divide. In phase 2 the technological landscape looked very different compared to the original research. The spread and prevalence in technological innovation, like Web 2.0 technology and social media, has created an explosion in ownership and use of mobile technology and the Internet; something which has been acknowledged as transforming the lives of many individuals (ONS, 2012). Nevertheless, the digital divide is still a current problem and access to, and use of, ICT and the Internet is still considered a major concern of government policy (Cabinet Office, 2010). For example, according to Wanless (2013) 16 million adults in the UK don't have the basic online skills to benefit fully from using the Internet and around 7.4 million have never used a computer or the Internet.

The following chapter discusses the advances in technology and how this is being experienced by three families within Grimethorpe. Section 1 discusses the expansion of new technology and how this has become smaller, mobile and wireless. Section 2 debates the rise of social media and in particular how Web 2.0 technology allows individuals to create their own content and allow them to share things with others instantaneously. Section 3 introduces the three embedded units used in the research and discusses their socio-economic status in order to contextualise the research subjects. Section 4 outlines whether or not individuals are accessing and using new mobile devices and Web 2.0 technology. The final section discusses the findings in relation to how each embedded unit interacts to create new social relationships or strengthen old ones. It also investigates if family members have an effect on other friends and families in relation to how they use or don't use new technology.

9.2 The expansion and use of technology – small, portable and wireless

In the initial phase of the research the focus was based mainly on desktop computers that were fixed in community technology centres. In phase two, desktop computers were still an important factor in accessing ICT and the Internet, but the focus has moved to encompass a broader range of smaller, portable and wireless devices that had appeared in the intervening years. These included laptops, netbooks, smartphones, tablets, game consoles, smart TVs, portable media players and ereaders. The growth of these new devices has been led in part by the growth of online businesses such as Amazon and Ebay, which have become incredibly successful using Web 2.0 software, but also by the use of the Internet by individuals for social purposes – although economic and political purposes are also relevant.

Since its inception the Internet has always been acknowledged as a source of information. Originally people were limited to the passive viewing of content. Web 2.0 software describes how technology has moved beyond the static pages of earlier web sites. Although this is not a new version of the World Wide Web it demonstrates the way in which web pages are now being constructed and used. For example, Web 2.0 allows users to interact and collaborate with each other. It is a place where ordinary people can contribute content through the use of their devices, particularly through social media sites built on Web 2 technology (van Dijk, 2012).

The growth of mobile devices that utilise new Web 2.0 technology has been documented by various organisations. For example, the market leaders in mobile technology are Laptops and Netbooks accounting for around 50 per cent of UK residents accessing the Internet through these devices (Ipsos MORI, 2012). However, over the last few years it has been the phenomenal sale of smartphones and tablets which has increased mobile access to the Internet. For instance, nearly 50 per cent of UK residents owned a smartphone in 2012 up from 40 per cent in 2011 (eMarketeer, 2012). Accessing the Internet using a mobile phone in the UK more than doubled between the same period from 24 per cent to 51 per cent, with a third of all

adults accessing the Internet with a mobile phone everyday (Office of National Statistics, 2013). Internet sales via mobiles doubled to £275 million driven by a 119 per cent rise in the m-commerce (mobile commerce) population, improvements in mobile technology and greater take-up of smartphones and Android devices (Pew Internet, 2012).

In 2013 it has been suggested that over a third of all people in the UK will use tablets on a regular basis to access the Internet (eMarketer, 2013). Adults ages 25 to 54 will be the core of the UK tablet population in 2013. Also, because cheaper versions of tablets using Android operating systems are being produced, the younger and older age groups will be able to afford purchasing a tablet increasing. While this year for the first time women will outnumber men on tablets (eMarketer, 2013).

9.3 The rise of social media

Mass media has been the dominant form of communication over the last 150 years, where content has been being produced by large organisations with high-speed production processes and widespread distribution (Benkler, 2006). Benkler (2006) demonstrates that because production costs were so high only large organisations such as newspapers, film studios and television networks had the capital to produce content. Web 2.0 technology allows the individual to be able to create content with little or no capital required using social media sites. This creates what Blank and Reisdorf (2012, p. 537) refer to as 'the antithesis of the mass society model' and underlines the importance of Web 2.0 technology in creating a link between the individual and the social world.

Social media in this instance relate to 'Internet applications that enable the sharing of things' (van Dijk, 2012, p. 180). These can include anything from text messages, emails, photos, videos, music, graphics, pieces of knowledge or information, to online virtual social realities; which can be sent using a variety of different applications including Twitter, Facebook, Google groups or Meetup. The key intention of all users of social media is to be social. It allows individuals to create content in blogs and microblogs like Twitter or on social

networking sites such as Facebook, with the express aim of engaging in communication with other people or institutions. It can also help create spaces which allow for the collective participation of many people, for instance chat boxes in MSN or communities of interest, content and exchange like YouTube (van Dijk, 2012). In other words, people are able to access Web 2.0 technology and through social media applications form new relationships with like-minded people or strengthen existing ties. It offers the opportunity for people to move beyond the confines of the 'off-line world' and network with other people much more easily (Blank and Reisdorf, 2012).

However, the success of social media applications is dependent on people accessing and using them. If enough people do adopt applications and use them regularly then they can become very effective means of communication, for positive and negative reasons. For example, applications such as Spotify have allowed users to find and distribute music much more easily than record labels, causing a large degree of acrimony across the music industry. Similarly, the Arab Spring of 2011 has been widely attributed to people using Facebook and Twitter to organise political action (Blank and Reisdorf, 2012). Without sufficient numbers of people using the applications this 'network effect' is unlikely to happen (Blank and Reisdorf, 2012).

In order to examine this and other claims being made on the effects of social media the next subsection introduces the three family units used in this phase of the research. Here, the backgrounds of three families are explored in order to understand the different socio-economic status of each. This helps to contextualise the research subjects prior to investigating how changes in technology are being experienced by individuals in Grimethorpe.

9.4 Embedded units of analysis

9.4.1 Family one

Three families became the embedded subunits of the second phase of the research. The first family included married couple Tom and Amy and their son

Paul who live in a two bedroom council house property near the centre of the original village. All three have always lived in Grimethorpe and still enjoy doing so. They have always rented their property since moving into it after the birth of their first child. They have no intention of wanting to leave the village, which they say has '*greatly improved*' over the last decade due to the new houses being built across the village along with more shops and businesses coming to the area. Both Tom and Amy agreed that this had '*breathed new life into the village*'.

