Sus-IT Short Report Sus-IT
Keeping silver surfers on
the crest of a wave

# A sense of adventure:

A report on older people engaging with information and communication technologies in Saltburn.

By Marian Smith, Leela Damodaran and Jatinder Sandhu

September 2012

© 2012 Loughborough University

Published by Loughborough University, Ashby Road, Loughborough, Leicestershire, LE11 3TU November 2012

A sense of adventure: A report on older people engaging with information and communication technologies in Saltburn. Licensed under a Creative Commons Attribution 3.0 Unported License (http://creativecommons.org/licenses/by/3.0/)

The content of this report is offered free to be used under a creative commons licence, requiring only accreditation for use.

# Contents

List of Tables	
1. Introduction	4
1.1. Saltburn Club	4
1.2. Destinations	5
1.3. Purpose	5
2. Research design	5
2.1. Sample	5
2.2. Data collection	7
2.2.1. Interviews	7
2.2.2. Ethical issues	8
3. Findings	8
3.1. Destinations: the learning centre and the community it serves	8
3.2. Beginnings	10
3.3. Motivation to learn and sustain engagement with ICT	10
3.3.1. A need to understand and learn	10
3.3.2. Looking for a new interest	11
3.3.3. Keeping up with the times	
3.3.4. Remaining active: wanting to 'do things'	13
3.3.5. Being with others	
3.3.6. Community aspect: helping others	15
3.3.7. Continuing an existing interest	16
3.3.8. Communication	
3.4. Barriers to learning and engaging with ICT	16
3.4.1. Pressure	17
3.4.2. Level of support	17
3.4.3. Memory	18
3.4.4. Fear	20
3.4.5. Established practice	
4. Community Media Club: a profile of its members	23
4.1. Determination	
4.2. Ready for a challenge: Having a go	
4.3. Curiosity	25
4.4. "Messing about"	25
5. Conclusions	
References	27
Acknowledgements	27
List of Tables	
Table 1: Demographic details of research study participants6	
Table 2. Details of participants' qualifications, housing and marital status	
Table z Therails of Dadicidants, oballications, bolisting and marifal statils — /	

# **Executive Summary**

The research reported here has been undertaken as part of the Sus-IT project, a 3-year research project funded by the New Dynamics of Ageing Programme (www.newdynamics.group.shef.ac.uk) to investigate the barriers and facilitators to sustained digital engagement for older people. Older people have much to gain from the use of digital technologies in particular computers and the internet, and conversely may face many disadvantages if they are not digitally engaged. Despite the fact that growing numbers of older people are becoming users of such technologies, they are still less likely than younger people to be digitally engaged. As public and commercial services are increasingly being offered online, it is crucial for policy makers, service providers and developers of ICT based products to understand the factors which can promote or prevent digital engagement by older people and the nature of potential solutions.

In the course of the project, Sus-IT researchers have engaged with over 1000 older people from a diversity of backgrounds across the UK, using a variety of research methods to gather evidence about the challenges and to explore their views about potential solutions. The findings/outcomes of the component research activities which collectively comprise the Sus-IT project have resulted in 24 project-specific outputs. These outputs and related publications by members of the project team in conference proceedings and academic papers currently total over 65 publications. All are available in the public domain – some under a creative commons licence.

This short report presents the findings from a case study of a particular community media club hosted in an ICT learning centre. It describes the context, the activities of the centre and in particular the experiences of eleven older learners who are members of the club. The study highlights the importance and key role of readily available and context-specific help and support even for highly motivated and 'adventurous' ICT users.

The evidence presented here has helped to inform the overall findings and conclusions from the research. It has important implications for policy regarding the nature of ICT learning and support for older ICT users in suggesting that training provision modelled on the requirements of the workplace may be seriously at odds with the needs and preferences of this group. In particular, a standard curriculum with tests and examinations against set criteria would seem to be inappropriate in a context where the focus of learning is self-determined and the pursuit of rewarding and enjoyable collaborative activities with other people is a primary goal.

Further information about the Sus-IT project is available from: http://sus-it.lboro.ac.uk/

#### 1. Introduction

This report is one of the outputs of the Sus-IT collaborative research project; investigating the actual and potential barriers to sustained and effective use of ICTs by older people and exploring a range of potential sociotechnical solutions to these barriers.

The report examines the experience of members of the Community Media Club in Saltburn (referred to as the Saltburn Club throughout the rest of the report) which provides a venue for older people to come together and engage with technology in an exciting and innovative way. The report, divided into five sections begins with an introduction which outlines the background and purpose of the report. Consideration is then given to the research design with details of sampling and data collection and analysis. In the main body of the report the findings are presented and then discussed in conclusions section.

#### 1.1. Saltburn Club

The Saltburn Club is located within Destinations a UK online centre and Internet Café in Saltburn on the North East coast of England. The activities of the club are led by Steve Thompson who at the time of the study was co-ordinator of Community Media at the University of Teesside. Steve works with a variety of community groups on social inclusion and digital media projects. The club began as a Community Media Club to provide fun and entertaining sessions. The advent of the Community Media Club arose in a community digital arts event, which took place in 2003 called People and Place and featured the Octorama, a multimedia digital arts installation.

The Saltburn Club is not exclusively for older people but its members tend to be older. Most are over fifty and many are over sixty and are mostly retired people. The membership of the club has ebbed and flowed over the years with people coming and going but there have always been more women than men (and the numbers have ranged between four and twelve). Throughout the year the Saltburn Club runs once a week on Wednesday afternoons for three to four hours. Often a session will run for a period of about three months and then after a break a new session will start with a different focus. The Saltburn Club is led by Steve Thompson, informally supported by various 'graduates' from earlier cohorts. Steve provides a rich and exciting learning experience. Activities undertaken include creating web sites and blogs, machinima, animation, audio, music etc. The Club has become known as a club that does exploration and takes people beyond the IT norm. The approach aims to promote more adventurous learning:

- Trying new things;
- Exploration;
- Having fun;
- · Making it relevant;
- Keep it social
- Being unafraid of technology;
- Learning things even the teacher has not learned. (Thompson 2011)

#### 1.2. Destinations

Destinations is a UK online centre and Internet Café in Saltburn. The Internet café is well used and has three computers. The learning centre is situated just behind the café. It is an IT learning centre with drop in computer access. There is wireless connection which enables people to drop in with their laptops. Office space has recently been created on the first floor for start-up businesses in the area. Destinations aims to provide easy access to technology and up to date methods of learning to local communities. It offers basic IT courses or structured accredited courses. The centre is currently used by Teesside University for their ten week accredited UCPD (University Certificate of Professional Development). This formal structured course often attracts older people and is focused on word processing and digital imaging.

