An exploration of the digital competences of literacy tutors and their use of digital technologies in adult literacy teaching

A Case Study

Deirdre Frances Aherne

Master of Arts in Digital Media Development in Education

University of Limerick

Supervisor: Aodhagán Ó Súird

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Declaration

I hereby declare that this project is entirely my own work, and that it has not been submitted for any other academic award, or part thereof, at this or any other educational establishment.

Signed: ____________________________________

Date: ____________________________________
Abstract

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The traditional definition of literacy was the ability to read and write, however, over time the meaning of literacy has evolved. It now includes being able to use everyday technologies to communicate and handle information, or “digital literacy”. In order to be able to support learners to become digitally literate, adult literacy tutors need to have digital skills themselves.

This research examined the digital competences of literacy tutors, full time, part time staff and unpaid volunteers, and their use of digital technologies in their teaching, in one literacy service in the west of Ireland.

The research used a case study methodology and gathered qualitative and quantitative data through a number of data collection methods including questionnaires, observations, interviews and document analysis.

The study found almost unanimous agreement about the importance of being digitally competent. The respondents expressed higher confidence levels in their traditional ICT skills, email and basic Internet searches than in using newer technologies such as tablets, social media and other Web 2.0 tools. They also expressed their lack of skills in evaluating online information, privacy online and security and copyright matters.

The use of digital technologies in teaching literacy was varied. Some tutors fully integrated the use of digital media and resources into the learning process, while other tutors did not use digital technologies at all. The tools that were predominantly used were literacy software, word processing and the Internet.

The study suggests that some tutors need support in order to update their own digital skills so they can integrate the use of digital technologies in their adult literacy tutoring professional practice.
Acknowledgements

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## Table of Contents

Chapter 1 – Introduction .......................................................................................................................... 1  
1.1 Background/Context to the Study ................................................................................................. 1  
1.2 Statement of the topic ................................................................................................................... 2  
1.3 Rationale for Research .................................................................................................................. 2  
1.4 Research Approach ....................................................................................................................... 3  
1.5 Delimitations ................................................................................................................................. 4  
1.6 Limitations .................................................................................................................................... 4  
1.7 Summary ....................................................................................................................................... 4  
1.8 Structure of Thesis ......................................................................................................................... 5  

Chapter 2 - Literature Review .............................................................................................................. 6  
2.1 Introduction .................................................................................................................................... 6  
2.2 The Changing Definition of Literacy ............................................................................................ 6  
   2.2.1 Historical Context ................................................................................................................... 6  
   2.2.2 International Adult Literacy Survey (IALS) .......................................................................... 7  
   2.2.3 Programme for the International Assessment of Adult Competencies (PIAAC) .................... 8  
   2.2.4 New Literacies ....................................................................................................................... 8  
   2.2.5 Digital Literacy ..................................................................................................................... 9  
   2.2.6 Digital Divide ....................................................................................................................... 10  
   2.2.7 Ireland and Internet Usage .................................................................................................. 11  
   2.2.8 Social and Economic Perspective ....................................................................................... 12  
   2.2.9 Social Practice Model ......................................................................................................... 13  
   2.2.10 Personal Benefits ............................................................................................................. 14  
   2.2.11 How to measure digital literacy? ....................................................................................... 14  
2.3 Review of Frameworks .................................................................................................................. 15  
   2.3.1 European Reference Framework – Key Competences for Lifelong Learning ......................... 15  
   2.3.2 Key Competences for Adult Learning Professionals .............................................................. 16  
   2.3.3 United Nations – ICT Competency Standards for Teachers (CST) ........................................ 17  
   2.3.4 DigEuLit Project .................................................................................................................. 18  
   2.3.5 Digital Strategy in Ireland .................................................................................................... 19  
2.4 Adult Literacy Learning and Teaching in the Era of New Literacies .......................................... 20  
   2.4.1 The Adult Learner ............................................................................................................. 20  
   2.4.2 Learning Styles ................................................................................................................... 20  


<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4.3 The Adult Literacy Tutor</td>
<td>21</td>
</tr>
<tr>
<td>2.4.4 Adult Literacy Tutors and Technology</td>
<td>22</td>
</tr>
<tr>
<td>2.4.5 Need for Change in Practice</td>
<td>23</td>
</tr>
<tr>
<td>2.4.6 Barriers</td>
<td>24</td>
</tr>
<tr>
<td>2.4.7 Best Practice</td>
<td>24</td>
</tr>
<tr>
<td>2.4.8 Organisational Strategy</td>
<td>25</td>
</tr>
<tr>
<td>2.4.9 Current and Emerging Technologies</td>
<td>26</td>
</tr>
<tr>
<td>2.5 Adult Literacy Provision in Ireland</td>
<td>27</td>
</tr>
<tr>
<td>2.5.1 VECs and ETBs</td>
<td>27</td>
</tr>
<tr>
<td>2.5.2 Adult Literacy Organiser’s Association (ALOA)</td>
<td>27</td>
</tr>
<tr>
<td>2.5.3 Organisational Perspective</td>
<td>28</td>
</tr>
<tr>
<td>2.5.4 Basic Education Solutions Programme</td>
<td>28</td>
</tr>
<tr>
<td>2.6 Teacher Education</td>
<td>29</td>
</tr>
<tr>
<td>2.7 Summary</td>
<td>29</td>
</tr>
<tr>
<td>Chapter 3 - Methodology</td>
<td>31</td>
</tr>
<tr>
<td>3.1 Introduction</td>
<td>31</td>
</tr>
<tr>
<td>3.2 Selection of Methodology and Design Frame</td>
<td>31</td>
</tr>
<tr>
<td>3.2.1 Quantitative v Qualitative Data</td>
<td>32</td>
</tr>
<tr>
<td>3.3 Ethics</td>
<td>33</td>
</tr>
<tr>
<td>3.4 Data Collection Methods</td>
<td>34</td>
</tr>
<tr>
<td>3.4.1 Experiments</td>
<td>34</td>
</tr>
<tr>
<td>3.4.2 Tests</td>
<td>34</td>
</tr>
<tr>
<td>3.4.3 Questionnaires</td>
<td>34</td>
</tr>
<tr>
<td>3.4.4 Documents</td>
<td>37</td>
</tr>
<tr>
<td>3.4.5 Observation</td>
<td>37</td>
</tr>
<tr>
<td>3.4.6 Interviews</td>
<td>38</td>
</tr>
<tr>
<td>3.5 Limitations</td>
<td>40</td>
</tr>
<tr>
<td>3.6 Bias</td>
<td>40</td>
</tr>
<tr>
<td>3.7 Reliability</td>
<td>41</td>
</tr>
<tr>
<td>3.8 Validity</td>
<td>41</td>
</tr>
<tr>
<td>3.9 Triangulation</td>
<td>42</td>
</tr>
<tr>
<td>3.10 Summary</td>
<td>42</td>
</tr>
<tr>
<td>Chapter 4 - Findings</td>
<td>43</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>43</td>
</tr>
<tr>
<td>4.2 Data Collection</td>
<td>43</td>
</tr>
</tbody>
</table>
5.4.2 Newer Technologies ................................................................. 66
5.4.3 Security and Privacy ............................................................... 67
5.4.4 Ethics and Legal Awareness .................................................... 67
5.4.5 Digital Literacy ....................................................................... 68
5.4.6 Teacher Professional Competences ......................................... 68

5.5 What are the views of BES literacy tutors on using digital technologies in teaching adult literacy? ......................................................... 69
5.5.1 The Importance of Using Digital Technologies in Teaching Literacy ................................................. 69
5.5.2 Independent Learning .............................................................. 69
5.5.3 Empowerment ........................................................................ 70

5.6 What is the current practice in BES regarding the use of digital technologies in teaching adult literacy? ......................................................... 70
5.6.1 Variation in Practice ................................................................. 70
5.6.2 Most Commonly Used Technologies ......................................... 70
5.6.3 Mobile Technologies and Web 2.0 Tools ................................. 71
5.6.4 Reasons for Non-use of Digital Media and Resources ............... 71
5.6.5 Access to Resources ............................................................... 72
5.6.6 Tutor Attitude ........................................................................ 72
5.6.7 Integrated Approach ............................................................... 72

5.7 Summary .................................................................................. 73

Chapter 6 – Conclusion ........................................................................ 75
6.1 Introduction .............................................................................. 75
6.2 Review of Investigation ............................................................. 75
6.3 Research Outcomes .................................................................. 75
6.3.1 Literacy Tutors – Digital Competences .................................. 75
6.3.2 Literacy Tutors – Use of Digital Technologies in Teaching ........ 76
6.4 Recommendations ................................................................... 76
6.4.1 Continuous Professional Development (CPD) ......................... 76
6.4.2 Areas for CPD ..................................................................... 77
6.4.3 CPD for Volunteers ............................................................... 77
6.4.4 The Future .......................................................................... 77
6.4.5 Policy .................................................................................. 78
6.4.6 Further Research ................................................................. 79

6.5 Summary .................................................................................. 79

Bibliography .................................................................................. 81
List of Appendices

Appendix A  Permission to Conduct Research
Appendix B  Covering Email to Participants
Appendix C  Questionnaire
Appendix D  Class Observations (A-F)
Appendix E  Interviews (G-K)
Appendix F  Document Analysis
Appendix G  Qualitative Data Themes
Glossary

AES  Adult Education Service
BES  Basic Education Service (Adult Literacy Service)
DES  Department of Education and Skills
Digital Competence  The ability to use ICT to retrieve, assess, produce, present and exchange information. The ability to communicate and participate in collaborative networks via the Internet. (EU High Level Group of Experts on Literacy)
Digital Technologies  In this research, the term is taken to mean the use of digital resources to find, use, create and communicate information. Digital resources include software applications, the Web including Web 2.0 tools and devices such as desktop pcs, tablets, mobile phones, digital cameras.
ETB  Education and Training Board. The 16 ETBs established in July 2013 replace the 33 existing VECs. Fas, the Irish National Training and Employment Authority will be dissolved and its training functions transferred to the ETBs, who will be responsible for programme delivery.
IALS  International Adult Literacy Survey
ICT  Information and Communications Technology
Literacy  Listening, speaking, reading, writing, numeracy and using everyday technology to communicate and handle information. (NALA 2013)
NALA  National Adult Literacy Agency
OECD  Organisation for Economic Co-operation and Development
PIAAC  Programme for the International Assessment of Adult Competencies
PISA  Programme for International Study Assessment
Reading/Writing levels  • Level 1 – the individual knows the alphabet but has difficulty with reading
• Level 2 – The individual can read but has difficulty with writing, spelling and grammar
• Level 3 – The person can read and write but needs improved skills to return to learning or for promotion at work.
Each level is sub-divided into lower, middle or higher
Solas  SOLAS will be the Authority which will co-ordinate and fund training and further education programmes in Ireland.
List of Figures

Figure 1 - Presenting and Managing Information ................................................... 49
Figure 2 - Finding and Evaluating Information ...................................................... 50
Figure 3 - Communicating and Collaborating .......................................................... 51
Figure 4 - Security and Ethics ............................................................................... 52
Figure 5 - Everyday Technologies ........................................................................ 53
Figure 6 - Use of Digital Technologies in Literacy Teaching............................... 59
Chapter 1 – Introduction

1.1 Background/Context to the Study
Historically, literacy was considered to be the ability to read and write. However, in parallel with societal changes, the meaning of literacy has evolved to include the skills that individuals need to participate fully in society, including the use of everyday technology to communicate and handle information (NALA 2012). The benefits of being digitally literate range from economic (Newrly and Veugelers 2009, Clark and Vissar 2011) to personal and social (UNESCO 2006, NALA 2008). Being digitally literate is now seen as one of the key competences required for Lifelong Learning (European Reference Framework 2006) and is a requirement for citizens if they are to function in today’s society (Ferrari 2012).

International and national strategy recognises the necessity of being digitally literate. In the United States a Digital Literacy Initiative (NTIA 2012) is dedicated to advancing digital literacy across all age groups while in Europe the Digital Agenda (2010) aims to help citizens and businesses to get the most out of digital technologies, with one of its pillars being the enhancement of digital literacy, skills and inclusion. In Ireland the Department of Education and Skills (DES) now includes digital literacy or the ability to use digital media to communicate as an integral goal in its literacy and numeracy strategy (2011), and the importance of citizens engaging with technology underpins the National Digital Strategy for Ireland (2013).

Synder et al (2005) argue that literacy education now encompasses digital literacy education, therefore, adult literacy educators need to be able to support learners who can function in a society where technology is ubiquitous (Synder et al 2005, Jacobsen 2012). In order to do so, it is important that the tutors themselves both possess key digital skills (Cullen and Cobb 2011) and are able to integrate the use of digital technologies into their practice (Jacobsen 2012) as recommended by the Department of
Education and Science who state that as a general principle, ICT should be integrated with literacy provision (DES 2012).

1.2 Statement of the topic
The setting for the research was a Basic Education Service (BES) that provides adult literacy tuition in various venues in a city in the west of Ireland. Given the importance of incorporating digital literacy skills into adult literacy provision, the purpose of the research project was to investigate the digital skills and the use of digital technologies in this programme provider. The broad aims of the study were to explore how the adult literacy tutors rate their own digital competences and secondly, how they currently incorporate the use of digital technologies with their learners. The specific objectives of the study were to attempt to answer the following research questions:

1. What are the views of the BES literacy tutors on being digitally competent?
2. How do the BES literacy tutors rate their digital competences?
3. What are the views of the BES literacy tutors on using digital technologies in teaching adult literacy?
4. What is the current practice in BES regarding the use of digital technologies in teaching adult literacy?

1.3 Rationale for Research
The researcher works within the Adult Education Service (AES) of a VEC and her role entails supporting staff and learners in the use of technology in teaching and learning across all the various education programmes in the service, namely, Youthreach, Upskill Solutions, VTOS, Community Education and Adult Literacy. While much has been written on integrating technology into teaching and learning at primary and post-primary level for the “digital natives” (Prensky 2010), there has been less research in the area of incorporating digital technologies into adult education. Specifically, the researcher felt that there was an opportunity to explore digital literacy and the use of digital technologies in adult literacy teaching from the perspective of the tutor.
Cohen et al (2011) cite the value of identifying any benefit the research will bring as this can help to focus the research and its audience. The insights gained in this study have identified training needs and best practice using digital resources. The results of the study could be fed back to the Basic Education Service and could potentially inform continuous professional development (CPD) for staff. During the initial phase of the proposal, both management and staff of the literacy service expressed interest in the project and in the dissemination of its potential outcomes and recommendations.