Tom was 47 and worked full-time as a warehouse operative at a factory near Barnsley, a position he had held for the last seventeen years. His wife Amy was 43 and worked part-time at the local school as a cleaner, a position she has held for over twenty years. Their son Paul is 20 years old and although he has had several jobs since leaving school, mainly through agency work, he was at present unemployed. Tom and Amy also have two older children Mark who was 22 and Vicky who was 23, both have left home and the village. Mark is a painter and decorator and lives with his wife and son in Sheffield and Vicky is also married and lives in Barnsley, where she takes care of the family home and two children. When asked about their total family income Tom and Amy eventually came up with a figure of around £23,000.

Tom's father (and grandfather) worked at Grimethorpe Colliery and his mother was a housewife. His mother lives on the same road in the house that Tom grew up in. He has two brothers one who lives in Grimethorpe with his wife and two children and one who lives in Hull. He has a good relationship with his mother and brother in the village but not with his brother in Hull. Amy's father also worked at the pit and her mother was a housewife. Bother parents were still alive and lived at Red City. She has two brothers and a sister, but none live in Grimethorpe and only her sister keeps in touch.

Both Tom and Amy went to the local schools and both left with no qualifications. Tom hated school and could not wait to leave, only having bad memories of school and a particular dislike of the teachers. He hated most of the lessons taught - although he enjoyed art - and did not believe what was

taught to him would be of any use in his future. Amy also disliked school and like Tom left without any qualifications. Paul had also disliked school but had left with four GCSE's, three Grade E's in English, Maths, Art and one Grade D in Physics – what he referred to as '*shit results*'. Tom, Amy nor Paul had anything good to say about their experiences of school and none have attempted to undertake any further education since.

In terms of perceptions and use of ICT and the Internet Tom was convinced they were of little value to him, his life or his situation. As a result, he had very little to do with computers or any other type of mobile device. There was still no computer in the house and his mobile phone was a Boqi which allowed the person to ring and send text message but little else. Sky television was installed at the property which had not been there in the first phase of the research. They also had their telephone and a broadband connection with Sky. Amy disagreed slightly with Tom and felt having a smartphone was really good, although she pointed out she did not fully understand how to use it properly and had to keep asking her son for help. Tom had a pay-as-you-go mobile phone both Amy and Paul had contract mobile phones. Both had the iPhone 4S, and Amy had only got hers last year due to her children who kept pestering her to get a '*decent mobile*', her old one had been a Nokia and was very similar in function to Tom's. Paul was perhaps the most enthusiastic family member and really liked his mobile phone – although he '*really wanted the iPhone 5*'. Part of Amy's and Paul's mobile phone contract allowed for a certain amount of internet access – 500mb per month. Paul used most of this allowance outside of the home and connected to the broadband Internet connection at home. Amy rarely used the Internet outside the home and was usually logged onto the broadband connection.

9.4.2 Family 2

The second family were a retired married couple Geoff and Sue who lived in their own three bedroom house at the top end of the village called Red City. They had bought the house after Geoff was made redundant from the pit. Sue was very happy in her home although she said it sometimes felt a little

empty since the kids had left home. Geoff also liked the house but really enjoyed the garden and was '*always doin' sommat in the back garden*'. They had two sons, both married with families and both had left the village some years earlier. The eldest son had moved to Cornwall and the younger one to Nottingham.

Geoff was 69 and born and raised in Grimethorpe and worked down the pit from leaving school until it closed. After this he was unemployed for a number of years until finding work as a night watchman for a security firm in Barnsley where he stayed until he retired in 2008. Sue was 67 and originally came from Brierley. She used to work part-time at the local school as a dinner lady before retiring at the same time as her husband. Both her sons were in the building and construction trade. When asked about their total family income Geoff and Sue did not come up with a figure but kept insisting they got '*what all pensioners got*'. According to Which (2013) this is approximately £12,000.

Geoff's father had been miner at Grimethorpe colliery and so had Sue's. Their mothers had '*worked hard as housewives*' never working outside the family home. Geoff's family had all but disappeared from the village. He had one or two cousins, but most of his family, his two brothers and a sister had moved away in the aftermath of the pit closure. Several members of Sue's family had also disappeared from Brierley after the closure, but she still had a sister and a brother who she was in regular contact with.

Geoff and Sue both left school with no qualifications and although Sue remembered her time at school as '*nice*', Geoff only remembered it as a chore. He pointed out that the only thing school ever did for him was '*teach me to read and write, and then only poorly*'. He remembers the teachers were harsh with children and settled everything with the cane. Sue on the other hand pointed out how school for her was difficult, because she didn't '*understand half of what was being said*' but liked to go because she was out of the house which she shared with her parents, two older brothers and 2 younger sisters.

Sue and Geoff did not see the need for ICT and the Internet in their lives either. In terms of computer access in the home they had no computers or other mobile devices. Both had mobile phones but these were older type pay-as-you-go Nokia 4210 mobile phones with functions similar to Tom's Boqi – they allowed you to ring and send text messages. Out of the two Sue was the one who used the mobile phone the most. They did have new 32" television with built-in Freeview and a telephone line from BT, but no Internet access at all.

9.4.3 Family 3

The third family include John who is married to Jane and their two children Paula and Alfie. John was 31 and Jane was 27 and their two children are 7 and 6 respectively. They live in their own modern, semi-detached house situated with other new houses recently built near the centre of the village. They moved in 3 years ago from rented accommodation in Barnsley where they had lived for six years after getting married nine years previously. The main reason for moving to Grimethorpe was based solely on being able to purchase a brand new three bedroomed house. When they first moved in they were a little apprehensive at leaving their friends and families but over the last three years they have come to call Grimethorpe home. They like the village and have found most people they have met to be extremely friendly and helpful, particularly their immediate neighbours who they are on good terms with. John had a younger brother who still lived at his parent's home in Barnsley. Susan was the middle of three siblings, all girls. Both of her sisters currently lived in local housing association housing with their partners and her parents in the family home.

John was a deputy manager at an electrical store in Barnsley where he had worked since leaving school. Jane worked part-time as a school receptionist at a local primary school where she has been employed for the last nine months. Before this she was a school receptionist at another school in Barnsley. John's father worked in a local factory and his mother was a cleaner at the local school. Jane's father was a plumber and her mother worked part-time at

a local shop. When asked about their total family income John and Jane estimated around £38,000.

In terms of education John has good Grade A GCSEs in Maths and English and an NVQ Level 3 in Customer Service and Retail Management that he studied for through work. Susan also passed several GCSEs getting Grade A in English, and Grade B's in Maths, French and Art. For John school was 'okay' and he 'enjoyed it' but he was pleased to have left and got a job. He enjoyed the work he did and when his boss said he needed a higher level of education to 'get on in this job' he was allowed to undertake an NVQ Level 3 in Customer Service and Retail Management. Jane also enjoyed school, but like John was pleased to leave. She was not interested in undertaking further education even though her parents had wanted her to. Instead she got an office job, which is where she learnt many of the skills she now uses in her current position.