# 1.3. Purpose

The purpose of the report is to explore the motivations and barriers to learning and engagement with ICT amongst older people in the community of Saltburn and the surrounding areas and to investigate the factors that make the Saltburn Club a successful learning environment for its members.

### 2. Research design

# 2.1. Sample

The population of interest was older people who attend Destinations in Saltburn and more specifically those who take part in activities at the Saltburn Club. The sample was drawn from this community. An introductory email was sent to the owner of Destinations outlining the aims and objectives of the Sus-IT project and requesting the opportunity to visit and to conduct data collection interviews with members of the club and others attending classes at the centre. All participants were volunteers. A total of eleven people participated in the research study. Eight participants were users of the Saltburn Club and three participants attended other courses at Destinations. In addition to the eleven participants the owner of Destinations and his partner who is also a member of staff were interviewed and provided background information. The ages of the participants ranged from forty seven to eighty two years of age. The majority of participants were fully retired (total of eight) and one was semi-retired. Two participants worked full time. Two participants were carers and five participants undertook voluntary work. Demographic details are given in Table 1.

Table 1: Demo	graphic details	of research study	y participants	
Participant	Gender	Date of birth	Occupation profile	Sessions attended
P.1	F	1955 56	Fully retired	Saltburn club
P.2	M	1948 63	Semi-retired Voluntary worker	Saltburn club
P.3	F	Aged 50+ 55	Fully retired P/T time voluntary worker	Saltburn club
P.4	F	1929 82	Fully retired	Saltburn club
P.5	M	1963 48	Fully retired P/T voluntary worker Carer	Saltburn club
P.6	F	1946 65	Fully retired P/T voluntary worker Carer	Saltburn club
P.7	F	1946 65	Fully retired	Saltburn club
P.8	М	Aged 50+ 55	Works F/T P/T voluntary worker	Saltburn club
P.9	М	1934 75	Fully retired	Destinations course
P.10	F	1938 73	Fully retired	Destinations course
P.11	F	1963 48	Works F/T	Destinations course

Over half of the study's participants cited some qualifications although no-one had tertiary level qualifications and four participants reported no qualifications. A majority of the participants were owner occupiers and were married. Details of the participants' qualifications, housing and marital status are given in Table 2.

Qualifications         2           O/A Levels         2           CSE/GCSE         1         1           City and Guilds         1         1           None         4         4           Housing	cipants
O/A Levels         2           CSE/GCSE         1         1           City and Guilds         1         1           None         4         4           Housing	
CSE/GCSE         1         1           City and Guilds         1         1           None         4           Housing	
City and Guilds 1 1 None 4 Housing	
None 4 Housing	
Housing	
House owner occupier 4 3	
Rented house/flat 3	
Flat owner 1	
Marital status	
Married 5 3	
Divorced 1	
Separated 1	
Vidowed 1	

#### 2.2. Data collection

#### 2.2.1. Interviews

Interviews were selected as an appropriate research method in order to capture data of complexity and detail. Use of the interview method allows the researcher:

"...to collect more complex information, where necessary, qualifying answers and generally obtaining results with a greater 'depth'". (Moore 1983, p.27)

Data were collected using semi-structured interviews. In a semi-structured interview the researcher is able to interact with the interviewee in order to explore the issue being investigated. Moore (1983, p.26) states:

"Semi-structured interviews provide much more scope for the discussion and recording of respondents' opinions and views".

The interviews were based on a core number of pre-planned open ended questions, which aimed to keep the interview on track by addressing the main themes. The issues covered by the interview questions included:

- Attitudes to ICTs
- Learning experiences
- Motivations and barriers to engage in learning about ICT
- The Saltburn Club
- Motivation to attend
- The environment
- What it offers

All interviews were conducted at the beginning of June 2011 at Destinations in Saltburn. A total of eleven interviews were conducted. Six individual interviews and one paired interview were conducted with the Club participants. One paired interview and one individual interview were conducted with the users of Destinations. The interviews lasted between thirty minutes and one hour. All interviews were recorded and transcribed verbatim. All of the interview transcripts were read by the researcher and analysed using the constant comparative method (Miles & Huberman 1994). Categories emerged from the data and were placed into an analysis grid and causal links were identified.

#### 2.2.2. Ethical issues

Prior to the interview taking place each participant was informed about the Sus-IT project. Participant information sheets along with leaflets detailing the Sus-IT project were distributed. The intent of the interviews was explained and all the necessary assurances were given about confidentiality. Participants were assured that there was no pressure to answer questions quickly and reassurances were given that there were no right or wrong answers to questions as Hazel notes, it is:

"...important to relieve pressure from participants by reassuring them that there are no correct or incorrect responses to any issues which may arise. Fear of false perceptions may be more likely in an educational setting where tests are a familiar occurrence". (Hazel, 1995)

Participants were informed that they were free to leave the interview at any point without the need for explanation. Consent to participate in the research was sought from each of the participants. For reasons of anonymity details of individuals are not given in this report. Each participant was assigned a code. The relevant code is used to refer to individuals in the report.

#### 3. Findings

The findings are presented in four sections. The first section gives a brief overview of Destinations and the community it serves. This is followed by a section which describes the factors that motivate older people to learn about and engage with ICTs. The third section addresses the factors which are perceived by this sample of older people to be barriers to learning and engagement with ICT and the final section looks at why and how the Saltburn Club engages and motivates older people to learn about and interact with ICTs. The second and third sections report findings from all participants i.e. those who attend Destinations and also those who attend the club. The final section reports only findings from members of the club.

#### 3.1. Destinations: the learning centre and the community it serves

Saltburn is located is situated in the midst of two diverse areas – East Cleveland and Redcar and Middlesbrough. East Cleveland lies to the south east of Saltburn and was described by member of staff S.1 as "very rural area with quite isolated, small villages often with very tight-knit communities" whereas the more industrialised, urban areas of Redcar and Middlesbrough lie to the West of Saltburn.