1.4 Research Approach

A case study is an empirical investigation of a particular phenomenon (Robson 2011) that allows the researcher to provide a unique example of real people in real-life situations (Cohen et al 2011). It recognizes that there are many variables operating in a single case and therefore, a case study generally requires more that one tool for data collection and multiple sources of evidence (Cohen et al 2011).

Social constructivist (Creswell 2009) or interpretative research (Thomas 2009) recognises that the social world is constructed in different ways by individuals. An interpretative approach attempts to understand data (Oliver 2010) and how people interrelate and construct meaning (Thomas 2009). An interpretative approach tends to use a case study approach where multiple data collection tools are used to gain a broad view of the specific topic or case.

This particular research focuses on the digital skills of one unique group of tutors in one literacy service and how these individuals use digital technologies in their teaching. The researcher felt that a case study approach would be appropriate to explore these areas in depth where multiple tools for data collection and multiple sources of evidence (Cohen et al 2011), namely, questionnaires, observations, interviews and document examination would be used.
1.5 Delimitations
Denscombe (2010) states that a case should be a self-contained entity and distinct boundaries should be set for the project. The scope of this research is the tutors in one adult literacy service in one VEC. These include full time and part-time tutors and unpaid volunteers. While some of the tutors in the literacy service also teach for other programmes, this research only considers their work within the literacy service.

The focus of the research is to ascertain how tutors view their digital competences and to outline how they use digital technologies in their teaching. Therefore, learners have not been included in the target group for data collection, however, any learner input gained during the research will provide a different perspective on the research topic and act as a form of triangulation.

1.6 Limitations
A limitation of a case study is how representative the findings are (Denscombe 2010) and generalization may not be possible except where other researchers see their application (Bell 2010, Cohen et al 2011). There is no intimation that the findings from this research can be generalised to other cases (Thomas 2009) as by its nature any findings will be unique to the adult literacy service where the research took place. However, a case study provides an opportunity to study a topic in some depth (Bell 2010) and the purpose of studying the case is to understand it in itself (Thomas 2009).

1.7 Summary
While this research is limited in scope, its value lies in its depiction of the real-life viewpoints and experiences of adult literacy tutors at a local level, and in its potential to inform their development and practice in the future by drawing on the theoretical frameworks studied in the literature.
1.8 Structure of Thesis

This research study comprises six chapters.

Chapter 1

The *Introduction* provides the background to the study and puts it in context. It also sets out the rationale for the research and briefly outlines the approach taken and scope of the study.

Chapter 2

The *Literature Review* presents an overview of the relevant literature. It explores how the literacy has evolved to include digital literacy and looks at the benefits of being literate. There is an examination of a number of frameworks that identify key competences that are required by citizens and adult educators. There is also an investigation into the use of digital technologies in adult literacy teaching and learning.

Chapter 3

The *Methodology* chapter considers various research methodologies and states the rationale for the methodology and data collection methods used in this study.

Chapter 4

The *Findings* chapter presents the results of the data collected in the study. These results are presented by theme under the research questions.

Chapter 5

The *Discussion* chapter examines the findings of the study with reference to the literature.

Chapter 6

The *Conclusion* reviews the research study, outlines the outcomes of the research and provides recommendations and potential for further research.
Chapter 2 - Literature Review

2.1 Introduction
In the National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020 (2011), the current Minister for Education and Skills stressed how important literacy and numeracy skills are for individuals to be active and informed citizens. This Strategy recognised that not all children develop numeracy and literacy skills in schools. When this cohort leave school, their lack of literacy skills means that they have difficulty participating fully in society. Having literacy issues as an adult can impact on the individual in a number of ways, including social inclusion and inequalities in the areas of education, employment, income and health (NALA 2011c).

This literature review describes how the meaning of literacy has changed to now include digital literacy. It also considers the impact of not being literate or digitally literate. The review examines a number of international frameworks that outline the digital competences that all citizens require to function in society and the additional digital competences required by adult literacy tutors in order to support their learners. The literature review also looks at the use of digital technologies in adult literacy teaching. Finally, the review outlines the Irish context for adult literacy provision.

2.2 The Changing Definition of Literacy

2.2.1 Historical Context
Traditionally the term ‘literacy’ was not commonly used, rather the focus was on the ability to read and to a lesser extent the ability to write (Lankshear & Knobel, 2006). On the 1901 census form in Ireland, the Head of the household was asked to categorise the household members as being able to Read and Write, Read Only or Cannot Read (National Archives of Ireland 2012).

Historically the teaching of reading and writing took place in formal education settings and instruction consisted of teaching how to decode and encode text. The skills of being able to read and write were seen as tools for learning, or the way to access and communicate meaning via the written text.
Reading and writing were the means to the end rather than being an end in itself (Lankshear & Knobel 2006).

The use of the term ‘literacy’ became widespread in the 1970’s when there was an emergence of various social justice movements influenced by the likes of Freire. He advocated a model that encouraged dialogue between teachers and learners to encourage the adult learner to acquire literacy skills, and also become aware of their rights as human beings. Not only is literacy the ability to decode and encode text but rather it enables the person to engage in critical thinking and reflection, thereby empowering the individual to transform reality (Freire, 1998).

Initial adult literacy provision took place in non-formal education settings where adult learners were provided with instruction to help them to acquire the basic skills of reading and writing. This instruction was generally provided by volunteers to individuals or to small groups of learners. In Ireland, the National Adult Literacy Agency was set up in 1980 to support and to raise awareness of adult literacy services (NALA, 2012).

2.2.2 International Adult Literacy Survey (IALS)
In the International Adult Literacy Survey (NALA 2013a), the OECD set out to ascertain literacy levels of citizens aged from 16 to 64 in Canada, Germany, France, The Netherlands, Poland, Switzerland, Sweden, United States and Ireland. The percentage of participants at the lowest level of literacy was higher in Ireland than in any other country except Poland. The survey found that 1 in 4 or 25% of Irish adults have literacy difficulties to the level where they would not know how much medicine to take based on the information printed on the package. This contrasts with Sweden and the Netherlands where 3% and 10% of adults respectively have literacy difficulties. The most recent IALS survey that included Irish adults took place in 1995 and the results were published in 1997, however, the Programme for International Student Assessment (2011) suggests that the issue of adult literacy continues with Irish global ranking dropping in both numeracy and literacy among the 15 year olds tested. These 15 year olds, who have grown up with
technology as an integral part of their lives, will be the cohort of adult literacy learners of the future.

2.2.3 Programme for the International Assessment of Adult Competencies (PIAAC)
While the IALS survey of 1994-1998 looked at reading and numeracy, the latest OECD Programme for the International Assessment of Adult Competencies (PIAAC) survey has been measuring the skills and competencies needed for individuals to participate in society and for economics to prosper. This survey was carried out in 2011, and in addition to literacy and numeracy, assessed the problem-solving abilities of adults in technology-rich environments. Using technology is now considered a core competency in what PIAAC refer to as the Information Age. Problem-solving in technology-rich environments does not simply mean being computer literate, rather it is the ability to access the information we need and evaluate it critically in order to solve problems. This corresponds to what is being referred to as the New Literacies. The results of PIAAC are due to be published in October 2013.

2.2.4 New Literacies
As the use of technology has become more prevalent in all areas of our lives, the definition of literacy has changed (Tyner 1998). Now it is accepted that there is not just one literacy, reading and writing, but rather the concept of “literacies” (Kellner 2000, Lankshear & Knobel 2006) has become more common. A multidimensional approach recognises that individuals need different skills in different situations, for example, reading instructions or using a computer to book a flight. Säljö (2012) suggests that literacy now includes areas such as knowledge, competence and learning while in other research the terms that are increasingly being used are digital literacy (Gilster 1997) and information literacy (Bruce 2002).

The rise of the Information Age has also led to the concept of Information literacy, defined by Bruce as the ability to effectively evaluate and use information effectively (2002). She views this ability to find and use information as critical, not only in formal contexts such as work or education, but also in informal contexts in everyday family or home life. Torras &
Skagen 2006 (cited in Skagen et al 2008) define digital literacy as information literacy together with ICT skills, however, there are many other definitions and contexts to the term digital literacy.

2.2.5 Digital Literacy
Martin and Grudziecki (2005) describe digital literacy as something that evolved over time in three phases. They refer to the Mastery phase as being from the 1960’s to the 1980’s. During this phase specialist knowledge was required to master or programme the machine. This phase was followed by the Application phase which covered from the mid 1980’s to the late 1990’s when the graphical user interface (GUI) and mass market applications made computer usage easier and more widespread. During this time, applications software such as Microsoft Office became popular and the focus of digital literacy here was on the competences required to use this software in education, at home and more especially in the workplace. The Applications phase was succeeded by the Reflective phase. This phase corresponds to the increased use of the Internet from the beginning of the 21st century and focuses on use of digital technology to source and evaluate information and to communicate with others. Paralleling the increase in online activity, there has also been an increase in the need to engage in critical, reflective, evaluative thinking (Martin and Grudziecki 2005).

The Federal Communications Commission (FCC) in the United States (cited in Clark and Visser (2011) similarly defines digital literacy as referring to a variety of skills such as finding, evaluating, creating and communicating information. Digital literacy embraces both technical and cognitive skills and also includes using the Internet to communicate and collaborate, for example by using blogs and social networks. Clark and Visser (2011) emphasize that being digitally literate means the individual is able to use digital tools to create meaningful content in addition to using tools to navigate and evaluate.

Chase and Laufenberg (2011) refute the idea that digital literacy is a new literacy at all. Instead they put forward the idea that digital literacy is more of a tool and genre that forms a part of all literacy rather than being a concept
of its own. They cite the example of students who use laptops to record audio interviews. The interviews are then posted onto the students’ blogs for students and others to listen to and to post comments. The hallmarks of traditional literacy, reading and writing, run through the project. From writing a draft of the audio script, to continuous editing of the material to creating, reading and responding to comments posted on the blog. Two key concepts in this approach are content creation and collaboration. This reflects Tim Berners-Lee’s (1989) vision when he began development of the world wide web in order to create a collaborative medium where people could “meet and read and write” (cited in Richardson 2009).

While there is no one definitive definition of the term digital literacy, the consensus seems to be that it is multidimensional (Tyner 1998, Lankshear & Knobel 2006) and dynamic in line with an ever changing digital landscape (Kellner 2000, Martin 2009). In Ireland, the National Strategy to Improve Literacy and Numeracy among Children and Young People 2011-2020 defines literacy as embracing various forms of communication, where being literate means the individual is able to read, understand and critically appreciate writing, printed text, the spoken language and digital media. Similarly, NALA now define literacy as being able to speak, listen, read, write, use numeracy and use technology to communicate and handle information (2012) in everyday life.

2.2.6 Digital Divide
The Digital Divide refers to the gap that exists between those who can use various digital technologies and those who cannot. In the United States, the Obama administration set up the Digital Literacy Initiative (NTIA 2012) in recognition of the fact that digital literacy is necessary for today's jobs while a US Dept of Commerce report (NTIA 2011) found that 32% of American do not have broadband access and 28% do not access the Internet at all. The demographic groups less likely to access the Internet are senior citizens, the unemployed, those with low incomes or those with low educational levels. One of the main aims of the Digital Literacy Initiative is to breach this gap by
increasing the digital literacy skills of these non-users in the hope of opening new opportunities to them online.

2.2.7 Ireland and Internet Usage
In the UPC Report on Ireland’s Digital Future (2012), it states that 8 in 10 adults use the Internet. However, it is unlikely that this is fully accurate given that the method used to gather the data was an online survey and it is likely that individuals who do not use the Internet were not able to do the online survey. The same report states that broadband access in Ireland is similar to the EU average of about two thirds. While this report was launched by the Irish Minister for Communications, Energy and Natural Resources and was carried out by an independent research company, it is worth bearing in mind that it was commissioned by a commercial organisation who may have vested interest in the results. The Central Statistics Office (2012) contextualises data on the same subject by stating that 81% of households in 2011 had a home computer and 78% had access to the internet, where at least one member of the household was aged between 16 and 74. These figures exclude the population aged over 74 and the rate of actual Internet usage for those aged between 16 and 74 is unclear. The statistics also omit the impact of the economic and social background of the individual.

Other studies have found that access and use of the Internet are related to an individual’s economic and social background. Aerschot and Rodousakis (2008) found that those who do not have access to ICTs are likely to be low-skilled or unemployed and have a low income. Internet access and usage is also linked to education levels with 83% of those who left school at primary level education level not having Internet access. Similarly, White and Selwin (2013) found that while Internet access and use increased between 2002 and 2010, it was related to the individual’s socio-economic and educational background, and to a lesser extent to their age.
In Limerick the Limerick City Community ICT Steering Group report (2008) identified ICT needs in disadvantaged communities. The report based on surveys and focus groups had similar findings to previous research (Aerschot & Rodousakis 2008, NTIA 2011) in that 48% of respondents in disadvantaged areas of Limerick were not using the Internet. The general consensus would appear to be that lack of Internet usage is directly related to education level and socio-economic status with the implications being that e-exclusion further discriminates against those who are already socially disadvantaged (Aerschot and Rodousakis 2008, White and Selwin 2013, NTIA 2011, Limerick ICT Steering Group 2008).

2.2.8 Social and Economic Perspective

In the knowledge society, digital literacy is critical from both social and economic perspectives (Newrly and Veugelers 2009). In the United States, digital literacy is seen as a “keystone for civic engagement, educational success, and economic growth and innovation” (Clark and Visser 2010, p.39). In Europe, the European Commission (2010) uses the term e-Inclusion to mean the use of technology by all individuals and communities to improve their participation in economic and social activities, leading to improved employment opportunities and a better quality of life. The overall aim of the e-Inclusion agenda (2010) is to ensure that “nobody is left behind” in enjoying the benefits of ICT in the Information society.

The Minister for Education and Skills, when announcing the creation of SOLAS to replace the existing VECs and Fas, the Irish training organisation, stated that there would be more of an emphasis on generic transferable skills, such as people-related skills, thinking and problem-solving skills and digital literacy skills (NALA 2012b). These skills are seen as being crucial in labour market activation and for increasing a person’s economic prospects.