John and Jane were perhaps the most receptive of those interviewed to using ICT and the Internet. They had a fixed computer, a laptop and an iPad tablet. Both had the iPhone 4S on contract and they also had a Sky package including TV, Broadband connection and telephone. They loved being able to access the Internet and talk to friends and family and they did this both at home and while out and about.

9.5 Accessing and using ICT and the Internet

9.5.1 Family one

Tom's opinion of ICT and the Internet had not really changed over the ten years since the original research had taken place. He was still quite derisory about using computers and accessing the Internet in any way stating '*I don't need to use computers or the Internet for anything...they don't bother my life*'. He did not use them in his personal or professional life and did not want. He pointed out how several of his friends, as well as his wife and family, had been onto him to '*join the 21st century*'; but he honestly felt he would gain nothing

from the experience to enhance his life in anyway. When asked about Sky, Tom pointed out how they had got Sky a few years before and eventually moved their telephone over to Sky and then, on the insistence of their younger son, got broadband. As Tom said *'Paul badgered me to death to get broadband'* but it wasn't until he found out he could get it for free with the other two services they received that he had agreed to have it. Before this he had told Paul (and his other two children) *'if you want broadband you pay for it'*, which of course they never did. In his defence Tom pointed to the costs associated with buying equipment and then paying for broadband *'if we'd had more money they could've had what they wanted...but we only have an account with the bank, we don't own it'*.

Having said this, there was no way to connect to the Internet apart from using the smartphones owned by Amy and Paul. When speaking to Amy she was more positive about accessing and using the Internet although she was still very unsure about how to use it properly and was *'scared of getting it wrong'*. She relied heavily on her son Paul to help her out and wouldn't do certain things without him being present. For example, she had used her iPhone to access the Internet for several reasons including to check her bank account, find out bus times, online shopping (reserving items at Argos and paying for items to be delivered to Next were mentioned, both located at Cortonwood Retail Park in Barnsley) and accessing Facebook, but most of the time this had been in Paul's presence. Amy also played several game applications that Paul had downloaded for her including Angry Birds, Candy Crush and Pet Rescue. Her phone was also set up to receive and send emails and although she understood the concept went on to say *'I wouldn't be able to use email...I don't have anyone to send one too'*. However, she did use the messaging facility especially to keep in touch with her family often sending texts to see how they were or to ask them something. As she put it *'I like sending texts because they're quick and easy and I know my lot always check their phones'*.

Amy particularly liked Facebook and the games applications. She used Facebook on at least once a day because her children were on there and several friends and it *'was nice to be able to see what they were up to'*. She

could easily click on the application to open Facebook up and read the new posts but didn't really like writing on it because she felt 'silly', although she had done this. Amy enthused about the gaming applications and would play these whenever she got a 'spare minute'. She enjoyed playing games but at the same time found them particularly frustrating, as she states:

'You just get used to a level [on Candy Crush] you know, how to play it and complete it and then you end up with no lives and then the bloody thing tries making you pay for extra lives. I don't pay though, if you wait long enough you get more lives, so I just play on Pet Rescue instead'

Amy also pointed out how you could get extra lives from friends on Facebook if you connected the application to it, something she had not done because she did not fully understand the technology.

Paul was perhaps the most enthusiastic about accessing the Internet saying '*I would be lost without my phone*'. He used his smartphone to keep in touch with all of his friends and also his girlfriend either online via Facebook, through texting or actually ringing and having a chat. He was quite knowledgeable about his smartphone and the various applications you could obtain and use, often scouring the Apple Application Store for new applications that he could download and use. He used text messaging a great deal to keep in touch with his close friends and girlfriend and also Facebook, which he accessed throughout the day. He felt Facebook was '*great*' and had no reserve in posting items for others to see. He loved the fact that he could '*look at what other people were up to*' or '*concerned with*' and that '*he was able to comment on these*'.

He also enjoyed using other applications including You Tube, Flixster, Comics, Shazam, iTunes and various gaming applications. His knowledge of how these work was quite sophisticated. Paul was able to utilise the applications individually but also combine them and integrate their abilities. For example, he was adept at posting You Tube videos and pictures to Facebook, as well as linking game applications he was playing. When asked how he had

become familiar with their use he stated '*by playing with them*'. He went on to say how easy they were to use and how most of the time instructions appeared on the screen which if you followed would automatically link '*what you're doing with another app*' such as Facebook. He also pointed out how many of the applications he used would become pointless if his friends did not use them '*If my mates weren't on Facebook I wouldn't use it*'. He went on to say how Facebook was the first place he would look if he wanted to know what his friends were doing '*we use it to let each other know what's happening*'. Similarly, if Paul and his friends were going out they used it to '*make sure everyone knew where to meet up*'. Paul made it clear his use of many applications was as a direct result of friendship. Paul also enjoyed '*finding new apps*' to tell his friends about, an example of which was Flixter. This application allows people to watch movies they have purchased on their mobile devices. Paul only had five because he was '*moaned at by his mum if his phone bill was over the monthly charge*' because she paid the bill. He was also a keen collector of music, which he downloaded at home or shared with his mates. At home he couldn't download too much because they only had a 2GB monthly Internet allowance and he dare not go over this in case they were charged and his father '*would do his nut*'.

Paul had learned about ICT and the Internet at school and could use software programmes like Microsoft Word, Microsoft Excel and Microsoft Powerpoint, but not very well. As he said, '*we did IT at school but it was a joke....the teacher was a right drip that had no control of the class and we ended up spending most of the lesson pissing about*'. However, he had enjoyed using the Internet especially the search facility although he pointed out how '*most of the things we were interested in looking at were blocked by the schools firewall....they were scared we would be looking at porn*'. Since leaving school Paul had not used any of these skills in either his personal or professional life. When asked if using his smartphone and Facebook in particular had helped him to find work, for example, had someone ever used the application let him know of an employment opportunity, he simply replied '*no...I've never heard of a job through friends and Facebook*'.

Although it was Paul who helped his mother use her smartphone, it had initially taken all three children to push her into buying one. As Paul made clear *'me, Vicky and Mark all ganged up on her to make her get one because we wanted her on Facebook'*. He pointed out how he had:

'spent ages showing her how to use things [on her smartphone] and she still forgets now and is constantly asking me how to do something...She can use the phone, send text messages and play games, but she's not very good with many other apps...she gets confused and then panics thinking she's broke the phone'

When asked about his father Paul made it quite clear that he thought he was *'a dinosaur...every time I mention getting a decent phone he just says he's happy with the one he's got'*. He went on to say *'he's got no interest in technology...he has his old car and his old mobile and he's happy, so I leave him alone'*. Paul and Amy had both tried to show Tom the fun you could have owning a smartphone but according to Paul *'he just doesn't want to listen and you can only be told to shut up so many times'*.