The café and learning centre are located on the ground floor of a two storey building. The Internet café is popular with the local community and visitors to the area. There are three computers available for use. Behind the café and visible from it is the IT learning centre. People can drop in with laptops and use the wireless connection. Destinations also provides outreach services to the local community. An example of this was given by staff member S.2 who described regular visits she made to a local nursing home to help a resident who had been ICT literate but after suffering a stroke needed to relearn how to use her laptop. Currently the upper floor of Destinations is being refurbished to provide office space. A group has been set up with the intention of running as a community not for profit group with the aim of offering new businesses office space to give them the opportunity to start enterprises which they can concentrate on developing. It was hoped that this project would be completed by the end of 2011.

Member of staff S.1 described Destinations as a learning centre. When it was first opened it was called a training centre but S.1 described why it was now known as a learning centre:

"When we first came up here we called it a training centre that was just because of the world we lived in then. We kind of think of it more now as a learning centre because training often means that you're going towards a qualification, an accredited something or other whereas what we prefer to do here is simply let people learn what they want to learn like the stuff that Steve does for example may or may not be part of a qualification but it's something that people want to learn. The things that P.9 and P.10 are learning don't lead to a qualification but it teaches them, it lets them learn aspects of IT that are important to them. So it's more of a learning centre than a training centre, or a qualification-driven centre". (S.1)

The demographics of the area served by Destinations was described by member of staff S.1 as "mostly thirty five plus". He stated that the percentage of over fifty year old users was "probably as high as 60%". The centre tended to facilitate learning for:

"...people who are perhaps in employment looking to move upwards, you'll have people who have been in employment and need to retrain. You'll have older people who just don't want to miss out on what's going on. The one area that we don't have many of here is late teens/early twenties". (S.1)

It was the impression of S.1 that people who used the centre came from as far afield as a ten mile radius. However he did add that one problem encountered by users, particularly older users was the poor transport infrastructure of the area.

Destinations served "anybody and everybody" in the words of staff member S.2. She described the oldest member of the public using Destinations at the time of the study as a ninety five year old:

"My oldest here at Destinations was ninety five. He came in, it was a gentleman who wanted to learn how to send emails, he wasn't bothered about anything else...one of his great-grandsons had gone away in the navy and he wanted to communicate with him. The gentleman in question was profoundly deaf so he couldn't communicate via telephone so he thought the only way to do it was to learn how to use emails. So he did and he got a wealth of enjoyment out of doing it".

The findings now look at the different ways participants reported becoming engaged with ICT.

# 3.2. Beginnings

Participants described how they first became involved in using ICTs. For some their introduction was for practical reasons such as gaining more employability skills as in the case of participant P.7:

"I had done a little bit of work on computers on schemes I'd been on. I had been unemployed". (P.7)

Some participants were encouraged to do so by their families:

"At the time my son-in-law had started building them and he actually made us our first computer, we went down to the computer fairs and bought all the bits and pieces for it and he built it". (P.8)

"It's a long story. I bought a laptop off a friend. It was brand new. It was our first computer. It had been behind the sofa since we moved here and that was four years ago I forgot all about it... Well my nephew came up from Creswell for the weekend and he said did you ever get that computer going and I said no so he said fetch it out and that is what started me". (P.9)

Family encouragement to use computers was also witnessed by staff at Destinations Staff member S.2 said that some people were persuaded to attend sessions at the centre by their families:

"This is how it all starts families will say to mothers or grandmothers, to fathers or grandfathers or to aunts or uncles 'you need to be on the internet, you need to have a computer'...I enrolled a new gentleman yesterday and he will be eighty two in the next few months he's coming because family of his said 'dad you need to be on the computer'".(S.2)

In the case of participant P.6 the opportunity to acquire a computer was made available through her husband's employer. She described how she viewed computers at that time "Computers to me were something very, very frightening". Nevertheless as she began to use the computer she found that she was curious and her curiosity overcame her fear.

In considering why people engaged with ICTs it was found that there were a range of motivational factors associated with learning about and sustaining engagement with ICTs.

# 3.3. Motivation to learn and sustain engagement with ICT

# 3.3.1. A need to understand and learn

A number of participants referred to a desire to learn as in the case of P.11 who had been waiting to sign up to a UPCD course on spreadsheets. Throughout the interview this participant frequently mentioned her fear of technology:

"It worries me because the amount of people I know who have used computers and who get really frustrated with them. The amount of people I know who have done things and lose their work on it. This is why it never drew me to doing it". (P.11)

Nevertheless she was motivated to learn because she realised that technology was here to stay and she was going to have to keep up with the times:

"But I know in this day and age it is something that I am going to have to overcome and learn how to do". (P.11)

She realised that learning about spreadsheets would help to make her job as a bookkeeper easier:

"They are waiting to hear if the university will run it but saying that they said even if the course doesn't run they can still show me how to do it. I'm not that bothered about getting a certificate I just want to know how to do it". (P.11)

In the case of participant P.1 she had already learnt about spreadsheets and although she used them she wanted to understand them in more depth:

"Well I had started to use spreadsheets and things but I didn't understand how the spreadsheet was made". (P.1)

Participant P.5 was a voluntary worker who was involved with a number of charities and in that role he wanted to create a website to promote his charity work:

"The main thing was I wanted to do it for charity but it has got my interests on. With Steve's help I've put it together...I've known Steve for a couple of years now and I can't actually remember being pointed in his direction but I wanted to do a website". (P.5)

Initially participant P.10 had accompanied her husband to Destinations and had been persuaded by him to enrol on the MyGuide course "...he decided that I should learn too so I think I started round about January". She soon found however that she enjoyed the course. It had made her aware of how much there was to learn and she was keen to do so:

"Well I don't think I have learnt enough yet I've still got a lot to learn that's why I keep coming". (P.10)

#### 3.3.2. Looking for a new interest

Participants talked about reaching a point in their lives where for one reason or another they were ready to take on a new interest. In some cases this new interest was in ICT itself, for others the new interest might be in a new type of ICT, or in use of ICT to pursue an existing interest such as photography or local history.