In addition to the economic aspects of having a digitally literate population, there are also substantial social benefits. Bruce (2002) sees information literacy as critical to successful lifelong learning with critical and reflective thinking being a key characteristic of the self-directed learner. The ability to access, evaluate, organise and use information is necessary in order to learn
and make decisions both in formal contexts, for example, at work or in educational settings, but also in the informal context in everyday life at home and in family situations. It helps move learners from being dependent on teachers to acquire knowledge and skills to being empowered to learn independently themselves.

This notion of empowerment is borne out by the review (2011b) of NALA’s online literacy programme www.writeon.ie. This review found that learners doing the distance learning course either independently, or as part of a blending learning programme, were motivated and more confident and became more autonomous in their learning. Using technology helped to remove the stigma attached to the traditional approaches to literacy. Where the course was used in a blended learning programme, the roles of teacher and learner changed, with the tutor becoming more of a facilitator and the learner becoming more self-directed, and the relationship between the two becoming more equalised (NALA 2011). Silver-Pacuilla (2008, cited in Jacobsen 2012) had similar results and found that learners even at the lowest levels of literacy can engage with online learning content. In fact, they are motivated to gain digital literacy skills and they become more self-confident and independent when doing so.

2.2.9 Social Practice Model
The notion of literacy being a social practice is central to the definition of literacy espoused by NALA. The organisation defines literacy as having social, economic and personal connotations as opposed to being just a set of technical skills (2011). The notion of social practice implies that literacy is not just technical skills but rather that literacy varies with social context. A social practice approach identifies with what the individual does in real life and identifies meanings, values and purposes within a basic skills framework (Hamilton et al 2006). In other words, literacy practice starts with the needs of the individual and includes confidence-building and personal development as well as technical skills.

Rogers (2002) concurs that teachers are not the sole providers of knowledge, but adult learners can create knowledge themselves, in fact the
adult learner can contribute to all areas of the teaching-learning process from planning to learning methods to evaluation. This participatory approach where both teachers and learners share knowledge, skills and ideas echoes Freire’s theory (cited in Jarvis 2004) where a more equal learning environment is created. Mutual planning of teaching and learning leads to the learner to question what they may have previously taken for granted and developing their perception of their own social reality (Freire, cited in Jarvis 2004). This notion of literacy having personal and social connotations corresponds to the social practice model where adult literacy increases the opportunities for the adult to reflect on their situation, explore new possibilities and initiate change (NALA, 2012).

2.2.10 Personal Benefits
The economic impact of not being literate or digitally literate can mean the individual may be more likely to be either unemployed or employed in a low-skilled, low paid position. However, there are also personal factors. The NALA (2009) study of older people with literacy difficulties found that the respondents had suffered negatively on both a personal and social level with confidence levels and self-esteem being impacted in many cases. In many cases, the participants reported that they had to depend on family members or friends for support with literacy tasks. There were similar findings in another study of older literacy learners in Dublin (NALA 2008) where the respondents reported that they developed coping strategies for dealing with their literacy issues, including avoiding situations where their lack of literacy would become apparent, or referring reading and writing tasks to a spouse or other member of the family. This would suggest that apart from the economic benefits of becoming literate, there are wider benefits including personal development and a gain in self-confidence that leads to an improved quality of life with the individual becoming more involved in family and social contexts (UNESCO 2006, NALA 2008).

2.2.11 How to measure digital literacy?
Brandtweiner et al’s study (2010) present a two-dimensional approach to digital or e-literacy. The first concept is what they refer to as e-competence or the basic skills of being able to use a computer and the Internet. The
second concept is “media competence” and refers to the individual’s cognitive skills (p814). They distinguish between the use of the Internet as a tool for data gathering, exchange and administration. The political goals in this case are increased economic activity and administrative activity. The second use of the Internet is as a mass medium for entertainment, education and information. Different skills are required for these different uses. They argue that more sophisticated communication skills, media competences, are needed when an individual is using the Internet as a mass medium.

Säljö (2012) puts forward the idea that for someone to be digitally literate, they need added competences to those we associate with print literacy. These competences include operating in virtual environments and being able to use tools in order to access and manipulate information, while Poore (2011) distinguishes between the competences required for “functional” digital literacy and “critical” digital literacy.

There are a number of frameworks that set out the skills and competences that embody the concept of being digitally literate. The next section examines some of these frameworks.

2.3 Review of Frameworks

2.3.1 European Reference Framework – Key Competences for Lifelong Learning
The Key Competences for Lifelong Learning – A European Framework (2006) identifies a range of competences that every citizen requires in order to adapt to a “…rapidly changing and highly interconnected world”. The basic skills required for all learning activities are cited as language, literacy, numeracy and information and communication technologies (ICT). The Framework defines a competence as being a combination of skills, knowledge and attitudes with key competences being those which all citizens require in order to participate fully in society.

In defining “Digital Competence”, the Framework uses the term Information Society Technology (IST). Digital competence is defined as the confident and critical use of IST for work, leisure and communication. This
competence is underpinned by basic ICT skills or having the ability to use computers to find, evaluate, store and present and share information.

In terms of knowledge, individuals will need an understanding of common computer applications such as word processing, storing and managing information and of the use of the Internet to communicate and to find and share information and to network. It implies that all individual will have an awareness of the opportunities and risks of using the Internet including the validity of information and the legal and ethical issues that can arise from using the Internet.

The skills cited in the Framework are focused on the ability to find and evaluate information and use it in a critical way. Skills, therefore, include being able to use tools to produce, present and understand information, being able to access, search and use Internet services, and being able to assess the veracity of information found. These skills reflect the findings of researchers such as Skagen et al (2008) and Paul Gilster (1997) who identified critical thinking as being the core skill in digital literacy rather than the technical skills used to find the information. The finding and evaluation of information also correspond with Martin and Grudziecki’s reflective phase (2005) and Bruce’s information literacy (2002).

2.3.2 Key Competences for Adult Learning Professionals

Buiskool et al (2010) set out a reference framework in which they identify a set of generic and specific competences of adult learning professionals. The generic competences include the ability to be a lifelong learner, being an expert in a field of study or practice and the ability to make use of different learning methods including e-skills. This implies that the adult learning professional will have a knowledge of different learning styles as well as teaching techniques. In terms of skills, the tutor will need to be able to use these different techniques including ICT and new media such as social networks to support adult learners in the learning process. Finally, the report refers to the necessity for the adult learning professional to have a positive and critical attitude towards using new approaches and be open to change when using new technologies.
One of the specific competences cited by Buiskool et al (2010) for adult learning professionals is being an ICT facilitator. This requires the adult education tutor to have knowledge of ICT-learning environments and also the opportunities and limitations posed by those environments. The skills required are the ability to design and employ ICT-based learning environments and support learners in their use of these environments. The tutor will also need to be able to assess how effective the environment was in the learning process. At the attitudinal level, tutors will need to be able to critically assess how the use of ICT can impact not only on the behaviour of adult learners, but also on the learning professionals themselves.

Buiskool et al (2010) define digital competence as the capability of the individual to use the digital tools and services that are required in modern society in everyday and professional tasks. They outline a number of specific digital competence goals for adult learning staff include finding, using and presenting digital information at various levels, netiquette, copyright and the protection of personal digital information.

2.3.3 United Nations – ICT Competency Standards for Teachers (CST)
The aim of the UNESCO ICT-CST (2008) project was to provide guidelines for professional development providers to create and evaluate learning materials and teacher training programmes in the use of ICT in teaching and learning. These guidelines provide three approaches which encompass the digital competencies required by teachers.

The goal of the Technology Literacy approach is to produce a workforce that is able to use new technologies in order to improve economic productivity. The objectives are that teachers would be able to use basic technology tools such as word processing and presentation software, a search engine, email, elearning packages and communication and collaborative technologies such as text, video conferencing and social media and other online collaborative environments. Teachers should also be able to use administrative software for example for taking attendance in addition to integrating the use of technology into teaching and learning activities.
The focus of the Knowledge Deepening approach is on adding value to economic output by applying knowledge of school subjects to solve real life problems encountered in work and personal life. In practice, this means that teachers would be able to design collaborative, project-based learning where ICT is used as a tool to support the learning activities. Teachers would also require the ability to critically evaluate web-based resources and to share and collaborate online not only for classroom activities but also for their own professional development.

The Knowledge Creation approach aims to create a workforce that is capable of continuous knowledge creation and innovation. The key outcomes are that teachers would be able to design online materials to engage learners in research or collaborative problem-solving. Teachers would also be able to support students in using multimedia, web production and virtual and knowledge building environments. An important feature of this approach is the ability of the teacher to engage in reflective thinking on their own professional practice and to participate in professional communities in order to share best practice. Teachers also should be able to support learners to create and plan their own learning activities and to engage in reflective thinking and learning themselves.

2.3.4 DigEuLit Project
The DigEuLit (2005) project was implemented Martin and Grudziecki with the aim of defining digital literacy and creating a European framework and tools for digital literacy development for teachers and learners. They stress the need for “situational embedding” where digital literacy means that competences are transferable and the individual can apply these competences in life situations. They identified a three level model for digital literacy development, namely, Digital Competence, Digital Usage and Digital Transformation.

Digital Competence is the foundation and covers skill levels from basic manual skills to critical and evaluative awareness (Martin and Grudziecki 2005). Martin (2009) gives examples of digital competences at this level as
being word processing, email, finding information on the web, creating and editing digital images and the use of other multimedia.

At the digital usage level, the central and most crucial level, the individual applies their digital competence within a work or life context – the situational embedding. Drawing on constructivist principles, Martin and Grudziecki (2005) state that each user brings their own history and personal and professional experience. Digital usage is fully embedded in the activity of the professional community and is similar to Wenger’s “communities of practice” where learning is a communal activity (Wenger et al 2002, cited in Martin and Grudziecki 2005) and supports professional development.

Digital Transformation occurs when digital usage enables creativity and innovation and can invoke significant change for the individual or the organization within the professional or knowledge domain (Martin and Grudziecki 2005).

2.3.5 Digital Strategy in Ireland
The above frameworks cover some of the international digital initiatives. In Ireland, the National Digital Strategy, launched in July 2013 includes measures to increase the number of citizens using the Internet, funding for digital skills training for citizens and the development of an online mapping resource to identify digital skills learning opportunities. Another strand is aimed at education and e-learning and focuses on the use of ICT across the education systems. This strand includes the provision of peer to peer supports including examples of best practice, professional development and elearning initiatives and the focusing on developing digital skills that are needed in the workplace.

The National Council for Curriculum and Assessment (NCCA) is currently developing an integrated curriculum for primary schools to embed the development of digital literacy into the language curriculum. Similarly, Junior Cycle Reform includes digital literacy as a core element supporting key skills across the curriculum (DES 2013).
2.4 Adult Literacy Learning and Teaching in the Era of New Literacies

2.4.1 The Adult Learner
Andragogy is defined by Knowles (1990, p54) as the “art and science of helping adults learn”. Knowles based his andragogical model on a number of assumptions about the adult learner, including the notion that adults learn most effectively when knowledge and skills are presented in the context of real-life examples. Adults also bring their life experience to the learning process and need to be active participants in the learning process for it to be meaningful (Knowles 1990). Jordan et al (2008, p131) draw the conclusion that andragogy is learner-centred and constructivist because of the “meaning that individuals attach to their learning”. Any adult training programme needs to incorporate real life examples and resources that are relevant to the learner, and provide practical exercises so the learner will have the opportunity to engage fully in the learning process.

2.4.2 Learning Styles
Much research has been done into the nature of learning and how adults learn. Gardner (1997) put forward the idea of multiple intelligences such as linguistic, logical-mathematical, kinaesthetic, interpersonal and intrapersonal intelligences. He suggested that while people have all intelligences, some are stronger in one intelligence than in another. In other words, we all have a different intelligence profile. In terms of learning, Gardner (1997) suggests that the individual learns and remembers better when the method of learning used is one in which they have strong abilities. For example, if a person has strong bodily-kinaesthetic abilities, then they are likely to learn better when they are directly involved in a hands-on activity. Gardner’s model gives rise to the notion of individuals having different learning styles. Similar models include the Visual, Aural, Reading/Writing, Kinaesthetic (VARK)) model (2012) and the Myers-Briggs Type Indicator (MBTI) which identifies differences in teaching styles, learning styles and communication (2012)

The common feature of all the above models is that every individual learns in a different way – or has their own learning style. When developing a teaching and learning strategy, teachers need to bear this in mind and adapt
methodology and resources accordingly. Using technology can play a role in this, particularly in the area of basic adult education.

However, it is important to remember that technology is not an end in itself but rather it is a tool to be used to support and enhance the learning experience (Gagné et al 2005). Mayer (2009, p10) distinguishes between “learner-centred approaches” and “technology-centred approaches”. Learner-centred approaches look at the way multimedia can support the learning process. In contrast, technology-centred approaches tend to focus on the power of the technology and giving people access to the latest technologies rather than “promoting human cognition” (Mayer, 2009, p12). He strongly supports the learner-centred approach. This focus on the learner relates back to adult education theory where a learner-centred approach is preferred (Jarvis 2004). Similarly, Jacobson (2012) says that technology should not be taught for technology’s sake but rather technology needs to be an integrated part of the teaching and learning process while Richardson (2009) stresses the importance of implementing technologies in all subjects in order to prepare students for new literacies and competencies outside the classroom.

2.4.3 The Adult Literacy Tutor
Martin (2009) identifies three key factors that identify the society in which we live. The first is globalisation where the free market economy is prevalent. The second is the use of digital technology in almost all areas of our personal and professional lives. The final factor he cites is the uncertainty and unpredictability of modern life in which the only constant is change. This is what Bauman (2005) refers to as “liquid modernity”.

The traditional structures such as the state, religion, local community and family units are becoming less important in this society. The construction of one’s individual social identity has taken their place in what Castells (2011) calls the network society. This can be seen in the growth of social media such as Facebook which now has over 2.2 million users in Ireland (socialbakers 2013), a number which is likely to include a large number of the population who are statistically defined as having literacy issues.
Martin (2009) sees this construction of identity as being inextricably bound with learning. The concept of constructivist learning, implicit in student-centred learning (Jordan et al 2008), is particularly relevant in adult education where adult learners bring their own knowledge and experience to the learning process and where they construct their own individual meaning of the learning based on their unique social reality (Knowles 1990). Adult literacy tutors increasingly need to be able to support learners to deal with the three factors cited by Martin (2009) to survive in Castell’s network society (2011).