9.5.2 Family two

Sue and Geoff were very much like Tom in their perception and understanding of technology in relation to their lives. Neither was computer literate and both agreed that learning ICT skills or accessing the Internet was not for them. Geoff was perhaps the most sceptical towards new technology. He said quite openly how he *'didn't like it'* and *'didn't trust it'*. He was also very sure of the fact that *'all this new-fangled stuff is for the younger folk not us old codgers'*. When some of the benefits were pointed out to Geoff, such as being able to keep in touch with family more easily, being able to access their bank accounts online or being able to use the Internet to pursue a hobby; Geoff just answered *'why...I can do all of them things without computers...it's just hassle and I'm too old to learn new stuff...it's for the young 'un's not us'*. Geoff repeated this phrase on several occasions throughout the interview.

The case for keeping in touch with family was re-iterated explaining the use of Skype or Facetime to be able to talk and see their children and grandchildren in real time. Geoff looked confused at this and when asked if he understood what was being said, he replied that *'I haven't got a clue'*. After trying to explain this further using how he could use the Internet to find out about gardening, he simply replied *'I have all the books I need on Gardening'*. Similarly, the point being made about keeping in touch with family was explored further which resulted in Geoff saying he was *'happy just using the telephone'* to speak with his sons and grandchildren. He also pointed out how he and his wife visited one of his sons at least every six months and they often visited them. One of the things Geoff was very keen to make clear was the fact that they only had a pension to live on. He was well aware that new mobile technology existed, particularly the iPad and *'mobiles that sing and dance'* because he had seen them on TV advertisements. He was also very clear in pointing out just how much they cost and how they *'could never afford to buy one of them'*, adding *'but why would we want one?'*

Discussing the same issues with Sue demonstrated a little more understanding of new technology but no more desire to want to purchase or access them. For example, she was quite receptive to the idea of using the Internet to speak to her family and see them while she was doing this – indicating how it would be *'really nice'* to do this. Sue knew about the Internet because a friend of hers used it regularly to buy the weekly shopping. When asked if she would like to do the same she replied *'Oh no, I wouldn't know where to start. Elsie has tried to show me what to do on her computer but I can't follow how she does it...and I would rather go to the shops and see what I'm buying'*. She also pointed out how both her sons and their families had *'computers and could use the Internet'*. She mentioned how their son Jim had also told Geoff on several occasions to buy a computer and get on the Internet, but then made the case that they could not afford one on a pension. More importantly she pointed out how *'to be honest, we don't want to buy one, we're happy as we are'*. Sue also explained how she felt they were *'too old to learn about computers'*.

Discussing mobile technology and how this had reduced the costs of accessing the Internet brought similar comments from both Sue and Geoff about being too old to learn. For example, Geoff pointed out how it had taken ten years to understand the mobile phone he had at the moment and how he still didn't understand how to change the channel on the new television. Sue had been shown how to do this at the shop where they purchased the item. She said *'a young lady went over what to do [in the shop] but by the time we got home I had forgotten. Mavis from next door came in and set it up for us and all I do now is press the up and down buttons to change the volume and the TV programme'*. It was also pointed out that there were facilities in Grimethorpe where both Sue and Geoff could access computers and the Internet and learn how to use them. Again, this was met with a joint agreement of how wanting to learn about computers and the Internet was not for them.

Whenever the subject of learning ICT skills or accessing the Internet were discussed with Sue and Geoff they were met with real reasons for not wanting to. I asked Sue if she was frightened of the technology and she replied *'not frightened...no, I just don't understand them...and don't really want to'*. The same question was put to Geoff whose response was similar *'I'm not frightened of computers...they don't scare me'*.

9.5.3 Family three

John had been around fixed and mobile computer technological equipment practically all his life. He worked in place that sold all kinds of devices from desktops to iPads, along with all kinds of compatible software. He had also used technology of one kind or another for most of his working life, as he stated *'I couldn't do my job without knowing how to use computers'*. Along with the manager he helped to open and close the store, undertakes staff reviews and helped with internal stock taking and stock replacement. He also helped with cashing up and communicating with other stores and the central office. Apart from opening and closing the store, the rest of these tasks all utilise ICT skills of one kind or another. For example, he would often answer

emails outside of work time *'to keep on top of them'*. He also had to sell fixed and mobile devices to customers and needed to learn about key selling points of each device, making him what Jane called *'a know-it-all, but really useful if you want to know about a camera or a laptop'*.

Similarly, Jane also used fixed and mobile technological equipment in her working life. She had to undertake a number of administrative tasks on a daily basis, including using the telephone, word processing and utilising email and the Internet. Jane's role also included safeguarding and promoting the welfare of children and young people ensuring they are protected from harm. Both Jane and John had used the Internet to look for employment. For example, John pointed out how he often *'looked for openings'* in other shops owned by his company. He also said he occasionally looked for *'managerial positions'* with competitors. While Jane had used the Internet to get the job she was currently employed in *'it was advertised on the Barnsley.gov website and I applied and got the job'*.

In their personal life both were adept at using various types of fixed and mobile technological equipment including a smartphone, a fixed desktop and a tablet. They had a Sky package which included broadband, TV and telephone. John used the iPad and his iPhone more than the fixed desktop. He used both to access a variety of different Web 2.0 applications including shopping applications, social applications and educational applications. For example, on the iPad he had applications for Amazon, Argos, Currys, HMV and Ebay which he had used on numerous occasions to purchase items. He also had Facebook, BBC iPlayer, Photoshop, ITV player, iTunes and a variety of games aimed at children and adults. John pointed out how most of these applications were also on his iPhone and he was adept at moving between the two. For example, he might take a picture with his iPhone whilst out and about and send this to his iPad where he would then use Photoshop to create the effects he wanted to. He used Facebook, sometimes before work, but mainly afterwards and at weekends. Having said this, he pointed out how he would *'check my phone throughout the day...I can't resist looking if it 'pings' to say I've got a message...it's very addictive'*.

Jane shared the iPad with John but had her own mobile phone and was the main user of the desktop. She pointed out *'John might use the desktop every now and then to write a letter or if he wanted to download something he had sent from the iPad or his phone, but me and the kids use it much more than John'*. Jane used many of the same applications John did but also had subscriptions to Grazia and Glamour which she accessed through the Newsstand application on the iPad. Jane also used the iBooks application and the Kindle application to read books which she had purchased from the iTunes store or via Amazon. She admitted that she was more likely than John to purchase *'reading material'* through applications on the iPad. Jane also used the desktop computer to visit shopping websites and purchase items, particularly clothes for herself, Paul and the children and toys and games for the children. She liked the fact that they were *'cheaper online than in the stores'* and often had *'free delivery'*.