Participant P.1 had to finish work through ill health but even though she was unable to work she still wanted to remain busy and have some structure to her week so she developed an interest in computing and embarked upon the first of many ICT courses:

"I did three courses and then I moved over to Redcar College about nine years ago. I had been doing the courses for about six years by then" (P.1)

At the time when participant P.7 became interested in learning about digital photography she had taken a number of courses related to ICT but here she describes how even after a number of years of learning it was still possible, given the right context, to be motivated to carry on learning:

"Well I didn't have a camera so I asked Steve to advise me and he advised me to get this one and it has been very good. I have an interest in it now you see. I just went mad with the camera and I thought right this is something I will be interested in ... Well I have got to learn better but yes it has given me an interest I must admit. I've got myself an interest in photography which I will keep" .(P.7)

### 3.3.3. Keeping up with the times

It was evident from comments made by participants that they were aware of life being lived in a different way in this age of technology and feeling the need to keep up with the changes that were taking place:

"You hear of people looking at things on the Internet, buying things and booking things and knowing more and more that is the way things are going". (P.11)

Staff member S.2 had also noticed that increasingly people were attending the centre because they were aware that technology was changing the way life was being lived:

"They find even more now that it says 'go to www.' or 'pay your gas bill online' or 'do this online". (S.2)

Having to finish work due to ill health participant P.1 derived a sense of satisfaction from the feeling that she was keeping up with the changes through completing a computer skills course:

"It was the satisfaction, having had to finish work through ill health and then being able to do It [complete a computer skills course] and not being out of touch with things". (P.1)

At a later point in the interview she talked about her Facebook account and when asked what had motivated her to get one replied:

"I don't know...young people have all these tools and as you get older you get a little bit left behind" (P.1)

Participant P.2 summed the situation up thus:

"You have got to move on with it and keep up". (P.2)

In the same vein keeping up with younger members of the family and a desire to help them had been a motivating factor for some participants. Reflecting back to the time when she first started to learn about computers participant P.1 said:

"I had a four year old daughter and I didn't really want her to be too far ahead of me so I thought the thing to do would be to do a basic course which I did". (P.1)

A similar motivation was apparent in the comment made by participant P.5:

"I have a young daughter so we had used it [Internet] for homework you know on Google and that. I mean she knows more about computers than I do but I had looked at Google looking for information but then Steve put me on a track where I knew what to do, how to use it". (P.5)

Interestingly staff member S.1 also noted how users of Destinations were aware of changes in the way everyday life was being lived:

"They've become aware that they can do all of those things online, the council are forever saying 'oh, if you just go online it will tell you'. Over April/May when there were a lot of bank holidays, nobody had a clue when the bins were collected, for example. All the information was online so these guys were ringing up the council saying 'when is the bin being collected? What's online? I'm not online". (S.1)

# 3.3.4. Remaining active: wanting to 'do things'

Throughout the interviews participants frequently talked about wanting to "do things". In the following quote participant P.10 emphasises the importance she attached to having an active brain:

"They say you have to keep busy and keep your brain active. I know I read a lot and I do a lot of word searches and I have got him [husband] sorted out he's started doing them. I said we've got to keep us brain active". (P.10)

Remaining active was important to people. Three of the participants were still employed and five of them undertook voluntary work. One of the participants P.2 was very active in the community undertaking a number of voluntary roles. He frequently referred to "doing things" as exemplified in this quote:

"I became a member of the community group and since then we have done various things. We held the first Internet quiz ...and we have just gone on doing things". (P.2)

This desire to "do things" was a motivator for some participants. Participant P.1 talked about the need to "have a structure to my week". Similarly participant P.10 described how visiting Destinations fitted into her week:

"Coming here [Destinations] gives us something to do. We also go to the gym every Friday morning. We have a full week because on a Tuesday we go and visit our son and I mean Monday that's when I clean the bungalow, Wednesday is our shopping day, Thursday we come here". (P.10)

When asked what motivated her to keep attending the club sessions participant P.7 said she appreciated getting out of the house and enjoyed "coming [to Steve's sessions] and doing things".

# 3.3.5. Being with others

In addition to "doing things" participants also cited being with others, social interaction was a motivating factor in attending courses at Destinations whether it was for a club session or a course run by the centre.

"It's a break as well and it gets us out and you meet other people". (P.9)

"Yes I like it, I really enjoy it. I come down here and have a cuppa and a sarnie, give Steve a bit of hassle, I tell him I'm there and then everyone else comes in for a cuppa as well because we all come in for a cuppa before we actually go in...Yes I enjoy it, it's a good laugh". (P.5)

It was recognised by the staff of Destinations that social interaction was an important factor in motivating people to attend courses:

"With older people yes there is a social element of it. The courses that we run here, not so much the accredited courses, you will have the same people quite deliberately coming at the same time to become friends. You'll have more of that than you would with the accredited learning which is often more individualised, so you'll have the individuals coming for that". (S.2)

Participants were sometimes drawn to the centre because they knew someone associated with it or someone who had attended it:

"No...well I knew a couple of people but you just get to know each other and we have a bit of a laugh". (P.5)

Nevertheless it was not always the case that people knew others attending the courses. When asked if she knew people attending the session participant P.1 replied:

"I didn't know them personally [when I started] whereas now I go and do a luncheon club at Mind with 'S' who is one of the other ladies who was with me when we were doing the video and I suppose we have become friends even though I don't know her telephone number I just know her email address and I'll send an email to her saying what do you think of this? So yes I think it is very good". (P.1)

This was not an isolated experience for this participant. At a previous course she had attended at Destinations participant P.1 had encountered an equally positive experience:

"Well it was nice that there was some social interaction as well. Once the school stopped and we came to this building we would perhaps go for a cup of tea in the middle of the session and we would say oh I'm coming in such and such a day will you be here? And we had each other's phone numbers and if you had a problem you might phone somebody up or they might phone you and say well I'm stuck here, I don't understand what the book says. The social interaction was important as well." (P.1)

# 3.3.6. Community aspect: helping others

One notable aspect which emerged from the interviews conducted was the importance attached by a number of the participants to community values. Five of the participants did voluntary work in the community and references to the local community were made throughout the interviews:

"Well my name is P.5 and I am a full time carer for my wife and I do a wide variety of voluntary work, of charity work. I work in a youth club as a volunteer; I am a paramedic as a volunteer and I am also a water safety advisor as a volunteer. I also used to be a volunteer coast guard which I am not anymore but I do a wide variety of stuff". (P.5)

"I'm a member of our local Marske Fisherman's Choir who go around and help people and charity". (P.8)

"I live in Marske and I also volunteer and run a small museum there". (P.3)

It is not surprising therefore that a motivating factor for engagement and learning about ICTs was helping others in the community:

"Well if it helps my community – that is what I am a councillor for– you have got to move on and learn about it [referring to using a Blackberry]". (P.2)

Using technology to help with her volunteer work in the community motivated participant P.6 to learn new skills:

"I work on a community magazine and it was good because I learnt how to upload the Town Crier magazine that I help to edit for our little Loftus community". (P.6)

Participant P.3 had originally been motivated to learn about creating websites as a result of her voluntary work in a local museum:

"At the time we wanted to set up a website for Winkies Castle ... Steve came in one afternoon to show us what to do. He helped us to set up the new website with the email address". (P3)

Having learnt how to create a website participant P.3 then used her skills to help other members of the community:

"I helped a friend set up his MND website and I am hopefully going to be setting up one for the graveyard. That is something I have just got involved with. There are not that many people who do things in Marske. We have got a very old graveyard in the village and we are just starting a Friends of St Germaine's we call it so we are just setting up a committee to get it tidied up because it is what they call a closed cemetery – no one can be buried in there and it is just going to ruin. So they just said can you help with the website"? (P.3)

# 3.3.7. Continuing an existing interest

One motivating factor for engaging with and learning about ICT was in order to continue an existing interest. This was alluded to in some of the interviews. Participant P.6 had talked about her interest in doing craftwork. She describes using her new computer for the first time:

"We got it home there was one or two free programmes with it and one of them was a card making programme and I really got into making cards on the computer and so from there it got so that I just found my way round". (P.6)

Similarly Participant P.8 describes how his interest in digital photography was a continuation of his long held interest in cinematography:

"I've always done a lot of cinematography right from being young, sixteen or seventeen year old...but now of course you've got modern digital cameras, video cameras, computers to enhance things and I'm quite interested in it". (P.8)

Member of staff S.1 recalled an occasion when a user of the centre was driven to seek help in using technology to prolong the life of his musical collection:

"Somebody came in, knew very little about computers but knew just enough to know that he could place his aging and well-knackered record collection on to CD's. So I showed him how to do that, showed him Amazon and all those other bits and pieces. So that's great, he went away really happy. He came back and said 'I found all these records that I used to play". (S.1)

#### 3.3.8. Communication

Interestingly communication as a driver for engaging with ICT was not mentioned directly by the participants interviewed although they did refer to using technology to communicate. It was however mentioned by staff member S.2 in particular the use of Skype:

"And Skype is the other; they all want to do Skype because family have moved away, they're on the other side of the world, people have said 'oh I'll email or go on Skype and we can meet'...I had one lady that came in and her daughter actually lives in Vietnam, lives and works out in Vietnam, and she said to me 'I need to go on Skype' and I said 'that's fine, we'll show you Skype, not a problem. So I get Skype up and she said 'I need it on my computer', I said 'is your computer a laptop?' 'Yes' 'right well bring it in' and we downloaded it and she said 'right, I've sent her an email, we've arranged times for Sunday'. And she came in the following week and she was beaming, absolutely beaming, she said 'that's the first time I've seen my daughter in two years, and I spoke to her'!" (S.2)

# 3.4. Barriers to learning and engaging with ICT

As the participants talked about their experiences of ICT it became evident that a number of factors were perceived as barriers to learning about and sustaining engagement with ICTs.

#### 3.4.1. Pressure

Reference was made by a number of participants to the pressure they had experienced on courses they had taken in the past. The pressure to which they referred was associated with the requirement to take an examination or complete assignments. Participant P.7 had taken the university course in IT because she was unemployed and wanted to equip herself with more skills in order to find employment. She had enjoyed the course and felt she benefitted from it but at that time she was caring for her elderly mother and felt strongly that the pressure of an exam was too much too cope with:

"I didn't want any pressure but at the end of the university course you do an exam". (P.7)

Although she finished the course participant P.7 decided not sign up for any further courses at that time and did not resume her learning until sometime later after her mother had died.

In the same way that participant 7 had pressures in her life which impinged on her learning so did participant P.1. Due to ill health participant P.1 took early retirement. In this quote she describes the pressure she felt when given a deadline to complete an assignment as part of a course:

"I had been ill. I've got to be careful because I can't afford to be under pressure and the deadline was putting me under pressure. Although they weren't too keen I said I cannot do the assignment now. I am going to have to do the full booklet and review it next term and do the assignment then because it was putting me under too much pressure because the subjects were of more depth. They were becoming more stressful". (P.1)

When asked if it would have made a difference if she had not been given a deadline She replied: "Oh yes because then you would have sufficient time to assimilate it". (P.1)

#### 3.4.2. Level of support

When undertaking a course a very important factor in determining how people felt about it was the level of support available. Frequently participants referred to the dearth of support: "Oh she was there to help you but she did have thirty odd people". (P.1)

"I just found that everybody when I did it everybody that was on the course was struggling and everybody was wanting so much attention there wasn't time to give people the attention that they needed". (P.6)

Staff member S.2 recognised the importance of providing support for users of Destinations:

They will come in when the university tutors are in, who will give them the support, but they will also come in when they are not in because they know they will get the support...and it sometimes it just needs an outsider to look at something and say 'that's where you're going wrong, you need to look at this or click on that'. But yes, they know that support is there and it will always be there, that's very important for them to know". (S.2)

Participants talked about being enrolled on a course where people had attained different levels of competency. The expectation was that tutors should provide differentiated levels of teaching but this did not always appear to be the case:

"It is a bit difficult especially when you are in an open room like downstairs when you have got people at different stages it is difficult with only one teacher". (P.3)

One participant described how she felt "left behind" because everyone else on the course seemed to be coping:

"Yes but you know the way they go people who know what they are doing they just come along and go bang, bang, bang and I will say what did you do? They did it too quickly. It was not explained and I just got left behind". (P.11)

Understanding the audience and delivering tuition appropriate for that audience was considered vital in engaging people. The competency of the tutors in doing this was called into question by participant P.6:

"Yes at some of these courses you come in and there's different tutors and you find one tutor is more qualified to do the session than others, some of them admit this. These are tutors from the university and I think they don't understand how people that's not been to university don't understand what they are doing". (P.6)

Even if tutors were considered to be 'good' the poor tutor/student ratio was cited as a real problem and indeed a problem that participant P.4 had perceived to have worsened over the years:

"Yes but then others were very good but then there were so many students that you could maybe wait half an hour or more to get the attention of the tutor and I gather now it is even worse because the tutors are not in very much and they are just sort of left to do it yourself and that is difficult when you don't know anything". (P.4)

# 3.4.3. **Memory**

Memory was reported to be a barrier in engaging with and learning about ICTs. It was a recurrent theme in the interviews. When asked if he knew how to text participant P.9 replied in a resigned tone:

"I think I might have but I've forgotten it, it's old age". (P.9)

References were made to 'not remembering it at our age'; 'I might need reminding'. As a result of her ill health participant P.1 suffered memory problems:

"The only thing was with not being well I have a very short term memory" (P.1)

She explained the frustrations encountered whilst trying to apply the skills she had learnt:

"I have a Christmas label list. I might have twenty children in my Rainbow group and at Christmas I'm lazy and I do sticky labels so I can use them and I can apply them. I have learnt them but I can't apply them to the depth I should be able to, of what I was taught. I just don't remember". (P.1)

Some participants recognised the problems they faced regarding memory and had developed strategies for coping with the problem. Writing information down in order to refer back to it was one strategy:

"It [memory] goes when you get to our age, it doesn't stay in but if you have got it written down then it comes back to you because you have got the written word to refer back to". (P.3)

"I always have my notepad and whatever he tells me I'll do from where we start and just keep going and if there is any branches off I'll do all that". (P.5)

Another strategy was to repeat learning as in the case of participant P.9 who explained that he had finished the MyGuide course but was embarking on certain aspects of it again:

"I'm taking bits again because I think you try to take too much in all at once when you first start it". (P.9)

Associated with memory problems was the issue of using technology infrequently. Participant P.11 explained problems she encountered when she had recently tried to take some photographs using a digital camera:

"We bought a digital camera and I have been shown how to use it but I don't do it very often and I just didn't know where to start and I still find with them that I go to put it to my eye and they annoy me because you take a picture and it doesn't take the picture when you press the button there is a delay". (P.11)

Recalling how she had tried to put into practice the skills she had acquired as a result of completing a course on spreadsheets participant P.1 described how she found it difficult to remember what to do after a period of time had elapsed:

"Well yes I was going to use the skills but when it came to writing my own spreadsheet eventually I couldn't get all the formulas and all that but when I was doing the course I could I was achieving all that. It was just that after a period of time I couldn't remember. I thought oh I'll put my Rainbow Unit on a spreadsheet — well it is on a spreadsheet but the macros don't work very well. I was full of it — I thought I am going to do this, I am going to do that but when I came to do it I just got to bog standard I couldn't remember the details". (P.1)

Later in the interview participant P.1 made the point that an important factor in remembering how to do something was the level of relevance it had in life:

"It has got to have relevance to what you are doing. It is a shame even with the webpage I did I wouldn't even know now what to do now because I never need to do it but when I was doing them I did them and I enjoyed doing them and I understood them". (P.1)

#### 3.4.4. Fear

Fear was an emotion that most of the participants had encountered at some point. Several participants referred to feeling fear when engaging with computers for the first time. The following quote from participant P.6 encapsulates what they reported feeling:

"I knew nothing. I'd never had anything to do with a computer. Computers to me were something very, very frightening". (P.6)

When asked to explain why she had felt frightened she replied:

"I don't know, just the same as everyone else that you are going to lose everything and it is going to go wrong". (P.6)

Staff member S.2 reported that individuals who had never used a computer before were often very scared and frightened. One of their worries was that they were going to break it:

"They'll say 'well I didn't dare turn it off in case I broke it'... they will come in and say 'well, if I don't turn it off properly, is it going to break? What if I move something? Or what if I click into something? If I have all of these different things open, will it stop working?' and I say 'No, you're not going to break it, the only way you're going to break this machine is if you fling it against the wall". (S.2)

Another fear was not understanding the language used. Participant P.4 explained:

"I mean it is worrying I came to computing and it is like a foreign language, it can be very difficult". (P.4)

Participant P.11 agreed that language was a problem:

"What bothers me sometimes is the language and I don't know what it means. It throws me because it is a different language – computer-speak is a different language. It does worry me" (P.11)

In addition to worries about language she was also troubled by messages that she didn't understand appearing on the screen:

"When I am really thrown is when you turn the computer on and a square comes up in the middle of your screen and you have got to do whatever it says like yes, no or cancel it or sometimes it is saying you need to update things. Now they bother me". (P.11)

When discussing the fears people had staff member S.2 reported that one of the biggest fears they referred to was viruses:

"They'll say 'I've got a virus, how do I get rid of it?' and I'll say 'how do you know it's a virus?' they'll say 'well, my anti-virus said so' and I'll say 'are you sure? What does it look like?'. And again, it's trying to get them to explain what they think this virus looks like and again, it's trying to say 'right, this is what you need to do' so we will show them how to do a scan". (S.2)

This was borne out by participants who were interviewed. Participant P.11 stated:

"Apart from the fact I'm worried about downloading a virus because people send out viruses and unless you know what to look for as to whether it is likely to be a virus...it is worrying... I think viruses and things can get in easy through Skype". (P.11)

Even when she had become relatively confident in her use of her laptop and accessing the Internet participant P.4 was still fearful of some issues one being online banking:

"No I don't use online banking I'm frightened that I would hit the wrong keys. I am frightened that if I do something wrong it will all goes pear shaped you know and you can't get it back again". (P.4)

When asked if she thought training would help her overcome this fear she was resolute that it would not.

Staff member S.2 had also come across people's fear of online banking:

"And that's what you come across with a lot of people, the older generation want their paper money and they want their cheques to pay their bills with, they don't want to have to go online to pay something, they're still very cautious about putting details in they say things like 'What if somebody else gets my name?', 'what if somebody else gets my bank account?'...". (S.2)

In her experience however she thought that people could be reassured if their questions were listened to and answered:

"It's trying to get this over, that yes, it's good and it is safe and I can show you some of the things that are there to make it safe and I can show you some of the things that we need to do to make it safe. they need to know that that little box in front of them, when we put the information in, that there's going to be a bigger box with a great big padlock on it that's going to keep all their information safe". (S.2)

One fear that was mentioned by staff member S.2 but was not referred to by any of the participants interviewed was the fear of identity theft. She described problems she had encountered with a gentleman she was registering as a user of MyGuide:

"When I register people with 'My Guide', it used to be that we had to give addresses, full name and address, and this would be kept confidentially. Now we just have to give postcode, so they'll give their name and then a postcode so that UK Online know the area where these people are coming from, and coming to, when they come to us. And he said 'no, I can't give you that' and I said 'well, it's not going to be used for anything else, I promise you' and he said 'they might use my name and clone me'. And he had this thing about being cloned". (S.2)