2.4.4 Adult Literacy Tutors and Technology
Jacobson (2012) discusses how adult literacy tutors now need to be able to support learners in acquiring new literacies at a time when technology is rapidly changing. While print literacy is still important, it may need to be taught in “the context of other media” (Barton and Hamilton, cited in Jacobson 2012). Newrly and Veugelers (2009) similarly state that with constantly changing technology, digital literacy learning is an ongoing process where skills need to be updated in parallel with the individual’s personal circumstances and Martin (2009) concurs that the concept of digital literacy needs to be dynamic rather than static, and it changes depending on the individual’s life situation.

Chase and Laufenberg (2011) state that learning is in the hands of the students when they have access to technology. Instead of being the fountain of knowledge, the teacher is a “knowledge node” (p537). Technology supports inquiry-based, independent learning. Poore (2011, p20) also argues that teachers need to be digitally literate in order to be able to support students to reach their full potential and to raise their “critical consciousness”. While her focus is on second level students, her argument is equally valid for adult learners and is echoed by Béisle’s “intellectual empowerment” model (cited in Martin 2005, p250). This ideological model embraces the idea that being digitally literate can have a transformative effect on a person’s thinking capacity.
By being digitally literate themselves, tutors can help implement NALA’s social practice model by supporting adult literacy learners to gain not only reading and writing and basic technology skills but also to enable learners to become independent and “empowered” in a fast-changing society.

2.4.5 Need for Change in Practice
Given that literacy practice outside the classroom is changing, teachers need to be able to respond to these changes (Mellar 2004b, Jacobsen 2012), however, research suggests that some adult literacy tutors are reluctant to introduce technology into the teaching and learning process. This may be because it takes time away from the traditional skills of literacy and numeracy (Ginsburg et al 2000) or because adult literacy educators do not believe that everyday technologies have a legitimate place in the classroom (Snyder et al 2005) or because many teachers perceive that their instruction is effective regardless of whether they have integrated technology or not (Kotrlik and Redman 2005). However, Jaffee (2001) states that it should be the learner who decides whether or not technology is used in tuition rather than the tutor.

Ginsburg et al (2000) believed that technology could motivate and facilitate meaningful learning for individuals who may not otherwise participate in basic skills education. This concurs with Jaffee’s (2001) conclusion that using technology in literacy programmes enables the learner to gain new literacy skills and can increase retention rates for adult literacy learners. The EU High Level Group of Experts on Literacy (2012) state that by embedding integrating literacy and digital skills has triple benefits. First, there is the development of the digital skills themselves. Secondly, embedding literacy skills gives access to digital written formats such as text and email. The third skill gained is the development of the critical skills needed to evaluate online information.

The consensus seems to be that technology is an important and necessary component in adult basic education (Ginsburg et al 2000, Kotrlik & Redman 2005) and as technology is prevalent in everyday life, there is an obligation on adult literacy programmes to offer learners the opportunity to become

2.4.6 Barriers
If digital skills need to be embedded within teaching, then the tutors themselves need to have digital competences in order to be able to support learners (Ala-Mutka et al 2008). However, Jacobsen (2012) suggests that there are still limited numbers of adult basic education educators who are comfortable in using technology in new and productive ways. Cullen and Cobb’s (2011) needs analysis of literacy programmes in the United States found many tutors were nervous about incorporating technology into literacy tuition as they were not comfortable using the technologies themselves. This is a similar finding to an earlier study where Kotrlik and Redmann found that many adult basic education teachers experience “technology anxiety (2005, p212) when thinking about using technology in their instruction.

Yildirim (2007) cites other obstacles that prevented basic education teachers from integrating technology into their classes including access to the technology and the quality of inservice training, while Mellor et al (2004a) found barriers included the infrastructure and the requirements of assessment getting in the way developing more collaborative work. Other barriers ranged from the curriculum itself to the lack of clearly stated goals and expectations for the use of technology from the Ministry and school leadership (Yildirim 2007) Finally, the lack of collaboration among teachers themselves meant that experiences and best practice were not shared in cases where technology was being used effectively (Yildirim 2007).

2.4.7 Best Practice
Mellar et al’s (2004a) study of early adopters of ICT found many examples of best practices such as clear lesson aims, multimodal ways of providing instruction and opportunities for peer learning and collaborative work. The use of ICT for learning and collaboration is also advocated by Ala-Mutka et al (2008). Dillon-Marable and Valentine (2006) came up with four characteristics of optimal computer integration in Adult Basic Education.
These included the seamless use of computers where learners could access computers easily, and where computers were used in combination with other instructional tools such as books. They also state that computer content should be appropriate and be facilitated by instructors in order to achieve their learning goals. Finally, if learners are proactive in using computer technology, it can empower them and enhance their ability to work both independently and collaboratively and address their roles as family members, workers or citizens (Dillon-Marable & Valentine, 2006).

2.4.8 Organisational Strategy
In promoting best practice, researchers have come up with various recommendations including the need for organisations to develop an infrastructure that can provide easily accessible and appropriate technologies (Mellar et al 2004a, Dillon-Marable & Valentine 2006). Other recommendations include the funding and development of effective tutor training in the use of ICTs in basic skills provision, and the development of the ICT skills curriculum and assessment methods (Mellar et al 2004a). The need for organisational development and professional development is also cited by Fletcher et al (2011) and by Lesgold and Welch-Ross (2012) who stress the importance of developing adult literacy tutors’ skills so they can use technologies effectively with learners. Dillon-Marable & Valentine (2006) also specify the need for staff development to enable tutors to be facilitators who can support learners to become empowered. Ala-Mutka et al (2008) recommend developing digital competences as part of teacher training and embedding digital competences in organizational strategies including lifelong learning strategies while acknowledging that a dynamic approach is needed where new technologies are adopted.

Rosado and Bélisle (2006) pose the question of the digital divide being a problem of technology or of social priorities. They refer to “technological determinism” where stakeholders focus on the purchase of equipment and then provide pedagogical training and curricular frameworks. They present the view that technology comes second to the social objectives of a programme. They feel that if people do not have the incentive, know-how
and confidence to use the technologies, then they won’t use them. They make the point that often there is an assumption that if the hardware is bought, the teachers will know how to use and integrate the equipment into their classes. In other words, the process starts with providing the resources and then proceeds to providing training to the teachers. However, they argue that training should be the initial step and then the teachers can feed into the acquisition of equipment and resources (Rosado and Bélisle 2006).

2.4.9 Current and Emerging Technologies
Any provision of resources needs to consider the technologies that people are currently using and that they may use in the future. The National Digital Strategy for Ireland (2013) refers to new and emerging technologies such as tablets, smartphones and apps and how digital engagement is becoming more mobile and mainstream. In terms of hardware, the current practice is a move from PCs to tablets as evidenced by the declining sales of laptops and desktops and the increasing sales of iPads and Android tablets (Flanagan 2013). The consensus among analysts (IDC 2013, Griffey 2012) would appear to be that usage of tablet computers will continue to grow and will overtake usage of the traditional pc or laptop. There has been growth too in the mobile phone market, in particular in the area of smart phones (UPC, 2012) allowing the user to browse the web, increasingly using touch screen technology. The sales of ebooks has increasingly grown (Sabroski and Ojala 2012. All these developments suggest that the way people read and write are shifting from traditional print media to digital formats.

The EU High Level Group of Experts on Literacy (2012) recommends that more digital practices should be used to engage learners in digital reading and writing environments. Sweeny (2010) also suggests that tutors should use digital technologies for writing activities in order to make instruction more meaningful and engaging in the digital era. While some teachers may be concerned about the language used in texting, Twitter, blogs and other social media, she argues that the Internet era has fundamentally changed the way people communicate.
The UPC report (2012) on Ireland’s digital future found that shopping and social networks were the most popular online activities carried out by those surveyed while Molloy (2013) discusses the move from branch banking to online transactions. Online activity for buying music and books has increased (UPC 2012) and the EU (eGovernment Action Plan 2011) and Ireland (eGovernment 2012) have strategies to increase eGovernment interactions with citizens. These developments indicate the use of technology will become more prevalent in everyday life. Given that the social practice model of adult literacy (Hamilton et al 2006, NALA 2011) implies that tuition will reflect real-life, the tutors themselves need to become familiar with the technologies and be able to use them with their learners.

2.5 Adult Literacy Provision in Ireland

2.5.1 VECs and ETBs
There are currently over 50,000 adult literacy learners in Ireland and most tuition is provided by the Adult Literacy Services that are run by the Vocational Education Committees (VECs). As the research progressed, the Irish government published a bill establishing 16 Education and Training Boards to replace the 33 existing VECs (DES 2012b). This Bill included an amendment requiring SOLAS to develop a strategy for the promotion and development of adult literacy and numeracy (NALA 2013). NALA recommended that specific funding be made available for this strategy. The new ETBs came into being on 1st July 2013. At the time of publishing the research, it is not known what changes if any there will be to adult literacy provision. This research looks at the current provision within one adult literacy provider.

2.5.2 Adult Literacy Organiser’s Association (ALOA)
The ALOA is the professional body in Ireland that manages adult literacy and basic education provision and contributes to the development of Adult Basic Education Policy. In 2012 the ALOA published the priorities and strategies for consideration for integrated adult literacy provision under the ETBs. One of the outlined strategies is to enhance literacy and digital skills by using ICT, blended learning and emerging technologies. Recommendations include the
development and implementation of ICT policies to support teaching and learning at all levels and also the provision of appropriate ICT training to staff. Furthermore, it suggests that good practice be publicised across ETBs as a way of encouraging staff to integrate the use of digital media and emerging technologies at all levels of the learning process (ALOA, 2012).

2.5.3 Organisational Perspective
Similar to Ala-Mutka et al (2008) and the ALOA (2012), the Education Plan (2011) of the VEC in which the research took place includes as a key outcome that all staff and learners will be competent in using existing, new and emerging technologies both in teaching and learning and in communicating and networking. Likewise the Adult Education Service in its Strategic Framework (2009) stressed the importance of maximising the use of technology to “enhance communication, teaching and learning”.

2.5.4 Basic Education Solutions Programme
The Adult Education Service (AES) under the auspices of the local Vocational Education Committee (VEC) offers full and part time courses to over 5,000 learners in a city in the west of Ireland. Courses are aimed at those returning to education and are in general focused on the generic or transferable skills at levels 1-6 on the National Framework of Qualifications.

These generic or transferable skills include basic or fundamental skills such as literacy, numeracy and the use of technology and are seen as critical for future economic development. They also cover people skills such as communication and interpersonal skills, and conceptual skills, for example, finding information, problem solving and learning to learn. The Action Plan (2012) for SOLAS, the new Further Education and Training (FET) authority, states that the core skills of literacy and numeracy should be incorporated into all FET programmes and that digital and media literacy should be embedded in course development.

The Basic Education Solutions Programme is responsible for adult literacy provision and is focused primarily on those from socially marginalised communities, with the majority of learners coming from Regeneration/RAPID communities. In 2012, there were 1,317 learners, 516 male and 801 female,
registered with the literacy programme. 999 of the learners were unemployed or not in the labour market.

There are currently 70 staff members in the Basic Education Solutions service comprising co-ordinators, full time resource workers, part-time tutors and volunteers. Resource workers and part-time tutors generally work with groups of learners and volunteers typically work on a one-to-one basis with individual learners.

2.6 Teacher Education
The Teaching Council stipulates that all Initial Teacher Education should include the use of ICT in teaching and learning and the Professional Development Service for Teachers (PDST) provides inservice courses on the use of ICT in literacy and numeracy for primary teachers. The Waterford Institute of Technology (WIT) in conjunction with NALA, provides the only nationally recognised programme for adult literacy practitioners, the Higher Certificate in Arts in Literacy Development. This level 6 Award includes an elective module on New Literacies. Email, texting and the use of digital photography as a communication tool comprise a section of one of the Developing Literacies mandatory modules.

In the BES, initial tutor training for volunteers consists of 8 three hour sessions, one of which is devoted to using ICT in adult literacy. Newly hired literacy resource workers or paid part-time tutors are also expected to attend this initial tutor training. The Service runs CPD events for staff and volunteers, many of which are devoted to the use of technology.

2.7 Summary
Technology has changed the nature of literacies and teaching needs to respond to this change in order to support learners to live in the world of these new literacies (Millar et al 2004b). In an era that is more and more being shaped by digital technology, teachers need to consider new ways of teaching and learning in order to meet new demands (Jacobsen 2012). Traditional literacy and the use of technology are no longer separate
activities but rather adult “…literacy education is equally and simultaneously
digital literacy education” (Snyder et al, 2004)

Because all citizens need to be able to use digital technologies in order to be
literate in the digital age, it is important for all these literacy tutors to
incorporate digital technologies into their digital instruction (Lesgold & Welch-
Ross 2012). Tutors might consider using technology because technologies
are prevalent in educational, workplace, and personal environments (Kotrlik
and Redmann 2005). In order to be able to support their learners to become
digitally literate, BES tutors need to be digitally literate themselves, in other
words, they need to be models of the behaviour (Bandura cited in Jordan et
al 2008). Only then can learners become proactive and independent in using
technologies for learning ((Dillon Marable & Valentine 2006), only then can
they become truly empowered (Dillon Marable & Valentine 2006, NALA
2011b).

The purpose of this research project is to attempt to ascertain the levels of
digital literacy of the BES tutors, and to what extent they use digital
technologies in teaching literacy to adult learners. The next chapter presents
the methodological framework for the study.
Chapter 3 - Methodology

3.1 Introduction
The review of the literature suggests that digital literacy is what Oliver calls a “contested concept” (2010, p20) with many different definitions for the term. For the purposes of this research project, digital literacy is taken to be multidimensional (Tyner 1998, Lankshear & Knobel 2006) and dynamic (Kellner 2000, Martin 2009) with the digitally literate individual being able to use digital technologies to communicate and handle information in everyday life (NALA 2012a).

In research, Cohen et al (2011) stress the importance of the researcher identifying “the benefit the research will bring, and to whom, as this will help to focus the research and its audience”. The purpose of this research is to explore the digital literacy skills of the adult literacy tutors in one adult literacy provider and to examine existing practice in the area of using digital technologies in teaching adult literacy. After reviewing the literature, the researcher refined the original research questions to the following:

1. What are the views of the BES literacy tutors on being digitally competent?
2. How do the BES literacy tutors rate their digital competences?
3. What are the views of the BES literacy tutors on using digital technologies in teaching adult literacy?
4. What is the current practice in the BES regarding the use of digital technologies in teaching adult literacy?