Both Jane and John used their mobiles and the iPad to keep in touch with friends and family. They had a joint Facebook account which they used to post messages to each other and to their friends, family and associates. Jane often messaged her sisters and her parents to inform them of what she was up to and enjoyed the interaction the application allowed her to have with them. She was able to let people know where she was, who she was with and what she was doing. As she pointed out *'I think it's useful to be able to let people know where you are especially if you're going somewhere'*. Jane felt being able to let people know online kept her family and friends abreast of her current situation, helping them to make informed decisions. For example, if a friend or family member wanted to visit *'they know where we are because we have let them know via Facebook'*. She also pointed out how it could initiate contact with friends and family. For example, *'if I post an item that says I'm feeling down then my friends or family might respond by telephoning me to ask why'*.

John also used the iPad to post messages on Facebook, but added *'if we're at home then Jane usually adds stuff to Facebook...I usually upload messages and photos using my iPhone when I'm out'*. John was also more likely than

Jane to upload You Tube videos and other links to stories or reports to Facebook, which he had either found himself or been sent by friends and colleagues. Having said this Jane did forward certain links and message especially if she felt they were important. For example, if Jane heard about an issue concerning children in the area she would *'post-it on Facebook so others would know what was happening'*. She would also pass on information that had been given to her children from school in this manner so other would also know.

According to Jane her sisters were very adept with using mobile technology, but her parents had took some convincing. Jane and her sisters had spent some *'considerable time getting them to purchase an iPad'*. Once they had one and been shown how to work it they had got on with it OK. Jane pointed out how *'we [Jane and her sisters] had tried for ages to get them to buy a new smartphone, but they wouldn't listen'*. It was only when Jane had sat down with her mum and let her play with her iPad that her mum got quite excited, *'I told her she could get in contact with her old school friends using Facebook...at first she didn't think it was for her, but after seeing me use it got quite excited at what she could do and how easy it was to use'*. It wasn't long after this that Jane's father purchased one, although Jane made it clear that *'dad doesn't use it as much as mum, but he can'*. John and his brother had convinced their parents to purchase an iPad and John's brother had shown them how to use it. John also said his mother used it more than his father.

Jane and John feel they are both very well placed to be able to teach their children how to use computers and other mobile devices due to the skills they had learned at work. Both children have their own LeapPad 2 which has built-in applications and games cartridges which help children to learn about reading, writing, mathematics and life skills. Alfie and Paula, were *'very good'* at using their devices, although according to Jane, Paula was at a more *'advanced level with her reading and writing'*. They also used the iPad to watch episodes of their favourite TV programmes and play a number of different applications including Pepper Pig and a piano application that they both like play with. Both children were allowed to use Microsoft Word and

Paint on the desktop computer and were able to print out work they had done. Jane pointed out how both children are allowed to go on the Internet but parental controls were in place. She pointed out how '*the Internet was not safe for children*', something John agreed with. All of the above activities with the children were undertaken with either John or Jane present. Both Jane and John want to give their children the best education they could and part of this meant them learning to access and use the different technologies that were available to them.

9.6 Discussion

From the above findings a number themes could be perceived. For example, there was clear socio-economic division between the three families in terms of perception, access and use of mobile (fixed) technology demonstrated along age, income, occupation and educational lines (Blank and Dutton, 2011). Family 2 had the lowest level of income and were the oldest participants in the research. These were also the only family not to have any form of fixed Internet connection or mobile device with which to access the internet. They were also very poorly educated leaving school at 15 with no qualifications and distinct memories of not liking school. Both Sue and Geoff had held manual positions all their lives. In Geoff's case first as a miner then as a night watchman until he retired, in Sue's case she worked in a local shop until getting married and starting a family before returning to work part-time as a dinner lady. In both cases their perception was one of not needing or wanting mobile or fixed technologies that could access the Internet.

Family 1 had nearly double the income of family 2 because both Tom worked full-time and Amy worked part-time. Tom and Amy would be considered middle-aged, being in their forty's, and lived with their 20 year old son Paul. Both left school with no qualifications and Paul left with very low attainment levels. In terms of access to the Internet the family were receiving free broadband with their Sky talk and Sky TV package. Paul was the most motivated member of the family to access the Internet using his mobile phone but mainly for friendship purposes, although he did use it to check up on his

family. He was also very adept at using a combination of applications to produce online content, but this was mainly in the form of adding messages, videos and pictures to applications such as Facebook. He was also able to search the Internet but this was usually to find free music and video download sites and for finding new gaming applications.

It was Paul and his brother and sister who had eventually got their mother to buy a smartphone, but this had been quite a struggle. Nevertheless, since getting a smartphone and using some of the applications available she had grown in confidence although she still referred to Paul to make sure she was '*doing things properly*'. Here we can see that Amy was beginning to 'trust the technology' especially the gaming applications (Blank and Dutton, 2011). Tom on the other hand had not changed in his opinion in wanting or needing mobile or fixed technology and access to the Internet since he participated in the first phase of the research ten years earlier. He had been talked into getting Broadband technology by his son and his wife, but only allowed it '*because it was free*'. He also made it quite clear to his son that if he went over the allowed limit he would have to pay the excess. None of the family used the Internet for work purposes or for sending and receiving emails, but they all used the text messaging function.

Family 3 had the highest income of all the families three times as much as the Family 2 and nearly twice as much as Family 1. They were also the youngest family participating at 31 and 27 and had two young children aged 7 and 6. They also had the most mobile devices including two smartphones, an iPad and desktop computer. John and Jane both left school with excellent GCSE's and moved into work which meant they had to constantly up-skill themselves. As a result both John and Jane were computer literate and could use software programmes such as Microsoft Word, Microsoft Excel, Microsoft Powerpoint and Microsoft Paint on the Desktop at home or at work proficiently. Both could also use the Internet effectively to search for relevant information – Jane finding her current employment online for example. They could also use mobile technology effectively, able to take advantage of the Internet to find and use information and applications that enhanced their lives. For example,

John was able to use multiple mobile devices and applications to keep ahead at work and keep up-to-date with friends and family. Jane demonstrated similar skills with mobile devices, although she would often spend more time on the desktop than John, especially with the children. In terms of learned knowledge about fixed and mobile technology, both John and Jane were adamant that their children would be able to understand, access and use them effectively and efficiently.

