

Wired up Communities Evaluation: Findings from the Carpenters Estate

David Devins
Policy Research Institute
Leeds Metropolitan University

Research Report

No 517

***Wired up Communities Evaluation:
Findings from the Carpenters Estate***

David Devins

***Policy Research Institute
Leeds Metropolitan University***

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education and Skills.

© Queen's Printer 2004. Published with the permission of DfES on behalf of the Controller of Her Majesty's Stationery Office. Applications for reproduction should be made in writing to The Crown Copyright Unit, Her Majesty's Stationery Office, St Clements House, 2-16 Colegate, Norwich NR3 1BQ.

ISBN 1 84478 184 4

Contents

EXECUTIVE SUMMARY

1	INTRODUCTION	1
1.1	AIMS AND OBJECTIVES OF THE RESEARCH	1
1.2	RESEARCH METHODOLOGY	2
1.2.1	<i>Survey Methodology</i>	2
1.2.2	<i>Qualitative research</i>	4
1.3	DOCUMENT REVIEW	4
1.4	FORMAT OF THE REPORT	4
2	LOCAL CONTEXT AND PROGRESS	5
2.1	LOCATION.....	5
2.2	DELIVERY PARTNERSHIP	5
2.3	INNOVATIVE TECHNOLOGY	6
2.4	ENGAGING THE COMMUNITY	7
2.5	TRAINING AND SUPPORT	9
2.6	SUMMARY	10
3	USE OF THE EQUIPMENT AND ACCESS TO THE INTERNET	12
3.1	CHARACTERISTICS OF RESPONDENTS.....	12
3.2	USE OF THE INTERNET PRIOR TO WUC.....	13
3.3	USE OF THE WUC TECHNOLOGY	14
3.3.1	<i>Surfing the Internet</i>	15
3.3.2	<i>Frequency of use</i>	15
3.4	USE OF E-SERVICES ON THE INTERNET	16
3.4.1	<i>Inclusion through information search</i>	16
3.4.2	<i>Community development</i>	17
3.5	FUTURE USE.....	19
3.6	SUMMARY	19
4	PLACING THE RESULTS IN CONTEXT	20
4.1	AIMS AND OBJECTIVES OF THE WUC PROGRAMME	20
4.1.1	<i>Providing access to the Internet</i>	21
4.1.2	<i>Training and learning</i>	21
4.1.3	<i>Employment prospects</i>	22
4.1.4	<i>Social Cohesion</i>	23
4.2	TOWARDS AN ASSESSMENT OF DEADWEIGHT AND ADDITIONALITY	24

4.2.1	<i>Encouraging the first steps</i>	24
4.3	TOWARDS THE FUTURE	25
4.4	SUMMARY	26
5	REFERENCES	28
	ANNEX	29

Acknowledgement

The author would like to thank local residents and those involved in the development and delivery of Carpenters Connect for their contribution to the research process. The survey was managed by Penny Wymer and undertaken by the Survey Research Centre at the Policy Research Institute. James Clark and Yvette Fidler undertook the data analysis. Jim Bennett and Vanessa Pittard at DfES provided valuable help and guidance throughout the programme evaluation.

EXECUTIVE SUMMARY

The Policy Research Institute was commissioned by the Department for Education and Skills (DfES) to undertake research in the Carpenters Estate (Newham) to supplement the Wired up Communities (WuC) Programme Evaluation¹, which was completed in January 2003. The Carpenters Project (known locally as 'Carpenters Connect') was funded under phase 2 of the WuC programme. It was subject to considerable implementation slippage and therefore no information was available at the time of writing the Final Evaluation report to assess the extent to which residents had used the equipment provided through WuC. This project seeks to provide DfES with information to fill this gap.

Context

- Carpenters Connect has been implemented in a challenging environment in an area ranked in the lowest 3% by the Index of Deprivation and where a large proportion of residents (70-80%) are drawn from a wide variety of minority ethnic groups. The future of the estate is being considered through a Master Planning Process
- The project is distinguished by the use of innovative set top box (StB) technology and high bandwidth telecommunication infrastructure (based on a mix of aerials and cables). The StB provides PC functionality and access to the Internet along with direct access to locally produced videos. It is viewed as an experimental prototype system
- Strong local support for the project is apparent amongst stakeholders (including residents) in spite of the implementation slippage and the system's prototype status.

Methodology

A multi-method approach was adopted to explore the impact of the Carpenters Connect project including

¹ 'Connecting Communities to the Internet . Evaluation of the Wired up Communities Programme (2000-2002) DfES Research Report No 389. [Online] <http://www.dfes.gov.uk/research>

- Discussions with key stakeholders (n=9)
- Telephone survey of residents completed in October/November 2003 (105 responses)
- Document review.

Key findings

To place the results from the research conducted in Carpenters in context, comparison is made with the findings emerging from the Wired up Communities (WuC) programme evaluation. However due to a variety of methodological and contextual issues these comparisons should be viewed as indicative rather than exact.

The WuC programme had four inter-related objectives associated with access, learning, employment and social cohesion.

Access

- About 300 StBs were delivered into three tower blocks (wiring up the equivalent of 69% of all housing units in the tower blocks)
- The majority of residents (66%) had used the technology to 'surf the Internet'. The incidence of use is lower than four of the WuC areas but higher than two others. However if the definition of use is widened to include the viewing of locally produced e-content available through other menu options on the StB (e.g. locally produced videos, information about the master planning process), the incidence of use (95%) was higher than any other WuC area.

Training and Learning

- Three quarters of the respondents reported receiving some training to help them use the Internet (comparable with the WuC area with the highest incidence of training).
- The vast majority of respondents (80%) were satisfied with the training provided. Furthermore, almost half (46%) the respondents reported an interest in further training to help them to use the Internet
- A minority of respondents with school age children (30%) used the Internet to help them with their homework or other learning related activity. This is significantly fewer than was apparent in the other WuC areas.

Employment

- Only 3 respondents reported that their employment situation had changed since receiving the StB and none of these reported that the use of the StB had contributed to the change in circumstances
- Use of the Internet to search for information on job opportunities (15%) was considerably lower than in the other WuC areas (circa 30%).