Participant P.1 who had described her initial fear about engaging with computers was now a volunteer tutor and witnessed fear in the students attending her sessions. She summed up her thoughts as to why this fear was prevalent amongst them:

"They are all in their sixties and seventies and they are very, very frightened. They don't suss it out very well...I think they are just frightened of computers, that they

are going to blow up or something or they are going to lose all their programmes and damage it. When I was at school there were no computers and they are in the same position. They didn't grow up with them that's the top and bottom of it". (P.6)

# 3.4.5. Established practice

During interviews with participants who attended Destinations and were taking the MyGuide course (but did not attend the club) one factor which was referred to as a barrier to engaging with ICTs was adherence to established practice. Habits had developed and participants did not see why they should be abandoned in favour of new practices as in the case of participant P.10 who was in the habit of using her landline phone to speak with her children who lived in another part of the country:

We don't need to use anything like Skype. We ring them up twice a week and we are happy with that". (P.10)

Although P.10 had started a MyGuide course at Destinations where she used a PC she did not see any point in following her husband's suggestion to work on his laptop. She was used to the PC and was content not to change:

"Well I don't use the laptop... I'm just satisfied as I am". (P.10)

Participant P.11 did have a mobile phone but made the point that she preferred to use her landline phone

"Yes I have a mobile phone I carry it... I know how to make calls and I know how to receive them. I can text but I don't do it very often. I don't use my mobile phone very often I prefer to use a landline". (P.11)

Participant P.10 also admitted that she had a mobile phone but she stressed that it was only used for emergencies:

"Mine is used for emergencies. If I go out I tell him [husband] when I am on my way back so he knows to expect me otherwise we don't use them". (P.10)

Even when people had attempted to move away from an established practice they sometimes found it a struggle and reverted to their original practice:

"A couple of years ago they sent word that I could pay my road tax over the phone so I tried to do it and each time I gave them my card number they said I can't accept it and I said why and they said you'll have to go and see your bank. They said have you another card and I said yes and I tried it on that one and it was the same thing...Well it is only a mile and a half into Redcar from where we live. So I went to the Post Office and get it and that will do me". (P.9)

# 4. Saltburn Club: a profile of its members

The Destinations website describes the Community Media Club ie the Saltburn Club as a place where:

"You will learn tools and techniques to improve your computer using experience...It is mostly about fun and being sociable and creative". (Destinations 2011)

This final section of the findings addresses why and how the Saltburn Club engaged and motivated older people to learn about and interact with ICTs, often in novel and exploratory activities – often for the intrinsic pleasure and satisfaction and outwith a proscribed syllabus or set of learning objectives.

Eight members of the club were interviewed, three men and five women. They were aged between forty seven years and eighty two years. Six were fully retired, one was semi-retired and one worked full time. Five of the participants were volunteer workers and two were carers (see Tables 1 and 2). Some of the attributes demonstrated by the participants are now discussed.

#### 4.1. Determination

Determination to achieve a goal was evident in many of the interviews. Participant P.6 enjoyed "messing around" on her computer and was not prepared to be defeated if she faced a difficulty:

"No it is more a case of getting annoyed if I can't suss it out, I have to do it, I just have to do it". (P.6)

Participant P.1 described a course that she undertook when first learning computer skills as not suited to her way of learning however she did not want to give up and therefore was prepared to start another course at a different location to achieve her goal:

"I couldn't do the business plans and everything you had to know for the exam so I dropped that and somebody said oh why don't you go to the school and do the university one...I wanted to understand it so I did". (P.1)

Participant P.1 described facing a number of problems she encountered along the way to gaining the sixty credits she needed to complete the course but she was determined to finish the course:

"[What drove you to keep going and get your sixty credits?] I don't know I suppose it was something I'd started and I was going to finish". (P.1)

Participant P.8 displayed a very positive outlook on life stating that he did not "have problems, only solutions". This was evident as he described his determination to address a problem he encountered whilst editing a video:

"All the frames were saying 'loading preview, please wait' but it never loaded the preview. So I went on to the forum which NCH have, I put my problem into the forum I got an email back a couple of days later saying that someone else had still

got the same problem. In the meantime I carried on trying and I managed to sort it out. (P.8)

# 4.2. Ready for a challenge: Having a go

Common to a number of club members was their willingness to be challenged:

"I love it, I love it. I don't know I just love the computer and well I think it is a challenge isn't it finding out what you can do and what you can't do on it". (P.6)

When asked if she knew what she would be doing when she came to a session participant P.1 when she replied showed that she was not deterred buy a challenge "Well I didn't really know what was to be involved". Being keen to try new things ran throughout her interview as exemplified in the following quote where she explained why she filmed some surfers from the local pier:

"I know my hands shake so I tied the flip cam to the balustrades down by the beach and just gradually changed the direction of the camera and one of my ambitions at the moment is to go surfing seemingly there is a really good basin. I've even been learning to swim. I could swim but my daughter gave me ten lessons for my birthday because she knew I wanted to go surfing and I can't go surfing until I am a little bit better with water and then I had another ten and I said to her do you think I should have another ten? She said once you get yourself practising then if you feel you want some more lessons then have some more. So because one day I will go surfing that is one of the bits that I did film from the pier". (P.1)

The readiness to be challenged and to try something new was evident in several interviews. Participant P.7 was typical of a number of participants in her willingness to "have a go".

"Yes but we didn't know what he was going to do. We didn't know what he was going to teach. We weren't sure what to expect...but we were prepared to have a go". (P.7)

Participant P.2 was ready to have a go at trying different things:

"I try to [do different things]. I have a go". (P.2)

Participant P.8 described when he first experienced working in Second Life. Steve knew that he had some experience of cinematography and was keen to involve him in a Second Life project. Although P.8 had no previous experience of working in Second Life he was ready to have a go:

"When he decided to do the second life film 'Tommy and Barry go back to the future' they were short of computer operators basically and he kept saying 'is P.8 free?', 'is P.8 free?' to P.3 and I was. I ended up coming through with P.3 and at one stage I had two computers with three browser windows open and I was operating three animated characters at a time".