Skills, experience and attitude all play a vital role when discussing access and use of the Internet via mobile (or fixed) devices. For example, it has been demonstrated that if you have the desire, have spent the time using the Internet and possess a range of ICT skills the more likely it is that you will engage more with online content production (Schradie, 2011). What the above stratifications demonstrate is that this could be true. Offline divisions that create inequality in society such as education, income, occupation and age are seemingly just as relevant online and people who are socially excluded in the real world will more than likely still be excluded digitally. For example, individuals on low income, individuals with little or no education, individuals in manual positions and older individuals (along with other social divisions) have been used to demonstrate inequality both in the real world and online (Zillien and Hargittai, 2009). The discussion above demonstrates how these divisions can be seen to act as barriers, individually or in combination, to whether or not individuals access and learn ICT skills and the Internet. Although a counter position could be made for people who genuinely don't want, don't need or will never use ICT and the Internet as Tom, Geoff and Sue seem to demonstrate.

In Chapter 8 the idea of CTCs raising awareness and understanding among excluded groups in the community was discussed to help motivate Grimethorpe residents to learn about and use ICT and the Internet. The above findings move this discussion on to how family members can also play an important role in helping other family members get online. For example, the way Amy's children '*ganged up on her*' to buy a smartphone or the way John and Jane and their siblings pushed their parents to buy iPad's. This

demonstrates that once an individual begins to use and experience the device and access the Internet they gain more confidence and begin to trust the technology (Zillien and Hargittai, 2009).

Mobile technology can also help people build social capital for themselves, but also within the wider community. For example, accessing the Internet and particularly social media sites such as Facebook has led to increase in supporting bonding capital (van Dijk, 2012). This was visible in the above research where individuals who accessed the Internet used applications such as Facebook to keep in touch with family and close friends. Similar research has also demonstrated how using applications of this nature can add a large number of 'weak ties' or bridging social capital based on the number of Facebook friends you can acquire (van Dijk, 2012).

Social media adds to the sociability and connectivity of society offering all kinds of ways to maintain and extend relationships (van Dijk 2005). Social media applications like Facebook allow for information to be instantaneously passed on to others who in turn can choose to acknowledge, add to and pass on to others. This can have both negative and positive affects in the real world as already outlined above when discussing the Arab Spring of 2011 to organise political action, or the use of Spotify allow users to find and distribute music much more easily than record labels, causing a large degree of acrimony across the music industry (Blank and Reisdorf, 2012). Jane demonstrated this kind of action when she sent out information on a regular basis to friends and family on Facebook letting them know about issues concerning primary children and school.

9.7 Conclusion

This chapter has outlined how the growth in mobile technology and social media over the last ten years has provided the ability of all sections of society to access the Internet via a number of low costing wireless mobile devices. It has also explores the ownership and use of different mobile (and fixed) devices of three families with different socio-economic backgrounds and

compares how each is accessed and used by each family. The final section compared the findings from each family and highlighted a number of socio-economic variables which can play a part in whether or not an individual accesses and uses the Internet. It also demonstrates how getting someone who could be described as digitally excluded to access the internet can be achieved by family members extolling the virtues of being online. Finally, it demonstrates how social capital was still a relevant concept and how new applications like Facebook were helping to strengthen close ties (bonding social capital) and create new weak ones (bridging social capital). The final chapter gives an overview of the two phases of the research.

Chapter 10 Conclusion

10.1 Introduction

This research was undertaken in two phases, a decade apart, within the confines of the village of Grimethorpe, Barnsley. The first phase was interested in examining the role that public and third sector CTCs played in offering physical access to the residents of Grimethorpe in order for them to learn ICT skills and cross over the digital divide. Two other areas of interest were also examined in phase one related directly public and third sector ICT policy. The first of these was to explore whether or not the CTCs could help build the ICT capacity of the residents in order for them to be able to participate more equally in the growing knowledge economy of the wider South Yorkshire region. The second was to explore whether or not the CTCs could help build social capital within the local community. In phase 2 the focus of the research was no longer concerned with the community technology centres but based on the rapid expansion in wireless mobile technology. The key aim of this section of the research was to explore how these devices along with web 2.0 technology was being experienced by individual family members. The main objectives were to see who was using this technology, how they were using it and whether or not their use influenced other family members' use of the technology. The following section addresses these aims and objectives by discussing the research questions.

10.2 Addressing the research questions

Question 1

What is the nature and extent of ICT measures supported by the Objective 1 Programme South Yorkshire in Grimethorpe, and what other ICT related developments are occurring within the same community?

In all there were three main CTCs within Grimethorpe: the Grimethorpe Electronic Village Hall (GEVH), the Learndirect Centre and the Library; all situated within the Acorn Centre. The GEVH began life in 1992 with the initial

aim of bringing the community together to develop the necessary ICT skills to help people overcome the digital divide. The GEVH's role was to provide a complete solution to the ICT needs of community and voluntary sector groups and also help local residents learn ICT skills. They provided a place that was free to access and available to all local residents. As a group they understood the main need for the community was to build the confidence of users so they could eventually move on to more formal ICT courses. There were three employed members of staff and one volunteer helper who was in charge of assisting participants to learn basic ICT skills.

The Learndirect Centre was developed and deployed nationwide by the University for Industry in 2000 with a remit from the Labour government to provide high quality post-16 learning delivered innovatively through the use of new technologies (UFI, 2006). Like the GEVH it aimed to try and reach those with few or no skills and qualifications in the local community and equip them with the relevant skills to become employable. They offered a wide range of courses that were available online, at home or at the centre, but could only be accessed if you were signed up to a course. The courses were flexible and based on the fact that you could learn as much as you wanted at a pace which suited you. Unlike the GEVH, the teaching sessions were not fixed. The centre was open 9-5pm, Monday – Friday and a member of staff, voluntary or employed by Learndirect, was always available to help. Alternatively, you could contact the Learndirect helpline for free.

The third centre, Grimethorpe Library was connected to the internet in 2003 (as the first phase of the research was being undertaken in Grimethorpe). This was part of the Government sponsored initiative, The People's Network (funded through the New Opportunities Fund) to connect every public library to the Internet. In relation to the GEVH and the Learndirect Centre, the library only had one member of staff so did not do any kind of training or teaching using the computer or Internet, other than help with requests for information or Internet searches. The lack of staff was also hindered by the library only being open for two days a week, 9am while 5pm.

All of the centres are funded either by the government or Objective 1 South Yorkshire with the specific aim of encouraging those in the community with little or no ICT skills to participate at one or more of the centres in order to learn ICT skills and begin the process of overcoming the digital divide. By learning ICT skills formerly digitally excluded individuals were up-skilling themselves. This would allow them to participate more competitively in the burgeoning knowledge economy in the wider South Yorkshire region. All of the centres had an open door policy which means anyone can use the centres, although with the Learndirect you need to be signed up with a course. Yet as the research demonstrated no one from Grimethorpe community was actually attending any of the centres.

Question 2

Are ICT related measures increasing the social capital within Grimethorpe, through relationships such as trust, reciprocity, civic engagement and networks, and if so, how?