Social cohesion

- A substantial minority of residents (17%) have been involved in the development of local content. By way of comparison with other WuC areas, the proportion of respondents involved in the development of local content ranged from 3% to 12%.
- A higher proportion of respondents (25%) had used the Internet to find information out about at least one of a range of community groups (compared with 15% in WuC areas in general)
- A defining characteristic of Carpenters Connect has been the local production of a range of videos which have engaged the community and fostered greater awareness and cohesiveness. This process is viewed positively by both residents and steering group stakeholders alike and made a valued contribution to the intervention
- A large proportion of respondents had used the Set top box to access local information available on Home2Home (75%), locally produced videos (63%) and Newham Life (57%).

Future

- In common with the other WuCs, Carpenters Connect faces many challenges as it moves forward. A key challenge is the development of a financial model which meets the ongoing cost and support which ensures that the community continues to develop local content and benefit from the system.

1 INTRODUCTION

The Policy Research Institute (Leeds Metropolitan University) was commissioned by the Department for Education and Skills (DfES) to undertake research comprising a survey of residents and interviews with key stakeholders in Carpenters Estate, Newham. Carpenters is one of seven areas funded under the Wired up Community (WuC) Programme (2000 – 2002). WuC sought to ensure that those people and communities that currently experience social exclusion are not further excluded from engaging with on-line consumer and government services (DTI 2000). The aim of WuC was to bridge the 'digital divide' by enabling communities to use ICT to access jobs, learning opportunities, government and other services.

A key element of the research underpinning the Programme Evaluation (Devins et al 2002) was not undertaken on the Carpenters Estate due largely to project implementation slippage. This element was based on a survey of residents to assess the extent to which they had used the technology provided through WuC. Subsequently, this research has been commissioned by DfES to fill the information gap.

1.1 Aims and objectives of the Research

The aim of the research is to establish

- The extent to which residents have used the equipment provided through WuC to access electronic services
- The extent to which the project has led to an increase in training activity
- The impact on employability (use of the Internet to search for information on job opportunities), use of selected government websites.
- Use of technology to communicate with selected community organizations

The research is intended to complement the findings reported in the Programme Evaluation. Whilst the findings will be of interest to local stakeholders involved in the design and implementation of Carpenters Connect, the research is aimed to meet the

interests of the commissioning agency (DfES) and not those of the local project (although there will inevitably be considerable overlap).

1.2 Research methodology

The research methodology combines a telephone survey of residents receiving the WuC technology with qualitative research through discussion groups and one to one interviews. The telephone survey sought to quantify the use of the technology and to identify key themes to be followed up in the discussion groups. The stakeholder interviews were conducted with individuals identified by the Carpenters Connect project manager.

1.2.1 Survey Methodology

Carpenters Connect provided contact details of the residents who had received the WuC Technology (to September 2003). A letter was sent to residents to introduce the research and forewarn residents that a member of the research team would be contacting them in the near future. A structured questionnaire containing 58 closed questions and 11 open questions was designed and implemented by the Survey Research Group at the Policy Research Institute during the period 27th October to 17th November 2003. In some instances more than one resident in a single household was named as recipient of the technology however only one interview was undertaken per household.

The questionnaire was designed to be compatible with the research instrument used in the other WuC areas. However the technical architecture and the on screen configuration of the Carpenters Connect system had considerable implications for the design of the questionnaire. Originally a question which asked respondents if they had used the Internet was used as a gateway to exploring the use of online services. However the Carpenters Connect System was designed to enable access through a variety of menu options. In one or two cases the user would make a conscious decision to use the Internet by choosing a specific 'Internet option' whilst in other cases the user might choose a combination of menu options which would provide them with Information which was locally produced or cached from the Internet. However as the users had not made an explicit choice to use the Internet, merely selected a number of menu options

they may be unaware that they were actually 'on-line'. Therefore the simple filter question had to be modified to take account of the Carpenters Connect system.

A further consideration to be taken into account in the design of the survey was that the Carpenters Estate contained a high concentration of residents from a variety of minority ethnic groups and that this would adversely affect the survey response rate. Given the large proportion of residents drawn from a variety of minority ethnic groups and the challenges of researching in an area where English is not the primary language in use, the interview team were given the flexibility to complete an interview with the recipient of the technology using another member of the household (usually a child) as an interpreter where the named recipient was unable to converse adequately in English. Nine interviews were completed using this approach however given the relatively high overall response rate (40.8%) and the second hand nature of this information these interviews have been removed from the analysis contained in this report. Removing these responses has no material effect on the analysis contained in subsequent sections of this report.

Approximately 300 StBs had been delivered into the homes of residents in the three tower blocks by the end of October 2003. Several residents contacted during the survey had not received their StB and refused to contribute to the survey.

A summary of the survey response and reasons for non-participation are set out below (Table 1.1)

Table 1.1: Local survey response/non response

	Response rate
Contact details with telephone numbers	272
Completed, usable interviews	105
Contacted at least three times but no interview	74
Refused	7
Part completed or unusable	9
Wrong telephone number	51
Telephone number does not accept anonymous calls	8
Other (includes residents who had not received or returned their StB, residents who could not speak English)	18
Overall	

1.2.2 Qualitative research

Qualitative research was undertaken with key stakeholders and residents to identify implementation issues and the usage of the technology. Semi structured discussion guides were used to ascertain stakeholders views of the performance of the project with particular emphasis on the approaches used to engage the community, the technology delivered to residents and the training and support provided. A list of contributors is contained in Annex 1. A discussion group was held with members of the community to explore issues associated with the use of the technology in further detail. Five residents contributed to this group.

1.3 Document review

A number of documents have been reviewed. These include Carpenters Connect bids for capital (WuC) and revenue funding (SRB) and a selection of academic and practitioner references. A full list is contained in the references section of this report.

1.4 Format of the report

Section 2 of the report provides the local context and a description of the key characteristics of the Carpenters Connect project. Section 3 of the report draws on the primary research to explore the residents' use of the equipment provided through WuC. Section 4 places the local results within the context of the WuC programme.

2 LOCAL CONTEXT AND PROGRESS

This section of the report describes the local context and the key characteristics of the Carpenters Connect project. It draws on primary (stakeholder interviews) and secondary (document review) sources of information.