3.2 Selection of Methodology and Design Frame
Action research is applied research that is performed in order to bring about change or improvement (Bell 2010), and is participatory with actual subject or practitioner carrying out the research (Denscombe 2010, Thomas 2009). Action research is not suitable for this project as the focus is on an objective examination of practice. While this research proposes to ask tutors to self-assess their digital skills, it does not fit into the category of evaluative research whose purpose is to assess the effects and effectiveness of a
policy or practice (Robson 2011). Nor is this research suitable for a survey strategy, which implies wide and inclusive coverage of a large group of people (Denscombe 2010). The breadth of coverage of a survey is useful to find out patterns of activity such as voting behaviour, however, the survey approach is less suitable for research on sensitive matters where a topic needs to be studied in more detail (Denscombe 2010). In such a scenario, the case study approach provides the researcher with the opportunity to study a question or problem in some depth (Bell 2010).

As the focus of this research was to look at adult literacy tutors and their experiences of digital technologies, it was felt that the case study methodology was the most appropriate. One of the potential advantages of a case study (Adelman et al 1980, cited by Cohen et al 2011, p.292) is that it can serve as “…a step to action”. Cohen et al (2011) suggest that one of the strengths of the case study is that the insights gained can be interpreted and used for example in providing feedback within an institution, for formative evaluation or for individual self-development or for staff development. It is envisaged that the results of this research project could be fed back to the Adult Education Service and if appropriate, could be used to inform future staff development.

A social constructivist (Creswell 2009) or interpretivist (Thomas 2009) approach generally concentrates on the individual rather than on the group and its focus is the way individuals construct and interpret meaning. Social constructionist research therefore will tend to use multiple research tools, such as interviews and observation, in order to acquire multiple perspectives (Robson 2011). The research questions in this study relate to individuals and the context in which they operate, and in recognition of the fact that there are many variables in a given scenario, the proposed case study will use multiple tools for data collection and many sources of evidence (Robson 2011, Cohen et al 2011).

3.2.1 Quantitative v Qualitative Data
Qualitative research tends to focus on the individual’s perceptions (Bell 2010), thus corresponding to Oliver’s interpretivist approach (2010).
However, adopting a qualitative perspective does not rule out collecting quantitative data techniques (Bell 2010). Concurrent triangulation design (Creswell 2009) refers to the process whereby both qualitative and quantitative methods are used separately, independently and concurrently with the results being compared in order to assess their convergence. It was this approach that was used in this research project.

3.3 Ethics
When collecting data from research participants, it is necessary to consider ethical principles (Robson 2011, Cohen et al 2011, Thomas 2009). The concept of “informed consent” is fundamental in research (Cohen et al 2011, p.77) and refers to a subject’s right to freedom and self-determination.

In addition to voluntary participation based on informed consent, Denscombe (2010) refers to two other principles of research ethics, namely, the protection of participants’ interests and the necessity of researchers to operate in an honest and open manner with regard to the investigation.

Sapsford and Abbott (1996 cited in Bell 2010) make the distinction between confidentiality and anonymity with confidentiality meaning a participant is not identified or presented in identifiable form. Anonymity is a promise that even the researcher cannot tell which respondent made a response. It will be important for any participant to be given full information about confidentiality and anonymity and also about how data will be kept.

In line with ethical practice, the researcher asked the Adult Education Officer and the Basic Education Solutions Co-ordinator for permission to carry out the study. Prior to sending out the questionnaire, the researcher sent an email to potential participants explaining the purpose of the study and what participation would entail. The researcher also spoke to staff at a staff meeting to ask for volunteers who would be willing to have their classes observed or to be interviewed. In all cases, participation was voluntary and participants had the choice of withdrawing from the project at any time.
3.4 Data Collection Methods

3.4.1 Experiments
Walliman (2011) considers experiments to be a method of data collection with the aim being to isolate events in order to investigate them away from their surroundings. Others (Cohen et al 2011, Thomas 2009) refer to experiments as a methodological approach, associated with the positivist paradigm, which are best used in fixed design projects (Robson 2011). This research uses a flexible design case study approach (Robson 2011) where the surroundings play an integral role in teaching and learning, therefore, the researcher did not consider experiments to be an appropriate tool for data collection.

3.4.2 Tests
As one of the research questions was to ascertain how tutors view their own digital skills, the researcher considered using testing as a data collection method. Tests can be norm-referenced where the participant is compared to a sample of their peers, or criterion-referenced where the person is assessed on their ability to meet some criterion, regardless of how others do (Robson 2011). Cohen et al (2011) state that it is important to consider the purpose of a test and the ethical issues that may arise from the use of the data collected. It was felt that in this research, as a social constructivist (Robson 2011) approach was being used, questionnaires would be more appropriate to capture more open and discursive data (Robson 2011).

3.4.3 Questionnaires
Questionnaires provide the researcher with a flexible method of data collection that are easy and convenient for respondents and provide the researcher a structured format for administering questions to a large number of people without having to meet each one individually (Walliman 2011, Cohen et al 2011). Thomas (2009) says the defining characteristic of the questionnaire is that it is written form of questioning where each person who answers the questionnaire reads an identical set of questions (Denscombe 2010). This provides for consistency and makes processing of the answers easier.
Web-based questionnaires allow respondents to easily select from a predefined range of answers (Denscombe 2010). However, a disadvantage of a web-based questionnaire is the possibility of response bias, with the more highly educated computer-literate person being more likely to respond (Robson 2011). To counteract this potential bias with the target group, the researcher gave the respondents the option of completing either an online or paper version of the questionnaire.

3.4.3.1 Questions
Closed questions are highly structured and are more straightforward to code and analyse (Cohen et al 2011) and are easier to complete (Walliman 2011). On the other hand, open questions can be useful in a site specific case study as they can capture the specifics of a given situation (Cohen et al 2011). When compiling the questionnaire, the researcher used both question types, with a majority of closed questions. With too many open-ended questions on self-completion questionnaires, the researcher cannot probe the respondents to find out exactly what they mean (Cohen et al 2011) which can lead to information loss when analysing the responses (Robson 2011).

3.4.3.2 Rating Scales
The focus of the research is how the respondents perceive their digital skills and use digital technologies in teaching and learning with participants being asked to rate their skills in a number of areas. A ranking question type was not suitable as it is used to put items in order by comparing values across variables (Cohen et al 2011). Instead a Likert rating scale (Thomas 2009, Robson 2011, Cohen et al 2011) was chosen to measure the attitudes and perceptions of the respondents, as each item was independent of each other and could be rated separately (Cohen et al 2011). While Likert rating scales often use five variables (Robson 2011), there can be a tendency for participants to opt for the middle point of the scale (Cohen et al 2011), therefore, the researcher used four variables which would remove this tendency (Thomas 2009). Cohen et al (2011) suggest that using an even number of scale points in this way requires a decision on the part of the respondent.
3.4.3.3 Dichotomous Questions

Dichotomous questions which are useful in compelling the respondents to “come off the fence” (Cohen et al 2011) were used to ask teachers to state if they had ever used any digital devices or software in teaching. These questions were then followed up with open-ended questions to allow the respondents the freedom to qualify their responses (Walliman 2011). Giving the respondents this freedom leads to a lack of bias, however, answers can be more demanding and time consuming for the respondent and from the perspective of the researcher are more open to interpretation and more difficult to code during data analysis (Walliman 2011). The open questions were put at the end of the questionnaire as they require thought from the respondent and if placed at the beginning might discourage a respondent from doing the full questionnaire (Thomas 2009).

3.4.3.4 Disadvantages of Questionnaires

Disadvantages of questionnaires include the intrusion into the respondent’s life in terms of time taken to completed the questionnaire but also, depending on the questions asked, potentially posing an invasion of privacy Cohen et al (2011). Denscombe (2010) also states that precoded questions can be frustrating for respondents, and can bias findings towards the researcher’s way of thinking. Questionnaires, especially if they are anonymous, do not provide the researcher with the opportunity to check or challenge the answers provided (Denscombe 2010). Belson (cited Cohen et al) refers to the validity of questionnaires where it is not possible to know if the respondents who complete the questionnaires do so accurately and if those who do not return the questionnaires would have given the same distribution of answers as those who actually responded. For these reasons, data triangulation was used in order to counter these threats to bias and validity.

3.4.3.5 Pilot Study

Cohen et al (2011) highlight the importance of a pilot study to devise and refine the categories in a questionnaire and the researcher sought input from colleagues in this respect, initially from one colleague who felt the original questionnaire devised was too long. A refined version was circulated to
these colleagues and three others and based on their feedback, minor changes were made.

### 3.4.4 Documents

Cohen et al (2011) define a document as a record of an event or process. Primary documents, such as textbooks and published reports are direct records while secondary documents are formed through an analysis of primary documents. Advantages of content analysis of documents include their accessibility (Denscombe 2010) and data being in a permanent form that can be re-analysed to allow for reliability checks (Robson 2011). Documentary research therefore offers a “methodological pluralism” (Cohen et al 2011, p254) which may be especially appropriate in the field of education (Cohen et al) Disadvantages include the possibility of bias as the document may have been created for some purpose other than research (Robson 2011, Oliver 2010). To help counteract bias, a template for evaluating the validity of documents was created based on Platt and Scott’s four basic criteria: authenticity, representativeness, meaning and credibility (cited in Denscombe 2010).

### 3.4.5 Observation

Cohen et al (2011) state that the data collected in observation should enable the research questions to be answered. The purpose of the observation in this research is to ascertain how technology is used in basic education classes. Systematic observation (Denscombe 2010) is generally associated with quantitative data collection methods such as the Flanders interaction analysis system (Flanders cited in Robson 2011), designed to analyse teacher and pupil behaviour in the classroom, and event sampling used to find out the frequencies of behaviours (Cohen et al 2011).

In contrast, participant observation (Denscombe 2010) is normally used to understand the culture and processes of the group. In this particular project, the researcher felt that this holistic approach (Denscombe 2010) which is more consistent with an interpretative approach (Thomas 2009) would provide more detailed data about what is happening in the adult basic education classes. Denscombe (2010) suggests participant observation
scores highly in terms of the validity of data as items are examined in terms of the overall event and context. However, reliability can be an issue as the researcher is the instrument of research and it could be extremely difficult to repeat the study to check for reliability (Denscombe 2009).

In this project the researcher adopted an “observer as participant” approach (Cohen et al 2011, Thomas 2009) where the researcher’s identity is openly recognized and gains the informed consent of the participants. The observation process takes the form of shadowing a class in the everyday context (Denscombe 2010).

Descriptive observation (Robson 2011) enables the researcher to define the physical setting, human setting, interactional setting and the programme setting (Morrison cited in Cohen et al 2011). While the format is less structured than systematic observation, it is still necessary to have some framework to focus the observation on the research questions (Cohen et al 2011). Therefore, for this research, an observation template was created based on Spradley’s nine dimensions of descriptive observation (cited in Robson 2011, Cohen et al 2011). The field notes also included a section in the field notes where the researcher could critically examine the methods used in observation and reflect on her own reactions to the observation (Bogdan & Biklen 1992, cited in Cohen et al 2011).

3.4.6 Interviews
Robson (2011) defines structured interviews as having fixed questions where answers are selected from a small list of alternatives. While structured interviews (Denscombe 2010) can provide a level of standardization, in effect, they are like face to face questionnaires and do not allow the interviewee with the flexibility to develop their ideas and expand on the questions raised by the researcher.

Less structured approaches are useful in ascertaining the “why” of the research questions (Robson 2011) and enable the participants to discuss their interpretations of situations (Cohen et al 2011). Similarly, Walliman (2011) states that interviews can be more suitable than questionnaires for
more probing type questions, particularly for qualitative data collection while Denscombe (2010) suggests that interviews are suitable when the researcher wishes to gain insight into opinions and experience.

Robson (2011) warns that the lack of standardization can raise questions of reliability, while Cohen et al (2011, p411) say that interviews can be “…prone to subjectivity and bias on the part of the interviewer. Oliver (2010) defines reactivity as the way in which the presence of the researcher can change the behaviour of the respondents and cites this reactivity as being a major threat to the validity of the data that is collected. To help counteract these limitations, a less structured format (Oliver 2010) allows the interviewee to determine the direction and tone of the interview. He says that ontologically speaking, this type of interview allows the interviewer to explore reality as viewed by the interviewee. This supports the interpretivist view that reality is subjective as it is constructed by each individual (Oliver 2010). A more open approach may well raise issues that the researcher has not considered (Oliver 2010). While the interviewer determines the topics for discussion, a semi-structured approach allows interviewee to determine the direction and tone of the interview and potentially raise important issues or concerns that the interviewer may not have envisaged (Oliver 2010).

In this project, it was felt that a semi-structured approach would be appropriate as it combines the structure of a list of questions to be covered with the freedom to follow up on points as appropriate (Thomas 2009). An interview schedule (Robson 2011, Cohen et al 2011, Thomas 2009) was created to provide a framework for the interview process including the topics for discussion, possible questions and probes.

In terms of capturing the data during interviews, video recording can be intrusive (Denscombe 2010) and audio recording can inhibit honest responses (Bell 2010). Therefore the researcher used the interview schedule to take notes during interviews and and wrote up detailed notes immediately after the interviews.
3.5 Limitations
The researcher recognises that there are a number of limitations in the study. While all tutors were invited to participate in the research, their participation was voluntary. This could potentially result in bias whereby the viewpoints of those who participated were more strongly represented (Walliman 2011) and the absence of data from those who did not participate could undermine the validity of the results (Robson 2011).

Given the time constraints of the project it would not have been possible to interview every staff member even if they were all willing to participate. Another limitation was the physical location of classes. As many literacy classes take place in community venues, it was not logistically possible to observe classes in all venues. There was also the “observer effect” where the participants may behave differently to normal knowing that they are being observed in some way (Denscombe 2010) or the issue of observer bias (Cohen et al 2011).

In order to mitigate the risk to validity caused by these limitations, the researcher used triangulation by using multiple data collection methods to present as full a picture as possible (Denscombe 2010). This resulted in a combination of quantitative and qualitative data which were cross-checked. While the majority of observations took place in the Head Centre of the Adult Education Service, one observation was carried out in a community venue. Interviews were carried out with tutors who work both in the Head Centre and in communities. The qualitative data gleaned in interviews was compared and analysed with open ended responses given by tutors in questionnaires.