Both government and Objective 1 South Yorkshire's ICT policies focused on enhancing or developing some form of social capital within Grimethorpe by residents using the centres. One of the key reasons for this has already been discussed in Chapter 4 where evidence demonstrated that the social cohesiveness and inclusion, interactions and participation in community life of Grimethorpe had changed dramatically for the worse since the closure of the pit (GSBCP, 2002). One of the aims of the CTCs therefore was to try and help foster or develop these measures within the local community.

Although this was not a total failure, especially as those attending the centres had formed friendships with people they might never have met (bonding capital); this aim was not as successful as it could have been. Prevailing ICT policy supported the creation of physical access to ICT and the Internet in local CTCs in order to help those digitally excluded learn ICT skills. This meant that individuals would eventually be able to utilise relevant software and the Internet to communicate with others. However, in the case of Grimethorpe simply providing physical access did not work and people were not attending

from the community (Selwyn, 2003). Moving away from the centres and interviewing individuals from Grimethorpe helped explore some of the reasons for this which is discussed below.

Question 3

Are ICT related measures increasing the ICT skill levels within Grimethorpe, creating an up-skilled workforce that can participate more fully in the information society.

Another key aim of government and Objective 1 South Yorkshire ICT policies was based on using the CTCs to help the local residents become 'up-skilled' in order to be able to participate in the growing knowledge economy of the South Yorkshire region. The lack of attendance at the CTCs by the local residents also prevented this from happening. Some of the issues raised by members of staff at the CTCs pointed to a lack of prospective ICT jobs in the locality that people could actually see. They also pointed out how most of the new ICT jobs being created in South Yorkshire region were poorly paid and not considered a 'living wage' by ex-miners. Moreover, there was a long-standing issue of the community suffering from a dependency culture – something often found in isolated, mono-industrial villages.

Discussions with members of the wider Grimethorpe community also brought to light the same socio-economic factors outlined in the previous question as barriers to wanting to up-skill, but especially education. Here participants revealed how they completely rejected anything to do with ICT and the Internet because of the associated 'learning' that needed to be undertaken and its association with school. In terms of wanting to, or needing to, gain new ICT skills this proved to be perhaps the most salient point made by the participants.

Question 4

How is the rise in mobile technology over the last decade being experienced by families, including:

- *how are individuals using new mobile technology,*
- *is this having an effect on using the mobile technology by other family members therefore helping them to overcome the digital divide?*
- *is social capital being increased.*

Phase 1 of the research investigated how access to CTCs, suites of computers wired to the Internet, could help the digitally excluded of Grimethorpe overcome the digital divide. In phase 2 the digital divide was still a huge policy issue, but the technological landscape looked very different. The growth of technological innovations such as Web 2.0 technology and social media sites has created an explosion in small, mobile, wireless devices used to access them. Moreover, these sites have created 'enormous popularity among all sections of the population' (van Dijk, 2012, p.186). As a result this research changed its focus from the CTC's to several families within Grimethorpe. The main reason for this was to explore how these devices along with web 2.0 technology was being experienced by individual family members. The main objectives were to see who was using this technology, how they were using it and whether or not their use influenced other family members to use the technology – especially if this means helping them overcome the digital divide.

The research developed a number of themes along socio-economic divisions that affected individual's perceptions, access and use of mobile technology which could be discerned along divisions of age, income, occupation and education. For example, the higher the household income the more mobile devices the family owned. Or, the older the individual the less likely they would own, access or use any mobile or fixed device. Similarly, the higher the education attainment levels of individuals the more use of different mobile (and fixed) devices was evident. Finally, there is a distinction between professional and manual employment with regards to ICT skills. For example, John and Jane had much more developed ICT skills accrued through their employment than Tom and Amy who did not need to use ICT skills at work.

Having said this, Paul was unemployed but was still able to access and use the Internet and social media sites at a similar level to John and Jane. This demonstrates the way social media can help to cut across some socio-economic barriers. Although this does not mean Paul and John have the same skill level or the same income with which to participate further as a consumer. For example, John and Jane were both able to use their devices to access goods from the Internet and purchase applications to use at their leisure. Paul on the other hand enjoyed watching movies on his phone but only had five because he could not afford to pay for more. The same could be said about other activities such as downloading music. Here John and Jane were able to download their favourite music from the Internet while Paul actually got a lot of his music from friends.

One of the interesting results of the research was the way in which some members of the family, particularly the children who were versed in the use of mobile technology and accessing the Internet, influenced their parents to purchase mobile technology and access the Internet. This was demonstrated by Paul, John and Jane who with their siblings were able to convince (at least one of) their parents to purchase a mobile device and then spent time helping them to understand and use the various applications to access the Internet.

Also, as with Phase 1, there were several individuals who did not want to know about mobile (or fixed) devices, ICT skills or the Internet. Here Sue, Geoff and Tom were very clear about not wanting to know about or use any kind of technology. For Sue and Geoff this was mainly put down to costs and thinking that new technology was for the younger generation. For Tom there was a constant rejection of needing or wanting anything to do with technology. In the case of Sue and Geoff there may be an argument for not understanding or knowing how learning ICT skills or using the Internet could be relevant to their lives, but Tom understood the technology and still wanted no part of it.

10.3 Contribution to future ICT policy

The following discussion highlights a number of practices that have emerged from the research that could contribute to future ICT policies at local and national levels to help create a more inclusive information society and help digitally excluded people overcome the digital divide.

One of the first points to come out of the research is that people need to understand the social and economic benefits to them of being able to access and use ICT and the Internet. Raising awareness therefore should be the first step of any future ICT policy attempting to increase access to ICT and the Internet. For example, access might be a precondition for ICT and Internet use but supporting activities are just as important (Stanley, 2003). Raising awareness helps increase the motivation of individuals to want to access and use ICT and the Internet (van Dijk, 2012). More important is how this awareness needs to be geared towards the social and cultural make-up of the community under scrutiny.

For example, many people in former coalfield communities can remember their community before the pit was closed down. Therefore an activity that connects in some way with the community's social and cultural heritage would probably help engage at least some members' interest. For instance, the creation of a local history group based at a local CTC to generate some kind of online repository of the community's history based on facts, figures and oral accounts. This online content may well address issues of motivation and access among members who would not ordinarily wish to participate with ICT or the Internet. In terms of CTCs there is a role for government to become a facilitator allowing the continuous funding of initiatives that ensure the sustainability of projects – particularly in deprived areas with long-standing structural problems. Without constant funding many initiatives simply disappear or move away from the disadvantaged area to survive, something which happened to the GEVH.