2.1 Location

The Carpenters Estate is situated to the East of the City of London within the wider regeneration area of Stratford. The Carpenters WuC, is the smallest WuC area, covering a single housing estate containing three high rise blocks (432 dwellings) and about 150 other 'low rise' dwellings. Most of the housing is social housing although there have been some sales of mainly low rise dwellings. The Carpenters Estate is located in one of the most deprived areas in the country as ranked by the Index of Deprivation (lowest 3%).

A distinctive feature of the estate is that it is very ethnically diverse. The estate is managed by a Tenant Management Organisation (TMO) and the local community centre in which the TMO is located also houses a number of other community facilities including a **learnirect** centre. The estate also has its own primary school which acts as a further focus for learning for the community.

The future development of the estate is being considered and a planning process involving considerable community consultation known as the 'Master Planning Process' is currently underway.

2.2 Delivery Partnership

The partnership has emerged and evolved as the project has progressed. The Local Authority has been heavily involved in the project with the ICT Department, Housing Department and Education Department along with a community enterprise (Newham.net) all playing a key role in the development and implementation of the project. Carpenters Connect is seen as an experimental project of importance within the wider context of the ICT infrastructure development taking place in the area.

The project is characterised by a wider partnership approach which has engaged many others including the local Primary School, Newham College of Further Education and the University of East London. Private sector partners have also been involved in the development of the technology, applications and local content. The various interests involved are represented on a Steering Group for the Carpenters WuC which continues to meet monthly. In spite of the implementation slippage all the stakeholders talk positively about the contribution of the project to the local area.

2.3 Innovative technology

The Carpenters Connect project is distinguished by the use of an innovative set-top box platform to provide access to the Internet, locally produced content and a range of government services. Carpenters Connect provides the resident with a set-top box and an infrared keyboard to use to interact with the system.

A major innovation has been the use of Windows XP platform and Microsoft Office suite over the set top box. This provides residents with Personal Computer functionality using the set-top box and enables them to access the Internet via Internet Explorer.

The telecommunications infrastructure has been laid on the estate to enable use of the set top box. It is an infrastructure which relies upon a combination of aerials enabling laser links to the tower bocks and cabling to the resident's home. It results in very high bandwidth connectivity. The infrastructure also covers a number of public buildings including Carpenters Primary School, Carpenters and Docklands Recreation Centre, Building Crafts College, Housing Office, **learnirect** centre and the GP clinic although the extent to which the system is currently available in these sites is mixed. This is due largely to the progress of the cabling within individual sites.

The development of the infrastructure on the Carpenters Estate has been slower and more complex than anticipated. Two subcontractors have been used to deliver the infrastructure, one for the aerials and one for the cable. The aerial subcontractors are working under a three year contract with Newham Council and have been unwilling to accommodate the timescale requirements of the Carpenters estate within the existing contract. The cable contractors are reported to be unreliable, missing appointments and not informing the Carpenters Connect team about progress. This has contributed to the

slippage in the project implementation and caused considerable consternation amongst a large minority in the community. In the survey of one hundred residents who had received the equipment provided through Carpenters Connect (see Section 3), one in five reported dissatisfaction with the installation process. Residents provide an illustration of the problem areas:

'Doesn't look nice...I didn't want it to show..they were supposed to come back and fix it but they never did'

'I had problems with the installers not showing up ... I once waited for them all Sunday but it was a waste of my time'

'I have to remove the scart lead from the box and insert it into the video recorder for it to work hence I don't use it much'

'Picture not clear but the installer said that it was the best he could do'

2.4 Engaging the community

A variety of approaches have been used to engage residents in the Carpenters Connect project. These include the production and dissemination of promotional materials, launch events and promotion through the local primary school. More than 100 tenants queued to sign up for the StB's at the Carpenters Connect Project Launch (November). Wider engagement of the community has continued and currently 300 StBs have been distributed to residents.

A bespoke community 'video on demand' service has been used as a vehicle to engage the community and promote the project as well as a mechanism for development and delivery of local content. The *Media Trust* has worked with the project team and local residents to develop a range of videos these include:

- Meet the Neighbours
- Carpenters Shorts e.g. Cooking/News items/Notting Hill Carnival
- Living the High Life
- Thoughts of Home
- Safe surfing (for kids, teens and adults)
- Local history club
- Master Planning

A video based NHS interactive health application has also been made available over the Carpenters Connect System.

The process of developing a video is reported by stakeholders to be a useful mechanism to involve the community in the development of local content. For example 45 young people have participated in the making of the 'Meet the neighbours video' and a further 30 children participated in the 'safe surfing' video. The 'safe surfing' content was developed working in partnership with Parry Aftab, the Internet safety advisor to the US president and provides a highly accessible way of introducing new users to key issues. The local history club galvanised interest amongst some older members of the community who used the Internet to undertake research and who shared their stories of life on the estate which were recoded on video. The high bandwidth associated with the Carpenters Connect system means that the videos can be viewed over the set top box in the home 'on demand' by the local resident.

The Carpenters Connect System (along with the video production process) has also been used to support the planning process associated with the future of the estate. For example, a representative of The Media Trust has accompanied the architects and the structural engineers and recorded their visits. These are made available to residents over the Carpenters Connect system and contribute to the information made available to residents.



Engaging Residents in the Masterplan

Masterplanners from Broadway Malyan are currently preparing a 'Master Plan exploring alternatives for the future development of the Carpenters Estate. The process has been documented using video and has been made available over the Carpenters Connect system. This has provided a unique history of the process which is accessible to all who can access a video (including open access in the Community Centre). It has included sensitive meetings with council officers and open meetings with residents. The filming process has provided a means to break into sensitive issues and to provide an opportunity for residents to raise issues of concern. By using video, residents have had the opportunity to pose questions which are punchy and to the point which the architects and council officers have responded to via video. An e-mail chat room has also been set up to enable residents to contact the architects with comments about design and for the architects to respond to these comments.