3.6 Bias
Insider research is when the researcher is a member of the case study context and has a social role within the group (Oliver 2010). In this research the researcher is a staff member of the Adult Education Service. While familiarity with the research field may make it easier to select the sample for the research, being an insider also runs the risk of taking things for granted in terms of observation and overlooking aspects of data that an outsider would acknowledge (Oliver 2010). Denscombe (2010) refers to objectivity as
the absence of bias, denoting research that is neutral and impartial with reference to the researcher’s influence on the outcome. Robson (2011) also refers to bias stating that the reliability of the research can be threatened by both participant error and bias, and observer error and bias.

### 3.7 Reliability
Reliability is defined as the extent to which a research instrument gives the same result on different occasions (Thomas 2009, Denscombe 2010). Bell (2010, p119) suggests a number of devices to check reliability such as doing a “test-retest” or “the alternate forms method”. However, she concludes that unless the researcher is trying to produce a test or scale, these methods are not necessary. In this research project, although tutors are being asked to self-assess their digital skills, they are not being ‘tested’. In such a case, the check for reliability will be done when wording the questionnaire and at the piloting stage (Bell 2010). Thomas (2009) states that in interpretative research such as this, the study is a snapshot in time where the exact same findings cannot be replicated. However, he stresses that the nature of interpretative research implies that reliability is not relevant but rather, what is important is the choice of an instrument that can produce the data that are required.

### 3.8 Validity
Denscombe (2010) defines validity as the accuracy and precision of the data and its appropriateness to the research question being investigated. There is a potential issue of validity where respondents may try to provide the response the researcher wants rather than saying what they really believe (Oliver 2010). Cresswell (2009) recommends the use of multiple validity strategies in order to ensure that the findings are as reliable and valid as possible, such as the use of rich description to convey the findings and the presentation of negative or discrepant information that runs counter to the themes.

The researcher used triangulation (Cresswell 2009) to help counteract any potential bias and ensure the validity (Oliver 2010), reliability and completeness of the data collected (Walliman 2011).
3.9 Triangulation
Time triangulation (Denzin cited in Cohen et al 2011) was not possible in this project as data collection took place during a limited time period, nor was investigator triangulation (Denscombe 2010, Cohen et al 2011) as there was only one researcher involved. Methodological triangulation allows the researcher to compare the findings from one method with the findings from another in order to see the same object of study from different perspectives (Cohen et al 2011, Denscombe 2010). In this research it was decided to use methodological triangulation by combining quantitative and qualitative approaches (Robson 2011). Data triangulation was also used where multiple methods of data collection (Robson 2011) were used to validate findings in terms of accuracy and authenticity and to produce complementary data to enhance the completeness of the findings (Denscombe 2010, Creswell 2009). By viewing the research questions from various perspectives, triangulation also helps to explain the richness and complexity of human behaviour (Cohen et al 2011).

3.10 Summary
This chapter examined a number of methodological approaches and provided the rationale for selecting a case study methodology where both qualitative and quantitative data were collected. It also analysed various data collection tools and presented the tools selected for this research project: questionnaires, observations, interviews and document analysis.

The following chapter details the findings of the data collected with these tools.
Chapter 4 - Findings

4.1 Introduction
This chapter presents the data generated from the research study. Denscombe (2010) states that it is not the research method that determines the type of data collected but rather it is the nature of the data collected that is important. Therefore quantitative data can be produced, not only by questionnaires but also by other methods such as observations and interviews. Similarly, qualitative data while primarily associated with methods such as interviews, documents and observations, can also be produced in open-ended questions in questionnaires (Denscombe 2010). The findings of this study comprise the analysis of questionnaires, class observations, interviews and the examination of secondary documents. The findings are presented by research question and draw on both the quantitative and qualitative data generated from these collection tools.

4.2 Data Collection
70 staff, including co-ordinators, full time resource staff, part-time tutors and unpaid part time volunteers, in the literacy service were asked to complete a questionnaire. One email bounced back and the researcher was not able to contact the individual. Of the remaining 69 staff, 57 responded with 49 filling in the survey online and 8 completing a hard copy which the researcher input manually into the online tool for analysis. Three individuals partially completed the survey. The overall response rate was 83% and the completion rate was 78%.

Robson (2011) states that there is little agreement on what constitutes a good response rate for questionnaires with Mangione (1995 cited in Robson 2011) considering a minimum response rate of 60% as acceptable, Stoop (2006) stating that 70% is considered to be quite good, while others such as Fowler (1993 cited by Robson 2011) stating that the rate should be at least 75%. The response rate for this study would therefore appear to be acceptable.
Six observations were carried out, and at the end of these observations, useful data was gleaned by engaging the participants in conversation in an informal way. Interviews were carried out with 2 full-time co-ordinators and three tutors. In addition, a number of secondary documents were examined.

4.3 Profile of Respondents

The majority of the adult literacy staff is female, and this was reflected in the responses where the overall breakdown was 84% female and 16% male respondents. The gender profile varied slightly according to the role of the respondents. All full-time resource workers were female, three organisers/co-ordinators were female and only the overall programme co-ordinator was male. 94% (16) of the 17 part-time paid tutors who responded were female and only one part-time respondent was male. The number of male volunteers who responded, while still a minority, was higher at 22%. All the tutors in the classes observed were female.

4.3.1 Age

There was some variation in the age profile based on whether the respondents were full time, part time or unpaid volunteers. Overall, the majority of tutors is aged between 35 and 54 with these two categories together accounting for 58% of respondents. Another 30% are aged over 55. The smallest proportion (12%) of respondents is aged between 25 and 34 and no tutor, paid or unpaid, is aged under 24. All full-time staff were aged over 35 with the majority in the 35 to 44 category. A sizeable majority (71%) of part time paid tutors were aged between 45 and 54, with 12% aged 35 to 44 and another 12% aged 55 to 64. Only one part-time tutor was in the 25 to 34 age category. The age spread amongst volunteers is more evenly spread with approximately 20% in each category, except for the 45 to 54 grouping which accounted for 13%.

4.4 Data Analysis

An online tool called surveymonkey (2013) was used to create a questionnaire which asked tutors to rate their own digital skills. The tool includes a reporting feature which analysed the quantitative data collected
from the Likert scale. The tool also includes the facility to use filters and crosstabs to support deeper analysis according to respondent profile and other criteria. Qualitative data was gathered in the open-ended responses in the questionnaires. This data and other qualitative data gathered from the observations, focus groups and interviews were coded for analysis and interpretation.

### 4.4.1 Coding and Content Analysis
Bell (2010) says that raw data need to be analysed for similarities and differences, groupings, patterns and items of particular interest and Cohen et al (2011) suggest that coding or the allocation of a label categorising a piece of data can be used when carrying out this analysis. A coding system, therefore, allows the researcher to identify similar data for analysis (Cohen et al 2011) and to cluster key ideas in qualitative data (Bell 2010).

Robson (2011) distinguishes between exploratory analysis, where the researcher attempts to find out what the respondents were saying, with confirmatory analysis, where the researcher attempts to establish if the findings were what the researcher expected based on theory. In this research, the researcher used an exploratory approach to try to ascertain what the participants felt about digital literacy and the use of digital media and resources in adult literacy teaching.

Robson (2011) also refers to a number of approaches such as quasi-statistical where word or phrase frequencies and inter-correlations are used to determine the importance of terms and concepts, and the grounded theory approach where a theory is developed based on the data. In this research it was felt that a thematic coding approach (Robson 2011) was the most suitable as this generic approach allowed the researcher to explore and code the data into themes which could be further analysed and interpreted.

### 4.4.2 Presentation of Data
Cohen et al (2011) stress that there is no single or correct way to analyse and present data, rather what is important is the principle of “fitness for purpose” (p537). The purpose of data analysis will determine the kind of
analysis that is undertaken (Cohen et al 2011). They specify various ways in which data can be organised and presented including by people, instrument, case study and narrative account. Cohen et al (2011) suggest that a useful way of organizing data is by theme. This enables the researcher to explore patterns and relationships across the data from the various instruments in the identified themes. Thomas (2009) suggests that using a constant comparative method of analysing each element in the data contents will lead to the emergence of themes and is consistent with an interpretative paradigm.

In this project, the researcher considered using a tool called QSR NVivo to analyse the qualitative data, however it was felt that this predominantly focused on coding and that it was important to attempt to also interpret the data (Robson 2011). Therefore, the researcher used the constant comparative method (Thomas 2009) and repeatedly went through the data. This led to various themes emerging, and these were then grouped under the research questions:

1. What are the views of BES literacy tutors on being digitally competent?
2. How do BES literacy tutors rate their digital competences?
3. What are the views of BES literacy tutors on using digital technologies in teaching adult literacy?
4. What is the current practice in BES regarding the use of digital technologies in teaching adult literacy?

4.5 What are the views of BES literacy tutors on being digitally competent?

4.5.1 The importance of being digitally competent
The theme of the importance of being digitally competent traversed all the data gathered. In the questionnaires 98% of the respondents indicated that it was either “very important” or “quite important” to be digitally competent. The majority of respondents (60%) felt it was “very important” to be digitally competent with a further 38% choosing the “quite important” option and only
one respondent indicated that it was “not important at all”. 75% of those aged over 65 selected the “very important” category (75%) in contrast to 57% of those aged 25 to 24. These quantitative data concurred with qualitative findings gained from interviews with all the staff interviewed stressing the importance of being digitally competent.

“It is vital. If you don’t have digital skills, you don’t know what is going on. Nobody can contact you. It is almost like not being able to read – it’s like looking through a net curtain at life.”

“You can’t survive without it – can’t cope without it.”

Learners who were interviewed also agreed with the necessity of being digitally literate:

It is very important to be able to look after yourself to know what’s going on....Filling out forms – you could do it all online

4.5.2 Benefits
The benefits of being digitally competent emerged as a sub-theme in the open comments given by respondents in the questionnaires. These reasons included work, leisure and communication and respondents gave everyday examples, such as banking, shopping, accessing information and online learning.

These reasons were echoed in interviews where all interviewees stated the importance of being digitally literate. Learners who were interviewed after Observation F stressed how important it is to use technology in everyday life from booking flights to using mobile phones, cameras and the play station.

The importance of being digitally competent for work was cited by tutors who responded to the questionnaires stating that it is “essential in today’s workplace and socially”, “it is also critical to be able to use computer systems in most workplaces” and “I think (IST) is very important in any workplace – in view of getting a job”.

The learners interviewed informally after Observation F also emphasised how digital skills are critical in order to get a job and the workplace co-ordinator spoke about how even those who are already in jobs need digital
skills training to survive in a changing work environment. She gave the example of a project where vintners now need to be able to order and stocktake online as the supplier, Diageo, have a new online system.

4.5.3 Digital Divide
The digital divide emerged as a sub theme in the questionnaires with over 30% of the respondents who provided open comments mentioning how important it is to be digitally competent at the societal level in order to “avoid a two-tier society” where those who cannot use technology are “lost” and “will be often outside the communication loop of their own and contiguous generations”.

“In ways, it is unfortunate that this is the case, but the way society at large is going, for better or for worse, this is the way it is. One can be quite marginalised or socially excluded if they have a low level of digital competence.

“It raises issues of the digital divide but competence is essential for participation in many current societal activities.”

In an interview, a learner stated that if you can’t use digital media “you’d be missing out”. This echoes the words of one of the tutors who stated that “nowadays anyone without basic computer skills is ‘lost’.

4.6 How do BES literacy tutors rate their digital competences?
The VEC ICT Strategy 2011-2015 sets out a number of desired outcomes including that “all staff are comfortable using existing, new and emerging technology for communication, collaboration, teaching and learning”. The findings would appear to suggest that the majority of BES staff are comfortable using ICT such as word processing, email and searching the Internet but are less comfortable using technologies such as tablets and Web 2.0 tools.
4.6.1 Digital Skills - Quantitative Findings

4.6.1.1 Presenting and Managing Information

A large majority of tutors rated themselves as quite skilled or very skilled in ICT skills such as word processing (91%) and file management (over 80%), with a smaller number rating themselves in the highest categories for creating presentations. All the respondents in the youngest category (25 to 34) stated they were very skilled at using word processing, presentations and carrying out various file management tasks. There was no obvious variation in skills according to the job role of the respondent.
The majority of respondents stated that they were confident about using browsers (94%), search engines (93%) navigating websites (83%), finding information on sites (94%) and carrying out everyday activities such as online financial transactions (83%) banking and shopping (93%). However, a third (33%) indicated that they either had no skills or limited skills when it came to evaluating whether a website was secure and trustworthy.

Those aged between 25 and 34 rated their skills the highest with 100% rating themselves as very skilled in using browsers, search engines and completing forms and doing shopping online. In contrast the over 65s were more likely to assess themselves as quite skilled (50%) at completing forms and doing online shopping (57%) rather than very skilled (38%, 43% respectively). Similarly, when it came to using search engines and browsers the older respondents rated themselves as quite skilled when it came to using browsers (75%) and search engines (63%) as opposed to the 25% and 37%
respectively who rated themselves as very skilled. The majority of respondents in each of the other age groups rated themselves as being very skilled in these categories.

Part-time tutors and volunteers in general rated themselves higher than the full time staff in their knowledge of web skills. 60% of full time staff stated they had limited skills in knowing if a website was trustworthy and 80% indicated they had limited skills in know if a website was secure. This compares to 88% of part-time staff and 60% of volunteers who said they were Quite Skilled or Very Skilled

4.6.1.3 Communicating and Collaborating

A large majority of respondents (98%) indicated that they were either very confident or quite confident in using emails. During interview K the Programme Co-ordinator confirmed that all tutors, both paid and unpaid, are expected to use email as the primary communication tool in line with the
VEC ICT strategic outcome that states that technology should be maximised to enhance communication across the organisation. However, when it came to using other online tools, over half of the respondents indicated that they had no skills or limited skills in either collaborating with others in an online workgroup (56%) or using social networking sites (53%). A small majority said they were quite skilled or very skilled at participating in online fora (55%) and using Skype (56%) and 70% selected the Quite Skilled or Very Skilled options for using Youtube.

Younger respondents rated their skills higher in all the categories. Those aged 55-64 and 65 or older they said they had Limited or No Skills in using social network sites (88%, 86%), collaborating in an online workgroup (88%, 88%) or participating in an online forum (75%, 75%).