Other barriers to motivation and access were also acknowledged by the research. Participants from Grimethorpe suffered from a number of inequalities related to socio-economic factors in both phases of the research including: unemployment, low-levels of income and low levels of education. Although the CTCs were initially situated in Grimethorpe to help overcome these inequalities it can be very difficult to engage people who are living from day-to-day and not able to see further ahead.

More important is the need to overcome the culture that surrounds the role of education in mining communities. Poor educational attainment and unpleasant memories of school do not lend themselves to undertaking further education. Again raising the issue of how awareness could be a key way to overcome these barriers, but only if this focuses on the use of technology instead of the technology itself. If the activity can create a positive interest this can then motivate those who are digitally excluded to want to access and use ICT and the Internet.

This leads onto a further point regarding how simply demonstrating the use of the Internet to others can often help create the motivation for digitally excluded people to access and use the Internet (Goraya and Light, 2011). Raising awareness in this way to promote digital inclusion is being made much simpler with mobile technology. The examples from the research demonstrate how the parents of Paul, Jane and John are now using mobile technology by experiencing it and understanding the usefulness of it to them (Dutton *et al.*, 2005). Here, there is a role for local authorities to work in partnership with community groups and local and national bodies to promote digital inclusion in a variety of different places, from the local schools to the doctor's surgery.

10.4 Recommendations for further research

Because the digital divide is a constantly changing phenomenon there is a continued need for research in this area. In terms of this project, more research needs to be undertaken with those who are socially and digitally excluded in order to learn more about how they are using or not using

technology. Investigating the needs of those who are not computer literate or connected to the Internet can help assess how ICT policies and programmes can help these individuals overcome the digital divide.

Similarly, more research needs to be undertaken into how local authorities and national government can assist in helping the digitally excluded cross the digital divide. This could form part of an evaluation project. For example, a programme aimed at helping the digitally excluded overcome the digital divide could be assessed at different points of time – before the project started and then at regular intervals – in order to disseminate best practice along with problems incurred.

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Appendix 1 Summary of Objective 1 Measures

<p>Priority 1 - Stimulating The Emergence Of New Growth And High Technology Sectors</p> <ol style="list-style-type: none">1. Exploiting a business centred research capacity ERDF2. Investing in targeted SMEs ERDF3. Developing growth sector start-ups ERDF4. Attracting growth sector champions ERDF5. Supporting new employment opportunities ESF
<p>Priority 2 - Modernising Businesses Through Enhancing Competitiveness And Innovation</p> <ol style="list-style-type: none">6. Exploiting new market opportunities ERDF7. Accelerating the adoption of new technologies products and processes ERDF8. Maximising the potential presented by e-business ERDF9. Improving processing and marketing of agricultural products EAGGF10. Enhancing management and workforce skills and capacity ESF
<p>Priority 3 - Building A World-Leading Learning Region, Which Promotes Equity, Employment And Social Inclusion Priority 3a - Building A World-Leading Learning Region</p> <ol style="list-style-type: none">11. Creating a responsive training and education system ESF12. Enhancing the curriculum for the world of work ESF13. Developing an adaptable and entrepreneurial workforce ESF14. Building a learning infrastructure for the 21st century ERDF15. Tackling gender imbalance in the labour market ESF <p>Priority 3b - Promoting Equity, Employment and Social Inclusion</p> <ol style="list-style-type: none">16. Assisting people back into work ESF17. Tackling disadvantage ESF18. Expanding and supporting a thriving social economy ESF
<p>Priority 4 - Developing Economic Opportunities In Targeted Communities Priority 4a - Supporting Community Economic Development</p> <ol style="list-style-type: none">19. Helping communities to access jobs and training ERDF20. Building neighbourhood strength ERDF21. Developing ICT as a tool to fight social and economic exclusion ERDF22. Tools for re-integration ESF <p>Priority 4b - Helping Communities Make The Transition To Economic Renewal</p> <ol style="list-style-type: none">23. Integrated development in targeted coalfield and steel areas ERDF24. Promoting the adaptation and development of rural areas EAGGF25. Developing forestry resources EAGGF26. Broadening the agriculture and forestry skills base EAGGF
<p>Priority 5 - Supporting Business Investment Through Strategic Spatial Development</p> <ol style="list-style-type: none">27. Seizing the opportunities of strategic economic zones ERDF28. Developing Sheffield City Centre ERDF29. Realising economic opportunities in urban centres ERDF30. Embedding the benefits of new business investment ERDF
<p>Priority 6 - providing the foundations for a successful programme</p> <ol style="list-style-type: none">31. Removing transport constraints on economic growth ERDF32. Improving access to finance for SMEs ERDF

Appendix 2 Objective 1: Priority 3 – Measure 21

Measure 21 - Developing ICT as a tool to fight social and economic exclusion

Aim

To ensure that excluded communities can create, form links with and benefit from opportunities arising from new ways of learning and working in order to contribute to the growth of a knowledge-driven economy.

Objectives

- Promote active participation in the development of a knowledge driven economy in South Yorkshire
- Implement community-based IT strategies to raise ICT awareness and develop capacity of communities
- Develop the interface between communities and public services
- To accelerate the development of commercial and public service delivery tailored to the needs of excluded communities

Rationale

Many disadvantaged communities are being left behind in the Internet society and excluded from the opportunities presented by the growth of the knowledge based economy. Research shows that people in South Yorkshire, particularly unemployed people, have limited or no access to the Internet. Over 40% of unemployed people in South Yorkshire have never used a computer but 60% want to improve their PC skills. Many people, predominantly males, who have previously worked in the traditional industries of coal and steel need to update their IT skills in order to access new employment. Women are under-represented in higher level ICT learning and employment. The digital divide noted in the National Strategy for Neighbourhood Renewal and its background reports is a fact for large parts of South Yorkshire. The PAT 15 report 'Closing the Digital Divide' establishes the principles which this Measure adopts.

The Information Society presents a major opportunity for currently excluded individuals to take part in a new form of market economy and society. If this opportunity is not harnessed effectively, there is a real risk that the Information Society will reinforce existing patterns of deprivation and exclusion. Fear is a major barrier to ICT literacy and the role of amateurs in breaking this down is key to this Measure. Access to opportunities of an appropriate nature which foster community based, supported and peer group involvement will play an important part in providing stepping stones to the learning opportunities in Priority 3 and the jobs envisaged through Priority 1. ICT literacy must include the opportunity to learn the skills needed to author software and content.

In common with all Priority 4a Measures, the Measure addresses the needs of communities which are fulfilling one of 3 defined roles, ie:

- At the first stage of involvement and needing capacity building support
- With some infrastructure an active groups but little community planning and co-ordination
- At the stage of planning managed action

Description

This Measure will promote active participation and ownership in the development of a knowledge-driven economy. It will facilitate the development of strategic community led projects and other partnership projects as appropriate including regional and national ICT