Several residents' workshops exploring various options for refurbishment and re-housing have been recorded and some difficult choices have been made with the backing of residents. Residents have contributed to debates surrounding land value and density and there is a marked improvement in the level of understanding surrounding these issues, much of which is attributable to the development process which has engaged a large number of residents (30-40), recorded it on video and has made the conversations widely available. Editorial control has been shared and the medium has provided residents with a voice which has been able to influence decision making about the future of their environment. The use of video as a key communications tool has ensured that local residents have taken ownership of the Masterplan process and it has helped improve understanding of many issues associated with a complicated area based regeneration project of this type.

Source: Based on contributions from representatives of Broadway Malyan,
The Media Trust and Newham Council

2.5 Training and support

The Carpenters Estate sought to provide user training through a variety of mechanisms including

- Help desk (Monday to Friday and Sunday 14.00-20.00)
- Person setting up the StB in the home of the resident
- Open access through the Estate **learndirect** centre and other local provision
- Locally produced videos available on the system explaining the use of the equipment 'Guide and Help' and introducing 'Cyber Safety'

A user manual has also been developed and is provided to the resident on installation of the set top box. At the point of installation the engineer also provides an introduction to the system and up to one hours initial support in the home. S/he also draws attention to the locally produced videos available on the system to support use of the Internet.

A **learndirect** centre is located on the Carpenters Estate in close proximity to the three tower blocks. There are two full time staff and a number of volunteers who help out. A walk in service is provided and the Centre is open each day at various times which are posted outside the centre. The Learning Centre manager reports an increase in attendance at the Centre since the set top boxes started to go into residents' homes however no records are kept to enable quantification of this increase.

A further issue has arisen vis a vis the compatibility of some websites and the set top box. The **learndirect** website is one such site which has not been designed to run on TV screens and consequently is not available through Carpenters Connect. There have also been problems associated with the delivery of PLATO over the system which have yet to be satisfactorily addressed.

2.6 Summary

- Carpenters connect has been implemented in a challenging environment in an area ranked in the lowest 3% by the Index of Deprivation and where a large proportion of residents (70-80%) are drawn from a wide variety of black and minority ethnic groups. The future of the estate is being considered through a Master Planning Process.
- The project is distinguished by the use of innovative set top box (StB) and high bandwidth telecommunication infrastructure (based on a mix of aerials and

cables). The StB provides PC functionality and access to the Internet along with direct access to locally produced videos. It is viewed as an experimental prototype system.

- Strong local support for the project is apparent amongst stakeholders (including residents) in spite of the implementation slippage and its prototype status.
- All stakeholders comment favourably on the use of video technology to develop local content and foster social cohesion

3 USE OF THE EQUIPMENT AND ACCESS TO THE INTERNET

This section of the report draws largely on the primary research conducted in the Carpenters Estate to assess the initial outcomes of the intervention on local residents receiving WuC technology. The characteristics of respondents to the survey are reviewed and the data is used to explore the use of on-line services provided through Carpenters Connect and the Internet more generally.

3.1 Characteristics of respondents

The profile of respondents is outlined in Table 3.1.

Table 3.1: Characteristics of respondents

	N=105
Gender	
Male	37 (35.2)
Female	68 (64.8)
Ethnicity	
White	35 (33.3)
Black (Caribbean, African, Other)	38 (36.2)
Indian, Pakistani, Bangladesh	13 (12.4)
Other	19 (18.1)
Age	
16-24	7 (6.6)
25-44	57 (54.3)
45-64	16 (15.2)
65+	12 (11.4)
Declined to answer	2 (1.9)
Qualification	
Below NVQ2	62 (59.0)
NVQ2 or above	43 (41.0)
Other	
Employment Status	
In work	46 (43.8)
Out of work	39 (37.1)
Retirement	11 (10.5)
Other	9 (8.6)
Health	
Long term illness/disability	20 (19.0)

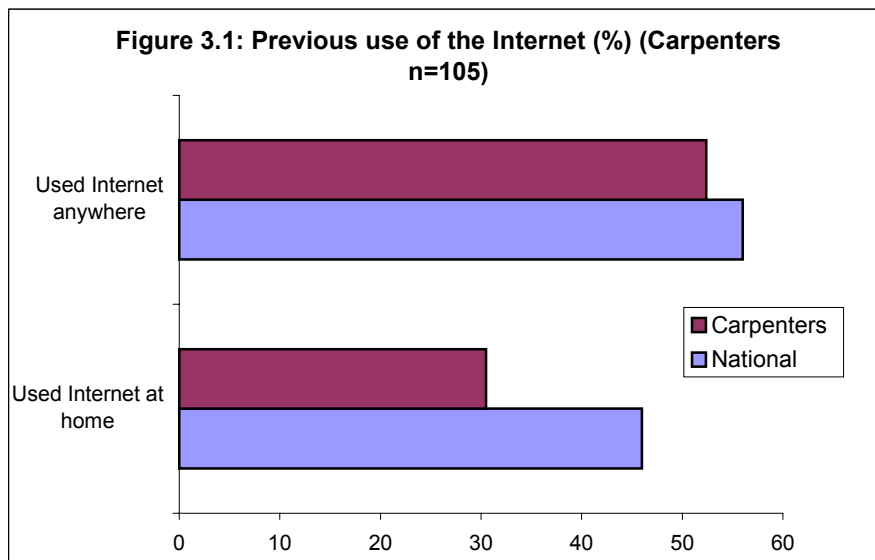
Source: Survey of residents on the Carpenters Estate 2003

The socio-demographic characteristics of respondents were obtained through self-classification, although several characteristics have been compiled through aggregation of specific responses contained in the questionnaire. For example, research has identified those with a qualification level below NVQ level 2 as at risk of social exclusion and the data has been coded and aggregated to enable the analysis to reflect this policy

priority. In relation to employment status, those 'out of work' include people claiming unemployment benefit as well as respondents identifying themselves as 'retired' but of working age, those suggesting that they are 'looking after home and family' and those who are not working due to ill health or disability. This is because those not in the workplace (including for example women returners and people with disabilities) have been identified as particularly at risk of exclusion from digital access. The sample contains a higher proportion of women than might be expected given general socio-demographic profiles. The profile of respondents reflect the ethnically diverse nature of Carpenters Estate. Over 70% of respondents were from minority ethnic groups. Respondents were asked to identify the main language used in the home and twenty different languages were reported. However English was reported to be the main language in the home by the majority of respondents (71%).