**4.6.1.4 Security and Ethics**

![Security and Ethics Chart]

*Figure 4 - Security and Ethics*
Overall 42% expressed a limited or no understanding of copyright with regard to downloading music, video and images and 48% said they had limited or no skills when it came to copyright with regard to copying text and images from the Web. When analysing the data, the researcher became aware that she had inadvertently included the term “images” in both these questions and this may have caused confusion and affected the reliability of the data. Regardless, it would seem that a sizeable number of respondents are not confident regarding copyright of content downloaded from the Internet. There was no clear differences in the skills cited by the different age categories with the exception of setting privacy settings on a site such as Facebook where 86% of those aged 25 to 34 stated they had a Good or Very Good Understanding in comparison with the 50% or less of all the other groups who selected the same levels.

4.6.1.5 Everyday Technologies
When it came to everyday technologies, almost 90% indicated that they were either very skilled or quite skilled at using a mobile phone and approximately 85% indicated the same skill level at using a computer or printer. 70% of respondents stated that they were very skilled or quite skilled at taking photos with a digital camera, 63% at transferring photos to a computer and 60% at uploading photos to email or a website. The numbers of decreased further when it came to using newer technologies 55% stating they were quite skilled or very skilled using iPads or other tablet devices and 54%, stating they were quite skilled or very skilled using an ereader such as a Kindle.

Younger respondents rated themselves higher in all categories with large majorities of those aged 25-34 stating they were Quite Skilled or Very Skilled at uploading photos (100%) or using tablet devices or ereaders (86%). In contrast, the majority of those who were aged over 65 expressed they had Limited or No Skills in using tablets (88%), transferring or uploading photos or using an ereader (75%).

4.6.2 Digital Competences – Qualitative Findings
Qualitative findings in interviews with tutors and co-ordinators concurred with the above quantitative data. Interviewees stated they were comfortable using traditional ICT and the Internet.

“I am good at Word and file management… I can order stuff online and am comfortable using the Internet” (Tutor H)

“I can do some Word and Excel and could amend something in Powerpoint or Publisher if someone has created it already” (Tutor G)

“Comfortable enough using the computer and very comfortable using the Internet” (Interviewee K)

“Comfortable using a computer and Internet” (Interviewee J)

In the areas of security and ethics and collaboration, the qualitative data gained in the interviews concurred with the quantitative data from the questionnaires. Staff interviewed indicated that their skills levels in these areas were lower than their above mentioned traditional ICT and Internet skills.
“not comfortable at all on security and ethics or collaboration” (Interviewee J)

“I am not into social media – Facebook or online forums except the ones in Moodle. I don’t use Twitter. I made a conscious decision – have decided not to do it. I don’t want to engage with people I don’t know. It would drive me crackers.” (Tutor H)

“would like to do more collaboration” (Interviewee K)

While Interviewee G stated that lack of digital skills could be age related which concurs with the quantitative findings of the questionnaires where younger respondents rated their skills higher than older respondents. However Interviewee I, who was aged over 65, stated that:

“I am excellent at all the following: computer skills, Internet, Security, Camera/phone etc I learn by doing – I figure it out myself for any new stuff I’d give it a go. I’m not afraid to do something.” (Interviewee I)

The next section presents the findings on how the BES staff viewed the use of digital technologies in adult literacy.

4.7 What are the views of BES literacy tutors on using digital technologies in teaching adult literacy?

4.7.1 The importance of using digital technologies in adult literacy teaching

Documentation examined stated the importance of using digital resources in adult literacy teaching and learning. The ALOA document Adult Literacy and Basic Skills in a Changing Sector (2012) set out 7 priorities for consideration in the creation of the new Education and Training Boards. These include the development and implementation of policies that support the integration of IT into teaching and learning, the promotion of self-directed learning through technology to staff and learners to increase their baseline skills and the provision of appropriate ICT training for staff and the promotion of good practice across ETBs to encourage staff to integrate the use of digital and emerging technologies in the learning process.

Other documents such as the Adult Literacy Guidelines drawn up by the Department of Education and Skills (2012a) advocated that ICT provision should be integrated into literacy and numeracy provision as a general principle, and access to blended learning should be available and the NALA guidelines for good adult literacy work (2012a) also include the integration of technology.
4.7.2 Tutors’ Views
Quantitative data gathered in the questionnaires found that over 90% of the respondents said it was important to use digital technologies in adult literacy teaching, with 59% selecting the *Quite important* option and 33% selecting the *Very important* option. 7% said it was *A little important* and one person (1.8%) replied that it is *Not important at all*.

Qualitative evidence gathered from open-ended responses in the questionnaire concurred with these quantitative findings with respondents saying that using digital technologies in adult literacy teaching is important as we live in “the digital age” and “Technology provides learners opportunities to learn, develop and reinforce the basic skills of learning in new way”.

4.7.2.1 Tutors’ Views by Age
The importance of using digital technologies was stated by participants across the different age groups. 100% of those aged 45 to 64, 88% of over 65s and 86% of those aged 35 to 44 thought it was *Quite Important* or *Very Important* to use digital technologies in adult literacy. Those aged between 25 and 34 felt it was less important with 71% stating it was *Quite Important* or *Very Important* and 29% choosing the *A little important* option.

A number of participants over 65 gave reasons for using digital technologies:

“Computers can expand enormously the aids available both to student and tutor and make the learning experience much less “boring”

“One must keep up to date on modern developments especially when they can be of such great assistance in literacy teaching”

“I find it important as some of the learning packages are of great assistance in moving the student forward”

In a similar vein, one of the respondents in the youngest group (25 to 34) said:

“It is important because the positive aspects of digital technologies include the capabilities they have to better illustrate things and afford the opportunity to interact with technology to learn and be challenged in a fun and innovative way.”

However, three of the participants aged between 25 and 34 had contrasting views:
“...I think there are a few cases where using digital technologies may hinder learning by alienating people who get discouraged in their literacy study by their difficulties with IT.

“There are some old school methods that work better than the online resources available today when it comes to teaching literacy.”

I think at the basic levels, pen & paper is sufficient — it’s also about the teaching relationship you have with a person. As literacy improves computer skills should be introduced to support literacy development and support development of ICT skills themselves.”

4.7.3 Independent Learning

One sub-theme that emerged was the value of using digital technologies to promote independent learning. Examination of the VEC ICT Strategy (2011) found that Independent Learning is a Key Strategic Area where the desired outcome is that learners become independent with the skills needed to live in the Knowledge Society. Within this Strategic Area, technology is cited as a way of supporting independent learning and accommodating different learning styles. Self-managed learning is one of the four strategic areas in the Adult Education Service Strategic Framework (2009) with desired outcomes being integrated independent skills in curricula, and the use of new and existing technologies to support teaching and learning.

In the questionnaires, many tutors said that using technology helped the learner to gain confidence both in literacy skills such as reading and spelling but also in using the technology itself which acts as a support for “enhanced interactivity and learner involvement in the process”. The value of digital resources in supporting self-paced learning and accommodating different learning styles “the visual, auditory and kinaesthetic/tactile approach to learning” promoted learner independence and autonomy with a number of tutors stating that the use of technology “empowering” for the learner.

The class observations also corroborated the idea of technology supporting independent learning. In the classes where technology was not used, the tutors used a more traditional didactic teacher-centred approach. In contrast, in the observations where technology was used, the researcher noticed that the tutors took a more facilitative role. In these classes, the tutor acted more as a guide and support while the learners worked independently on tasks.
In Observation B, the tutor supported the learners to carry out a number of activities on iPads including taking photos, recording themselves doing spelling exercises, using the Notes app to type lists and doing web searches, with the focus being on spelling practice. In Observation F, the tutor adopted a similar role, guiding the learners who worked away on their own carrying out tasks on the computers for much of the class. The use of the computers was integrated into spelling, reading and writing practice.

Interviewees H and K also cited technology as being a way to support independent learning not only in the classroom but also outside in the Self-Access Learning Resource Centre or at home.

Learners too backed up the idea of technology supporting independent learning in a number of ways. The learners from the Observation C class said they used Google Translate at home when they did not understand an English word. Learners from the Observation F class told the researcher that after using the computers in class they had become more independent. They now used the computer at home to check their spellings and they were confident at using the Internet, whereas prior to going to class, they had to ask a family member for help.

4.8 What is the current practice in BES regarding the use of digital technologies in teaching adult literacy?
While the importance of using technologies was recognised by tutors, the data collected across the various tools found that the actual practice of using technologies was varied.
4.8.1 ICT

In practice tutors were most likely to use ICTs such as a desktop computer or laptop, cited by 65% of questionnaire respondents. Specific literacy software was used by 57% of tutors with their learners and just over half of the tutors had used websites that have materials and resources aimed at adult literacy learners. Mobile phones were used by 39% and the other resources were used by small minorities.

There was a variation in the usage according to the profile of the respondent. Full time resource workers were the most frequent users of technology in their classes with all having used a computer in their teaching, and the majority having used an interactive whiteboard, digital camera and specific literacy software and websites (80%). Other devices were used less frequently with 60% using mobile phones, 40% using iPads or other tablet devices and 20% using ereaders.
Volunteers were least likely to use any technologies. Just over half (52%) had used a computer and 54% had used specific literacy software with learners and 35% using literacy websites. Very few volunteers had used any other digital technologies such as a mobile phone (28%) or an iPad or other tablet or ereader (7%). The usage of digital technologies amongst part-time paid tutors came between that of full-time staff and volunteers, with 80% having used a computer in class, 73% said they used literacy websites and 60% specific literacy software. Just over half the part-time tutors stated that they had used digital cameras (60%) and mobile phones and iPads or other tablet devices (53%).

The observations bore out the varied use of digital technologies in teaching. Of the six classes observed, two tutors did not use any technology (one full time, one part-time), one used to present content on PowerPoint (part-time) and three tutors (two full-time and one part-time) used technology to present and practice material.

4.8.2 Use of Tablets
While a majority (86%) of those aged between 35 and 34 said they were very skilled or quite skilled at using an iPad or other tablet, very few (17%) had used one in teaching adult literacy learners. In the next age group (35 to 44) 73% expressed their skill levels as being very skilled or quite skilled and 21% of this group had used an iPad/tablet in class. 47% of those between 45 and 54 said they were very skilled or quite skilled and 41% said they had used an iPad or tablet with learners. In the 55 to 64 age group, 63% said they were very skilled or quite skilled while 25% had used an iPad with learners. In the over 65 category, the numbers saying they were very skilled or quite skilled at using a tablet dropped to 13%, however, while nobody in this group had used one in class, two people in this age group (29%) had used an ereader.

iPads were used in Observation B, and the researcher noted that with the exception of one learner, they have a motivational effect and the learners actively engaged in all the activities set by the tutor to practise spelling. However, one learner disengaged completely.
4.9 Factors influencing the use/non-use of digital technologies in teaching adult literacy within BES

Coding the qualitative data led to the emergence of a number of themes across all the data collection tools regarding the factors that influence the use and non-use of digital technologies in teaching adult literacy within BES.

4.9.1 Age of Respondents
While younger respondents rated their digital skills higher than the older tutors, the findings did not show that the use of technology in adult literacy teaching was related either to the age of the respondent or to the level of digital competence claimed by the respondent. 79% of those aged 35 to 44 and 71% of those aged over 65 said they had used a computer or laptop. 65% of those in the 45 to 54 year category, 63% in the 55 to 64 category and of the 6 volunteers in the youngest age group, 2 (33%) had used a pc with their literacy learners.

The observations bore out the findings that the use of technologies did not seem to be related to age. The oldest tutor observed (Observation C) was very comfortable using technology as an integrated part of class and used a YouTube video to introduce the topic and supported the learners in the group work independently on an online quiz on a learning website. The youngest tutor (Observation D) used a PowerPoint presentation to introduce the topic being covered in class. The tutors in Observations B and F fully integrated the use of iPads and computers respectively into their classes. These tutors were aged between 35 and 54 as were the tutors who did not use any technologies in Observations A and E.

4.9.2 Availability of Resources
A number of respondents to the questionnaire cited the lack of availability of ICT infrastructure as one of the reasons why they do not use technologies in their classes.

*When I am involved in tutoring these facilities are not available to me.*

*My sessions have largely been in rooms without access to these tools.*

*Not all of them (resources) would be available in any case.*
I have not been able to use them with one of my students because the venue where the class was held did not have internet access.

It is often not possible to use the above mentioned resources because I am working in the community where such resources are unavailable.

However, with the exception of one room, all the observations took place in rooms which have PCs and interactive whiteboards but Internet access is not available in all rooms. While many literacy classes take place in community venues, the Self-Access Learning Centre has a library of digital resources such as netbooks, iPads, projectors and cameras for tutors to borrow.

In interviews, tutors said that they did not feel that the availability of resources was a major issue. The teacher from Observation A said that while there were no IT facilities in her classroom, she could book another classroom to use digital resources but she didn’t. Teacher H and Teacher I said however, that if there were no resources available, they would encourage their learners to go to the Self-Access Learning Centre. During his interview, the Programme Co-ordinator gave his view on resources:

“There are resources in the classrooms but they aren’t used. There are interactive whiteboards that aren’t used. There is a suite of iPads that isn’t used. The issue is not the resources, it is the relationship with the resources.” (Interview K)

4.9.3 Learner Ability and Confidence

The reading/writing ability of the learner emerged as a sub-theme with seven respondents stating that it was necessary to bear in mind the learner’s literacy ability and not to introduce technology too soon. This theme also came out in the mini interviews which took place after Observation B, where learners said that you needed to have good spelling before using the Internet and that reading and spelling needed to come first. However, during the observation, with the exception of one learner who was disengaged, none of the others appeared to experience any difficulty in completing any of the activities on the iPads including using the Internet. Confidence was also cited by tutors in the open-ended responses to the questionnaires:

“My student has a basic level of literacy and I do not want to overwhelm him with technology until his confidence increases.”
“Depends on the literacy level of student and their confidence level.”

“On my current student it is not advisable. He is a very basic student and cannot even recognize letters. Using a computer scares him.”

However, these views contrast with other tutors who indicated that using technology with their learners “instils confidence” and “abates the initial fears that they may have around using technology”. In the interviews, there was also a mix of viewpoints. Tutor H said that the use of technology would be dependent on what was being taught. Co-ordinator K said that “technology is a huge aid to those at the lower levels” and Tutor I stated that

Even the most basic learner can use the computer, it promotes independent learning. Another thing, people find it easier to say they are learning on the computer than learning to read or write, for their self-esteem it is better.

Under this theme, there did not appear to be any relationship between the age of the correspondent and the views they expressed.