# 4.3. Curiosity

Curiosity was another attribute that participants displayed. When recalling how he had visited the local university with Steve and some other members of the club to see how a film was made in Second Life, participant P.5 admitted that he hadn't really been interested in the visit initially but curiosity got the better of him and he did not regret his decision to go:

"What it was I was nosy a few of us went and there was a buffet on and that were it...It was brilliant". (P.5)

Similarly participant P.6 admitted that it was curiosity that had driven her to set up a Facebook account and a Twitter account:

"Well you just go on Twitter and you say what you are doing and somebody else picks up on it...yes it was curiosity that made me do it and for Facebook". (P.6)

When asked what had motivated her to set up a blog site she replied

"Just the same thing again I am just curious". (P.6)

# 4.4. "Messing about"

"Messing about", "experimenting", "trial and error" and "playing with" were phrases that were used by a number of participants to explain their approach to learning:

"Trial and error that's it - I'd have a go. (P.1)

Participant P.6 discovered Skype by "messing about":

"I found out about Skype when it very first came out and nobody knew what I was talking about - that was just messing around you know, surfing the Internet and finding things out. So really I suppose I've learnt a lot that I wouldn't have known just by playing on the computer". (P.6)

Similarly she learnt about desktop publishing by 'playing' on the computer at home:

"I learnt how to do this [Desktop publishing] by playing", (P.6)

When asked what he did when things went wrong participant P.8 described how he had "played about" to solve a problem which he had encountered on one occasion:

"I thought what do I do now?... I just found my way around basically playing about. I experimented...no I wasn't frightened... this is all learning by play and experiencing it". (P.8)

#### 5. Conclusions

From the descriptions above of their attributes, it is clear that the participants demonstrated that as a group they were willing to try new things and were not afraid of "playing" and "messing about" with technology.

This small scale study, based on in-depth interviews with 11 older learners and two learning centre staff provides important insights and knowledge relating to the digital engagement of older adults. In particular, this study reveals some of the motivations and barriers to ICT learning and use.

Older adults report being motivated to engage with ICTs for varied reasons. These included seeking the intrinsic reward associated for example with pursuing a personal interest or hobby, cultivating a new interest and family influence to engage with ICT. The findings, especially the verbatim comments, show the older people in the study were particularly highly motivated when they wanted to learn new skills; had a sense of curiosity; were altruistic (e.g. to help others; to remain active and "do things"; to be socially active and to "keep up with the times". Older people also report being motivated to engage with ICT to address their fears, such as the fear of losing control of their lives if they were unable to interact with the government online; online banking and shopping; fear of getting left behind; and a fear of a divide growing between themselves and the younger generation (e.g. methods of communication, leisure pursuits).

The primary barriers experienced even by this 'adventurous' group of older people who sought challenge and novelty - to engaging with ICT are identified as *fear*, *impaired memory*, *pressure*, *force of habit* and *inadequate support*. Memory limitations emerge as a particularly significant issue – and a number of strategies which were found to ease the problem were identified by the research participants. For instance, the provision of hand-outs for later reference was reported to be very helpful, as was knowing that you could ask a friend or neighbour who also attended the centre, or email the tutor for assistance when difficulties arose. These mechanisms alleviated the worry of trying to remember everything all at once.

Concern to avoid the extra pressure associated with ICT classes was an issue for the participants who reported having busy and demanding lives. Several were in employment or did voluntary work as well as caring for elderly parents or partners or grandchildren after school and during the school holidays. In addition they themselves often had health problems which required attendance at medical appointments. The pressure exerted in some learning environments to undertake examinations or complete assignments was seen as unacceptable for many.

Older people had often established routines and reported finding it difficult to abandon the security of these established practices, for instance switching to using Skype to talk to members of the family who had moved away. This suggests that when older people fail to engage with technology it could simply be because they are unaware of it or they are unaware of the benefits it could bring to their life.

Participants reported times of "feeling lost" or "left behind" in class and in need of help which was not always available. While the tutor-student ratio is of course important, findings also suggest that peer support is very important. While the availability of support during the sessions is clearly important, the evidence suggests that equally important is the ability to access support outside the sessions.

Thus the critical success factors for successful engagement with ICTs indicated by this small study are the availability of a safe, secure, social forum where older people can set their own learning agenda, pursue their interests, enjoy exploration of new opportunities, learn at their own pace, without fear of stigma and embarrassment, and with easy access to technical help

and guidance, support and reassurance both in sessions and outside them. Finally the good practice reflected in the user-centred approach taken by the management of Destinations plays a significant part in making the centre a place where older adult learners can enjoy learning and thrive as successful ICT users.

#### References

Destinations 2011. <a href="http://www.destinations.uk.com/learning/community-media-club/">http://www.destinations.uk.com/learning/community-media-club/</a> [accessed 28.09.11].

Hazel, N., 1995. Elicitation techniques with young people. *Social Research Update* [online], **12**. <a href="http://www.soc.surrey.ac.uk/sru/SRU12.html">http://www.soc.surrey.ac.uk/sru/SRU12.html</a>, [accessed 31.08.10].

Miles, M. B. & A. Huberman, 1984. *Qualitative data analysis: A sourcebook of new methods*. London: Sage.

Moore, N., 1983. How to do research. London: The Library Association.

NDA, 2011. NDA Programme. Available at: < http://www.newdynamics.group.shef.ac.uk/sus-it.html> [accessed 28.09.11].

Thompson, Steve, 2011. *Savouring last of the summer wine* Available at: <a href="http://www.slideshare.net/stmedia/savouring-the-last-of-the-summer-wine">http://www.slideshare.net/stmedia/savouring-the-last-of-the-summer-wine</a> [accessed 28.09.11].

Thompson, Steve, 2011. *The Magic Password*. Available at: http://www.scribd.com/doc/113094528/The-Magic-Password [accessed 28.09.11].

#### **Acknowledgements**

The author and her colleagues in the Sus-IT team thank the staff and tutors at the Destinations Centre, Saltburn for making it possible to conduct the interviews with a sample of its members and course participants. Our thanks and warm appreciation are extended to the participants who kindly agreed to be interviewed for the study, gave generously of their time and provided important contributions to the research. Finally we pay tribute to the innovative and inspiring 'model' of ICT learning and support established by Steve Thompson and look forward to seeing it emulated more widely.

This study was conducted as part of the research of the Sus-IT: 'Sustaining IT use by older people to promote autonomy and independence' project, supported by a grant (Grant Number RES-353-25-0008) from the New Dynamics of Ageing Programme which is funded jointly by the five UK Research Councils – AHRC, BBSRC, EPSRC, ESRC and MRC. The project is led by Leela Damodaran and Wendy Olphert at Loughborough University, UK.