3.2 Use of the Internet prior to WuC

The survey retrospectively established the position regarding use of the Internet prior to the delivery of the Carpenters Connect technology. Figure 3.1 provides an illustration of the use of the Internet in Carpenters prior to the intervention and contracts this with nationally available statistics.



Overall just over one half of respondents in Carpenters (52.4%) had used the Internet prior to participating in the local WuC. This is just below national levels as indicated in recent surveys. A National Statistics Omnibus survey (ONS, 2003) covering the period

January to March 2003 indicates that 56% of adults in Great Britain have accessed the Internet at some time.

Just over one in five (21.9%) had used the Internet from their home prior to delivery of the StB provided through Carpenters Connect. Comparisons with national data suggest that residents in Carpenters were less likely to have accessed the Internet at home than those in Britain more generally. For example research commissioned by DfES reports that 46% of adults had accessed the Internet from the Home in 2001 (Taylor and Stafford 2002).

3.3 Use of the WuC technology

95% of respondents had used at least one of the menu options available through the StB provided by Carpenters Connect. The extent to which respondents who had received the StB had used each option is illustrated in Table 3.2 below.

Table 3.2: Proportion of respondents using StB menu options

	Used
Guide and Help	46.7
Home2Home	75.2
Internet and Email	57.1
Videos	62.9
Newham Life	57.1
Games	49.5
My Computer	49.5
Digital TV	39.8
Master Planning	47.6

Source: Survey of Carpenters residents 2003 (n=105)

A large proportion of residents used the StB to access local information available through *Home2Home* (75%), *Videos* (62.9%) and *Newham Life* (57.1%). These options included locally produced videos and a variety of local information. Almost six in ten residents (57%) had used the *Internet and email* menu option available on the StB. Almost a half of the residents had used the StB to play *games* (49.5%) and look at the information available about the *Master Planning Process* (47%). Almost a half had used the *My Computer* option (49%) and the *Guide and Help* option (46%). The least used option was *Digital TV*, providing access to a small number of free to air digital channels, which was however used by almost four in ten respondents (39%).

3.3.1 Surfing the Internet

There is a range of e-resources available to residents on the Carpenters Connect system through for example the *Master Planning Process* or *videos*. However of key concern within the context of the WuC Programme is the extent to which residents have used the technology to access the resources and services offered through the Internet more generally. On the Carpenters System there are two main access points to enable surfing of the Internet as detailed in the user manual *Getting Started*. One is through the *Internet and e-mail* option, which includes options to *search the internet* and provides access to a range of filtered web sites. Another way of surfing the Internet is available through the *My Computer* menu option which allows access through MS Internet Explorer.

Combining respondents who had used the *Internet and email* option and *the Search the Internet* option provides a 'best estimate' of the extent to which residents had used the StB to 'surf the Internet'. Triangulating this response with other questions associated with use of the Internet contained in the questionnaire confirms the validity of this estimate (99% confidence). The survey results suggest that two thirds of respondents (65%) have used the StB to surf the Internet.

3.3.2 Frequency of use

There appear to be a relatively large proportion of regular Internet users with almost half (49.4%) reporting that they used the Internet at least once a day. This is comparable with the frequency of use across the programme as a whole (48.9%). A further third (33.3%) reported that they used it at least twice a week. A small proportion (8.7%) use the Internet less than once a month. Just over four in ten (41.7%) of users suggested that their frequency of use of the Internet in the home had increased since receiving the StB.

However almost one third of respondents (32%) have not used the WuC technology to access the Internet. Analysis of the text responses within the questionnaire and the comments at the discussion group revealed multiple explanations for non-use. These included issues associated with technical, personal and organisational factors. For example respondents noted:

'Couldn't access the actual pages on the Internet: always came up 'browser cannot find'..eventually gave up trying'

'There is something wrong with it. It kept breaking down...it won't accept my password...it's still not working'

'Picture is rubbishI just cant see it'

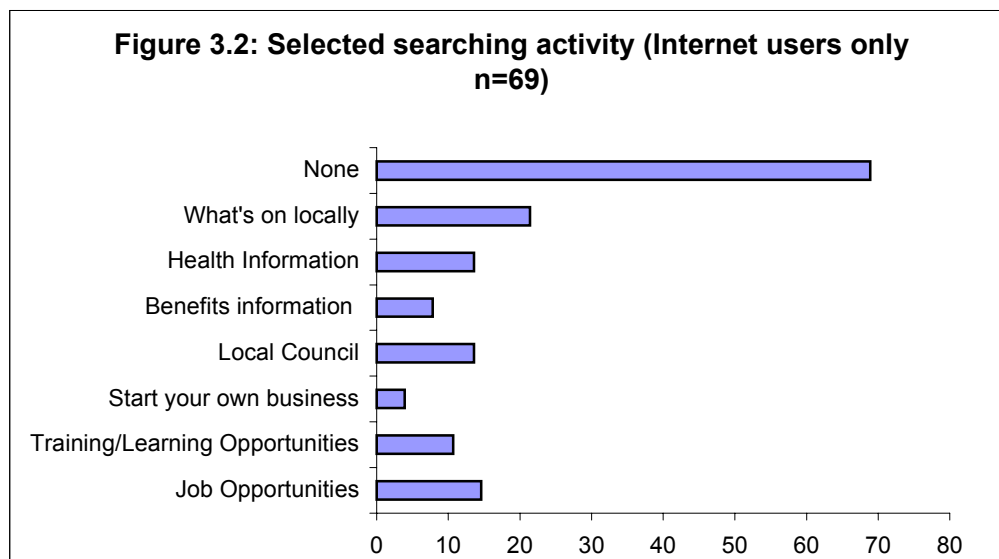
'I'm just not that interested'

3.4 Use of e-services on the Internet

The delivery of e-services is a key element of the modernizing government agenda. ICT has the potential to provide a wide range of information and services. Consequently this is a complex research arena and the survey adopts a relatively simple method to provide an indication of the extent to which residents have used the Internet to search for information which may affect their social or economic circumstances.

3.4.1 Inclusion through information search

Respondents were asked if they had used the StB to find information associated with a range of issues. The results are summarised in Figure 3.2 and enable comparison between the likelihood of using the StB to find information about, for example job opportunities, a key intermediate objective associated with the WuC programme, along with other search activity of interest to policy makers.



Source: Survey of Carpenters residents 2003 (n=105)

A minority of respondents (circa 15%) reported that they had used the StB to search for information associated with job opportunities, local council and/or health information. The most 'popular' use in terms of the options presented to the respondents was to use the Internet to search for 'what's on locally' (21.4%). However, the majority of respondents (compared with a quarter across the other WuC areas) had not used the StB to surf the Internet to find information about any of the options presented to them as listed in Figure 3.2.

Respondents were asked to report the extent to which they had used the Internet to look at a selection of government websites and the results are presented in Table 3.3.

Table 3.3: Respondents visiting selected websites

	% of StB users (n=105)
www.worktrain.gov.uk	1.9
www.nhsdirect.gov.uk	8.7
www.childcarelink.gov.uk	2.9
http://h2h.newham.net	20.4
www.dss.gov.uk	3.9
www.learnirect.co.uk	10.7
www.ukonline.co.uk	2.9

Source: Survey of Carpenters residents 2003 (n=105)

More than one in five respondents (20.4%) had visited the local website <http://h2h.newham.net> (Home2Home). However far fewer people reported visiting other government sites with less than 10% visiting www.nhsdirect.nhs.uk and less than 5% visiting the website which is designed to link citizens with employment and learning opportunities (www.worktrain.gov.uk).

3.4.2 Community development

The Internet has the potential to facilitate communication between local people and local groups. In order to gain an indication of the extent to which residents had used the Internet to connect with other local agencies respondents were asked if they had used the StB to find information about a range of local groups. The findings from the survey suggest that a relatively large minority (35%) of Internet users had used the StB to find information. The results are summarised in Table 3.4.

Table 3.4: Used the Internet to find /send information

	Find information	
	Internet users (%)	All set top box users (%)
Residents'/Tenants' Association	23.2	15.0
Trade Union	1.4	1.0
Political Party	1.4	1.0
Self Help/Support Group	4.3	2.9
School Governing Body/PTA	4.3	2.9
Youth Activities/Club	2.9	1.9
Religious Group	2.9	1.9
Sports or Social Club	11.6	7.8
Women's Group or organization	2.9	1.9
Other	4.3	2.9
Not used for the above	65.3	76.2

Source: Survey of Carpenters residents 2003 (n=105)

The survey suggests that almost a quarter of Internet users had used the StB to find information about residents/tenants association and just over one in ten residents had used the Internet to find information about sports or social clubs. This level of use is higher than was apparent across the WuC programme more generally (less than 10%) and is likely to reflect the local environment, in particular the connection between residents and the TMO. In common with the programme more generally (85%), the majority of residents (65%) had not used the Internet to find information about the range of (prompted) community groups. Whilst not directly comparable, it appears that residents were far more likely to find information from the locally produced content associated with for example 'Newham Life' (visited by 57% of StB users) and the Master Planning Process (visited by 47% of StB users) than through general use of the Internet.

A small proportion of respondents appear to have used the StB for a commercial transaction, with just over 10% using the Internet to shop or bank on line. However, the proportion of respondents using the StB to shop or bank online is significantly smaller than was apparent across the WuC programme more generally (41.8%). A much smaller proportion (2%) had used the StB to request information and receive a response from a local council or any other government department (compared with 6.4% across the WuC programme).

3.5 Future use

Whilst there have been instances where the StB has been returned or has remained largely unused it would appear that the majority of respondents (75%) plan to use the StB to access the Internet in the future. For about one third of users it will be their sole method of accessing the Internet, for about one in ten it will be their preferred means of using the Internet. A quarter suggest that they will prefer to use their PC/Laptop to access the Internet.

Just under a half (46.7%) of the survey respondents own their own PC/Laptop and nearly two thirds of these currently have access to the Internet at home. Over half of these (equivalent to 17% of all respondents) would be interested in connecting their PC/Laptop to the Carpenters Network.

3.6 Summary

- A large proportion of respondents had used the Set top box to access local information available on Home2Home (75%), locally produced videos (63%) and Newham Life (57%)
- Two thirds of respondents had used the StB to 'surf the Internet'
- Just over one in five respondents (21%) had used the Internet to find out 'what's on locally'. However the majority of respondents had not used it to search for information about a range of (prompted) services associated with inclusion
- A large minority (35%) had used the Internet to find information about a range of (prompted) community groups
- The majority of respondents report that they plan to use the StB to access the Internet in the future.

4 PLACING THE RESULTS IN CONTEXT

This section of the report places the findings emerging from the survey in the wider context of the WuC programme.

4.1 Aims and Objectives of the WuC Programme

Four inter-related objectives were stated for the programme. These are outlined below:

Objective 1: Access

- To contribute to the social exclusion agenda by enabling most people in disadvantaged communities to have access to ICT.
- To allow people in disadvantaged communities easy access to the full range of government and other services through the internet.

Objective 2: Learning

- To increase ICT and other skills in disadvantaged communities and support the learning of local adults and children.

Objective 3: Employment

- To promote economic inclusion and improve the employment prospects of people in the communities through improving their access to jobs and training.

Objective 4: Social Cohesion

- To help communities use new technologies to develop and sustain community co-operation, capacity and mutual support.

Each of the local WuC projects had its own approach and local priorities within this framework. Carpenters Connect is widely perceived locally as an 'experimental project' and a test bed for the development of the ICT infrastructure in Newham and further e-services. The key features of the project on the Carpenters Estate are the development of the telecommunications infrastructure and innovative set-top box technology along with the production and distribution of local content based largely on video content. Carpenters Connect has been implemented in a challenging environment in an area ranked in the lowest 3% of areas by the Index of deprivation and where a large proportion (70-80%) of residents are drawn from a variety of black and minority ethnic groups.

4.1.1 Providing access to the Internet

Organising and managing the supply of technology into residents' homes proved to be a major challenge for the Carpenters Connect Project. The innovative technology took time to develop and the wiring up and installation has not proceeded according to plan.

At the time of writing this report the three tower blocks were 'wired up' and cabled to varying degrees. About 300 StBs had been delivered into residents' homes ('wiring up' the equivalent of 69% of all housing units in the tower blocks). The majority of people who had been provided with the technology had used it to 'surf the Internet' (65.7%). The incidence of Internet use is lower than in four of the seven WuC areas but considerably higher than two of the areas. However if the definition of use of the Carpenters Connect technology is broadened beyond 'surfing the Internet' to include using the StB to view e-content (e.g. locally produced videos, information about the master planning process and Home2Home), the incidence of use is higher than is apparent in any of the other WuC areas. The propensity of respondents in Carpenters to use the StB to access e-services more generally (95%) through the range of options available on the StB is comparable with the WuC area where the highest Internet use was apparent (Framlingham 94%).

4.1.2 Training and learning

A short-term objective of the WuC programme was to encourage the development of ICT skills and to support the learning of adults and children. The Carpenters Estate sought to provide user training through a variety of mechanisms. The survey provides an indication of the impact of the intervention on the recipients training activity in Carpenters and (where appropriate) the support they provide for their children's learning in the home.

The training typically covered basic use of the technology provided through WuC. Three quarters of the respondents (74.3%) reported receiving some training to help them use the Internet with a sizeable minority (25%) reporting that they did not receive any training. The proportion of residents reporting receiving training is comparable with the highest incidence of training (e.g. East Manchester - where training was a prerequisite prior to receiving the free equipment) apparent in other WuC areas. The vast majority of

the respondents undertaking training were satisfied (80%) with the training provided. The minority who were not satisfied articulated a range of reasons. For example:

'The training was too complicated' or alternatively

'I was just given the basics ..longer time going through it would have been better'

'Not enough time taken to explain it adequately'

In spite of the relatively high proportion of residents suggesting that they had received training, there is apparently scope for the further development or promotion of local training opportunities as almost half the respondents (45.6%) noted that they were interested in further training to help them to use the Internet.

A further dimension of the impact of the WuC intervention of particular interest to policy makers is the extent to which it supported parent-child learning. The research developed limited indicators to gain a flavour of learning in the home in relation to supporting homework. In the Carpenters Estate, 45% of respondents (n=47) who had received the StB had school age children at home. A large minority of these (30%) had used the WuC technology to help their children with their homework or learning related activity. However, this is significantly less than was apparent over the other six WuCs where a majority of parents with school age children had used the WuC technology to help their children with their homework or other learning related activity. These findings are consistent with those of Owen et al (2003) who explored the use of ICT by black and ethnic minority groups living in deprived areas and found that, amongst other things, they were less likely to use ICT to support their children's learning in this way.

4.1.3 Employment prospects

A medium term objective of the WuC Programme was to promote economic inclusion and improve the employment prospects of local people. Whilst it may be too early to assess the contribution of WuC to this objective at this time, the survey provides an indication of the short-term outcomes associated with the Carpenters Connect Project.

Only 3 respondents (2.9%) suggested that their 'employment situation' had changed since receiving the StB and none of these respondents reported that the use of the Internet or the StB had contributed to their change of circumstances.

4.1.4 Social Cohesion

Within the context of the WuC programme, the development of local content was seen to be a key 'first step' towards fostering greater social cohesion in the communities. The survey suggests that a substantial minority of residents (16.5%) had been involved in the development of Home2Home through making or participating in the local videos. By way of comparison the proportion of residents receiving technology through the WuC programme in other areas engaged in development of local content ranged from 3.2% (Framlingham) to 12.2% (Blackburn East).

In order to investigate a further aspect of social cohesion a relatively simple composite measure of Internet use was developed from the responses to the survey in the local WuCs. This measure was based on the consolidation of affirmative responses to using the Internet to find information about any of the named groups listed in Table 3.4 (p18). A quarter of respondents in Carpenters had used the StB to find information about at least one of the groups (equivalent to 35% of Internet users). In comparison with other WuC areas, respondents in Carpenters were most likely to have used the Internet to find information about these groups. This will to some degree reflect the local context with the active TMO and the estate undergoing a 'Master Planning Process'.

However a defining characteristic apparent in the Carpenters Estate (but absent in the other WuC areas) has been the local production of videos. One stakeholder noted

'the videos have generated a community feeling.....people recognize each other from the video - seen you on the telly – and a lot of people are willing to talk with each other.....the master planning means that residents are more aware of what is going on and are a part of the process'

A consultancy was commissioned to develop locally produced content which is available on the Carpenters Connect system in the form of videos. This process is viewed positively by both residents and steering group stakeholders alike. As one stakeholder noted

‘you can’t expect people to come and tell you about things....you need to meet them and to make things happen....they (residents) like people to listen to them and they like to see themselves on TV’

Empowering the community through ICT has provided the Local Council with new challenges as the Estate based videos such as ‘Down Carpenters Way’ and ‘Living the high life’ have proved to be very effective means of communicating the issues of concern to residents on the estate to local representatives and facilitating ‘democracy in action’.

4.2 Towards an assessment of deadweight and additionality

Arguably of most interest to policy planners is the extent to which WuC has encouraged people to use the Internet for the first time and to subsequently remain online.

4.2.1 Encouraging the first steps

Table 4.1 presents survey results associated with previous use of the Internet at home for each of the WuC areas prior to the delivery of the WuC equipment and use of the equipment to access the Internet.

Table 4.1: % who had previously used the Internet by WuC area

	Had used the Internet at home before WuC (%)	Used WuC equipment to surf the Internet (%)	‘Additional home access’ (%)
Alston	22.1	91.5	69.4
Blackburn	15.3	90.4	75.1
Brampton	20.9	51.3	30.4
East Manchester	6.8	77.5	70.7
Framlingham	27.8	94.3	66.5
Kensington	5.1	50.0	44.9
Carpenters	21.9	65.0	43.1

Survey of recipients of WuC technology

The data illustrate a wide variation in local residents' exposure to the Internet prior to the WuC intervention. The proportion of residents with home access prior to the WuC intervention (just over one in five) in Carpenters, was one of the highest in the seven WuC areas. To some this might reflect an element of deadweight with a substantial minority of residents within a disadvantaged community already having used the Internet at home. However this view is counter-balanced to some degree in Carpenters through the piloting of an *innovative technological solution* and the availability of 'upgraded'

equipment to improve home-access or to provide another point of e-access within the home for others to use.

In order to assess the impact of the programme on specific local areas an 'additional home access' indicator is used to provide a proxy measure. This indicator is the result of the net increase in use of the Internet amongst non-Internet users who had received the technology available through the WuC programme. Largely due to the relatively high use of the Internet at home prior to WuC, Carpenters has one of the lowest levels of 'additional home access' in the seven areas funded under WuC (43%). However it is higher than the expected rise in the proportion of residents accessing the Internet at home (circa 6% p.a at the national level). If the wider definition of e-services is adopted (where 95% of respondents in Carpenters have used the StB to access at least one of the services available through the menu options on the StB) a considerably higher value would be associated with the additional home indicator (73%). This is comparable to the WuC area with the highest level of 'additional home access'.

4.3 Towards the future

In common with the other WuCs, Carpenters Connect faces many challenges as it moves forward. A key challenge is the development of a financial model which meets the ongoing running costs and support required to ensure that the community continues to develop local content and benefit from the system. A number of potential funding streams have been identified which include

- Purchase of value added services by residents
- Council investment under the e-government agenda
- Market testing
- Advertising

However in order for the network to be viable it is necessary to extend its scale beyond the Carpenters estate to encompass circa 5,000 households, an option the Council and its partners are currently considering. The research findings provide some evidence which may be of use when considering the business model underpinning further development of the ICT infrastructure and Carpenters Connect. For example:

Take up:

- Circa 30% of households in the tower blocks (assuming 100% occupancy) have not come forward for a StB to date

Equity:

- The Carpenters Connect system is currently unavailable to residents housed in the low rise accommodation (circa 25% of households on the estate)

Demand

- 17% of all respondents are interested in connecting a PC to Carpenters Connect
- Less than 5% of Carpenters respondents who use the Internet report undertaking a commercial transaction (shopped or banked on-line) using the StB.

4.4 Summary

The WuC programme has four inter-related objectives associated with access, learning, employment and social cohesion.

Access

- About 300 StBs have been delivered into three tower blocks (wiring up the equivalent of 69% of all housing units in the tower blocks)
- The majority of residents (66%) had used the technology to 'surf the Internet'. The incidence of use is lower than four of the WuC areas but higher than two others. However if the definition of use is widened to include the viewing of locally produced e-content available through other menu options on the StB (e.g. locally produced videos, information about the master planning process), the incidence of use (95%) is higher than any other WuC area

Training and Learning

- Three quarters of the respondents reported receiving some training to help them use the Internet (comparable with the WuC area with the highest incidence of training).
- The vast majority of respondents (80%) were satisfied with the training provided. Furthermore, almost half (46%) the respondents reported an interest in further training to help them to use the Internet

- A minority of respondents with school age children used the Internet to help them with their homework or other learning related activity. This is significantly fewer than was apparent in the other WuC areas

Employment

- Only 3 respondents reported that their employment situation had changed since receiving the StB and none of these reported that the use of the StB had contributed to the change in circumstances
- Use of the Internet to search for information on job opportunities (15%) was considerably lower than in the other WuC areas (circa 30%).

Social cohesion

- A substantial minority of residents (17%) have been involved in the development of local content. By way of comparison with other WuC areas, the proportion of respondents involved in the development of local content ranged from 3% to 12%.
- A higher proportion of respondents (25%) had used the Internet to find information out about at least one of a range of community groups (compared with 15% in WuC areas in general)
- A defining characteristic of Carpenters Connect has been the local production of a range of videos which have engaged the community and fostered greater awareness and cohesiveness. This process is viewed positively by both residents and steering group stakeholders alike and made a valued contribution to the intervention.

Future

- In common with the other WuCs, Carpenters Connect faces many challenges as it moves forward. A key challenge is the development of a financial model which meets the ongoing cost and support which ensures that the community continues to develop local content and benefit from the system.

5 REFERENCES

- CLES, MCCR and CEMVO (2003) Supporting Access to ICT for BME Groups in Deprived Areas: Approaches to Good Practice. DfES Research Brief No 388. [Online]. <http://www.dfes.gov.uk/research> (Consulted November 2003).
- Devins, D., Darlow, A., Petrie, A. and Burden, T. (2003) Connecting Communities to the Internet. Evaluation of the Wired up Communities Programme (2000-2002). Research Report No: 389. Department for Education and Skills [Online] <http://www.dfes.gov.uk/research> [Consulted November 2003]
- ONS (2003) National Statistics Omnibus Survey - Access to Internet from Home Expenditure and Food Survey (April 2001 onwards) <http://www.statistics.gov.uk/CCI>.
- Owen, D., Green, A.E., McLeod, M., Law, I., Challis, T., and Wilkinson, D. (2003) The use and attitudes towards information and communication technologies (ICT) by people from black and minority ethnic groups living in deprived areas. Research Brief No: 450. Department for Education and Skills. <http://www.dfes.gov.uk/research> (Consulted November 2003)
- Russell, N. and Stafford, N. (2002) Trends in ICT Access and Use. Research Brief No:358. Department for Education and Skills.

ANNEX

Stakeholders contributing to the research:

Jan Bless (Carpenters School)

Tee Fabikan (TMO and Learndirect Centre)

Albert Golding (Broadway Malyan)

Richard Overton (Newham.net Ltd)

Sarah Reid (Stratford Development Partnership Ltd)

Richard Stubbs (Self employed consultant and unpaid director of Newham.net)

Richard Steel (Newham Council)

John Taylor (Building Crafts College)

Nicola Pritchard (The Media Trust)

Copies of this publication can be obtained from:

DfES Publications
P.O. Box 5050
Sherwood Park
Annesley
Nottingham
NG15 0DJ

Tel: 0845 60 222 60
Fax: 0845 60 333 60
Minicom: 0845 60 555 60
Online: www.dfespublications.gov.uk

© Queen's Printers 2004

Produced by the Department for Education and Skills

ISBN 1 84478 184 4
Ref No: RR517

www.dfes.go.uk/research