4.9.4 Tutor Ability and Confidence

The theme of teacher ability and confidence also emerged in the findings. Tutor A said her own IT skills were limited. In the questionnaires, a number of tutors said they preferred to use “pen and paper” and a number cited their own skills with one respondent saying “…my reluctance would also relate to a lack of confidence in their use in a group setting” and another saying “…I’m not a very competent techie myself…..

This theme was also brought out in interviews. Tutor J said that tutors needed to be comfortable using the technologies. Tutor G also said that tutors needed to have the skills themselves and that some tutors were more skilled than others and Tutor I said that “it might be that people may not be comfortable themselves with technology” while Co-ordinator K said:

It’s the attitude, openness, fears, confidence… it’s more work than the traditional approach. It’s more challenging…. We need to have openness to learning ourselves, independence.
4.10 Summary
This chapter presented the findings of the research with data obtained from questionnaires, observations, interviews and document examination. The general findings were that BES staff felt it was important both to be digitally competent and to use digital technologies in teaching adult literacy. Respondents rated their ICT skills higher than their knowledge of the legalities and security of web content.

The practice of using technologies in teaching adult literacy was varied with some tutors fully integrating the use of digital resources into their classes and other tutors not using any technology resources at all. The following chapter will discuss these findings in relation to the literature.
Chapter 5 Discussion

5.1 Introduction
Denscombe (2010) says the aim of examining a topic is either to describe its constituent elements, to explain how it works or to interpret what it means. In many cases, a description is the starting point for an explanation or interpretation. The previous chapter described the findings of the research. This chapter provides a discussion of these findings and relates them to the literature. An interpretative approach is used, with the analysis providing a broad understanding of what is occurring within the literacy service of one organisation rather than providing a universal result (Denscombe 2010).

5.2 Case Study and its Limitations
The case study approach allowed the researcher to examine the research questions in depth from a number of perspectives. However, it is recognised that there are limitations to the findings. While the completion rate for the questionnaires of 78% was acceptable (Fowler 1993 cited in Robson 2011), it still meant that the views of just over one-fifth of the literacy staff were not included in the findings. Also, given the time constraints, six observations and five interviews were carried out. A more representative picture would have emerged had the researcher had the opportunity to observe and interview a larger number of staff members. Notwithstanding these limitations, the case study methodology provided a detailed illustration (Denscombe 2010) of the views, experiences and practices of a number of the literacy staff. The next sections explore these experiences under the various research questions with reference to the literature.

5.3 What are the views of BES literacy tutors on being digitally competent?

5.3.1 The importance of being digitally competent
The research found that there was almost unanimous consensus amongst tutors, co-ordinators and learners regarding the importance of being digitally competent in order to fully function in today’s society. This reflects the literature where technology is now seen as a core competency (OECD 2012, European Commission 2005) and even a human right (Ferrari 2012). In the
study, respondents and interviewees cited the necessity of being digitally competent for participating in social activities and in the workplace which correspond to the social (Bruce 2002, Newrly & Veugelers 2009), and economic benefits (Newrly & Veugelers 2009, Clark & Visser 2011) espoused in the literature.

5.3.2 Digital Divide
Qualitative evidence from questionnaires and interviews suggested that the impact of not being digitally competent could lead to an individual being excluded, and almost a third of the respondents specifically referred to the digital divide, a concept that is also referred to in the literature (Ginsburg et al 2000). E-inclusion is part of the EU’s strategy set out in the Digital Agenda for Europe (2010) which aims at promoting the use of ICT to “…overcome exclusion and improve economic performance, employment opportunities, quality of life, social participation and cohesion”. These aims are similar to those of NALA’s social practice model for literacy (2012a). Given the importance of equipping adult learners with digital literacy skills as part of literacy learning, part of this study looked at how tutors rated their own digital competences.

5.4 How do BES literacy tutors rate their digital competences?

5.4.1 ICT Skills
The European Reference Framework of Key Competences for Lifelong Learning (2006) defines a competence as a combination of skills, knowledge and attitudes. Digital competency includes the individual having basic ICT skills, and an understanding of common computer applications such as word processing and use of the Internet. This research found that over 80% of the literacy tutors rated themselves quite highly in basic ICT, email and Internet search skills. This compares to the average of 75% of Europeans who were found to be able to perform tasks in the areas of operational computer and internet skills in the Digital Agenda Scoreboard (2012).

5.4.2 Newer Technologies
Over half of the respondents in the research indicated that they had limited or no skills in collaborating in an online forum or using social networking
sites. In the youngest category (25 to 34) all the respondents indicated they were comfortable using social media sites and Skype and 86% were Quite Skilled or Very Skilled at participating in an online forum. All but one of those in the youngest age group were unpaid volunteers. These levels are much higher than those of the average European citizen where the Digital Agenda Scoreboard (2012) found that a minority of participants were able to perform activities such as posting messages to online fora (33%) or making telephone calls over the Internet (26%).

The responses of the older full time and part-time paid tutors are more comparable to these European figures. In this study, the minority of respondents aged over 55 indicated they were Quite Skilled or Very Skilled at participating in an online forum (25%) and using Skype (37.5%).

5.4.3 Security and Privacy
The Digital Agenda Scoreboard (2012) found that 46% of Europeans felt they had adequate skills to protect the privacy of their data and to keep their personal computers secure from viruses. This contrasts with the findings in this study which indicated that 59% of tutors were comfortable installing anti-virus software, 69% could set secure passwords and 46% were able to change privacy settings on sites such as Facebook. The majority of younger tutors (35-44) stated they were Quite Good or Very Good at setting passwords (100%), changing privacy settings on Facebook (86%) and installing anti-virus software (86%).

5.4.4. Ethics and Legal Awareness
Almost half of the respondents expressed that they had either a limited or no understanding of copyright regarding downloading music or video or copying text and images from the Web. Over half of the respondents said they had limited or no knowledge of software licensing, phishing or spam. There was no discernible pattern according to the age of the participants. It would appear that almost half of the BES literacy staff do not have the basic competences in the areas of copyright and the protection of personal digital information recommended by the Norwegian Institute for Adult Learning (2010) for all those involved in training basic adult education.
5.4.5 Digital Literacy
The submissions by the Department of Education and Skills (DES) to the Joint Oireachtas Committee on Education and Social Protection (2013) on digital literacy defines reading literacy as including both digital and printed text, referring to the Education Research Centre’s identification of unique skills required for effective digital reading such as locating, critically evaluating and synthesizing and having the ability to use navigational devices.

17% of the respondents in this research said they had limited or no skills in using hyperlinks to navigate websites, 23% said they had limited or no skills in knowing if the information on a website was reliable and secure and 33% of the tutors expressed they had no or limited skills in knowing if a website was trustworthy or secure. This implies that approximately a quarter of the literacy tutors do not have some of the digital literacy skills set out by the DES.

5.4.6 Teacher Professional Competences
This Digital Agenda Scoreboard (2012) includes ICT and Education as an action area to enhance digital literacy, skills and inclusion. This area of the Scoreboard refers to the use of ICT by teachers in primary and secondary, including vocational, schools. While this research study focused on adult literacy tutors, the results concur with the ICT in Education Survey (2013) in finding that teachers were more confident in their operational skills such as in using word processing, Internet, email, file management than in social media skills such as participating in social networks and online discussion fora.

The literature would suggest that tutors increasingly need more than these operational ICT skills. The Technology Literacy skills level of the UNESCO ICT Competency Standards for Teachers (2008) includes the objective that teachers should be able to use social media and other online collaborative tools. The BES literacy tutors would appear to be at the foundational level Digital Competence Level of the DigEuLit project (Martin and Grudziecki 2005) project which consists of word processing, email, and finding information on the web. However, Martin and Grudziecki (2005) argue that
the higher competence level of Digital Usage is crucial for teaching professionals where, in addition to having basic skills, individuals will be able to draw on competences specific to the profession and embed usage into their professional activities.

5.5 What are the views of BES literacy tutors on using digital technologies in teaching adult literacy?
Buiskool et al (2010) identified the ability to be an ICT facilitator as one of the key competences required for adult learning professionals, however, they (2010) also state that tutors will need to be able to use new media as well as ICT in order to support learners, and will need to be open to change when using new technologies. This section looks at how BES tutors view the use of digital technologies in teaching literacy.

5.5.1 The Importance of Using Digital Technologies in Teaching Literacy
Digital technology is prevalent in almost all areas of our lives, with constant change (Martin 2009) in the “network society” (Castells 2011) and the “Information Age” (OECD 2012). In such circumstances, Jacobson (2012) states that adult literacy tutors need to support learners not just in the traditional print literacies but also in digital media. The majority of the research participants concurred with this opinion, with 91% stating that it was important to use digital media and resources in adult literacy teaching.

5.5.2 Independent Learning
Qualitative findings from questionnaires, observations and interviews indicated that a positive impact of using technology was that it provided the opportunity to support learners to become more independent and self-directed. The VEC ICT Strategy (2011) and Adult Education Service Strategic Framework (2009) both included the development of independent learning skills through the use of technology. This reflects Chase and Laufenberg’s (2011) idea that technology supports independent inquiry-based learning where learning is in the hands of the learner, and Silver-Pacuilla (cited in Jacobsen, 2012) who found that even learners at the lowest literacy levels could engage with online learning content and in doing so became more self-confident, self-directed and independent.
5.5.3 Empowerment
The concept of literacy is more than just a set of technical skills (NALA 2004) but rather the social practice model implies that the needs of the individual learner need to be considered and literacy practice also includes confidence-building and personal development (NALA 2012a). In the questionnaires, tutors who had used technology with learners cited its benefits in actively engaging the learner in the learning process, in promoting independence and confidence and in helping to “empower” the learner. This is concurs with Martin’s “intellectual empowerment” model (2005) whereby digital literacy can be transformative, and Jacobsen’s theory (2012) that digital technologies support empowerment when learners are actively engaged in the process by helping to define and initiate projects themselves.

The final area of the research looked at how technology was used in practice by literacy tutors to support the learning process.

5.6 What is the current practice in BES regarding the use of digital technologies in teaching adult literacy?

5.6.1 Variation in Practice
Lesgold and Welch-Ross (2012) argue the case for incorporating technologies into literacy instruction as technology and literacy are entwined in the digital age. While the above findings indicate that tutors felt it was important to use technologies in literacy teaching, the research found that the practice of using digital media and resources in adult literacy teaching was mixed. Some tutors did not use any digital tools or resources at all. Others used digital resources to present content, to practice skills (Ginsburg 1998) or as an instructional tool to support and enhance the learning (Ginsburg 1998).

5.6.2 Most Commonly Used Technologies
The research found that a computer or laptop was the device that was most frequently used by tutors in class with learners. Specific literacy software and websites had also been used by over half of the tutors in class. Large majorities of tutors had never used an interactive whiteboard, digital camera, mobile phone or a tablet device or ereader in class with learners. These
findings broadly reflect the results of the EU Digital Agenda Scorecard regarding the use of ICT in Education where large majorities of teachers had never used digital readers or cameras with learners.

5.6.3 Mobile Technologies and Web 2.0 Tools
The study found that 39% of tutors had used a mobile phone and only a quarter (25%) of respondents had used a tablet device such as an ipad in teaching literacy. Mellar et al (2004b) found that mobile technologies such as tablets and mobile phones were motivating for the learners and enabled flexibility in teaching. Observation B and open responses from other tutors concurred with Mellar et al (2004b) indicating that those tutors who had used tablet devices and mobile phones in class found it created a “positive learning atmosphere”.

While only a minority of the respondents used mobile devices in teaching, the literature would suggest that given the need to make literacy practice real and relevant for the learner, (Knowles 1990, Jordan et al 2008), there is a growing need to use mobile technologies and popular tools such as social media (Sweeney 2010, EU High Level Group of Experts on Literacy 2012) which are becoming more prevalent in everyday life.

5.6.4 Reasons for Non-use of Digital Media and Resources
Five tutors said they did not use technology because their learners were at a basic level. This may reflect Ginsburg et al’s (2000) assertion that tutors may be reluctant to introduce technology in the belief that it takes time from traditional literacy and numeracy. In contrast, Interviewees I and K suggested that technology can be used with learners of any levels and Mellar et al (2004b) suggested that when using technologies in literacy learning, the two areas of skills are learned independently and the acquisition of one skill does not affect the acquisition of the other. In fact, learners acquire two sets of skills simultaneously which doubles the value of their study time is doubled (Moser Report DfEE, cited in Mellar et al 2004b).

One tutor stated that their reason for not using any technology was because their learner declined its use in class, and one learner in Observation B did
not engage with the activities using the iPads. Ultimately, when it comes to using technologies with learners, it must be the learner who decides rather than the educator (Jaffee 2001).

5.6.5 Access to Resources
Seven tutors stated that hardware and software were unavailable when they were teaching and this reflects Ginsburg (1998), Kotrlik and Redman (2005) and Yildirim (2007) who stated that access to resources prevents tutors from integrating technology into basic education classes. The EU Survey of Schools: ICT in Education (2013) also found that the availability of ICT equipment was the major obstacle cited by teachers to using technology in teaching and learning.

5.6.6 Tutor Attitude
However, other findings suggested that the availability of resources was not the key reason for the non-use of technology. The EU findings (2013) showed that confident and supportive teachers were able to make the best use of poor ICT learning environments. The situation would appear to be similar in BES. While some rooms do not have computers or Internet access, the Service has a small library of portable digital resources that are available to borrow including laptops, netbooks and iPads.

During this research, the teacher observed in class F fully integrated the use of ICT into the learning activities even though the computers used were slow and outdated. Interviewee K suggested that it was not the resources that were important but rather what was done with the resources. It would appear, therefore, that when using technologies in learning activities, the ICT infrastructure is of less consequence than a tutor’s confidence and openness to using those technologies.

5.6.7 Integrated Approach
Dillon-Marable and Valentine (2006) suggested four characteristics of computer integration in Adult Basic Education, Seamless, Appropriate, Facilitated and Empowering and echoes Ginsburg’s (1998) earlier work on using technology as an instructional tool where technology is seamlessly integrated into the instructional activities. While the primary learning
outcomes may be literacy or numeracy, the development of simultaneous technology skills is another valuable outcome (Ginsburg 1998, Mellar et al 2004b). Open responses to questionnaires and class observations carried out during the research found examples of these models of seamlessly integrating technology where the focus was not on the technology for technology’s sake (Jacobson (2012) but rather was a tool to support the learning process.

While the tutor in Observation B used tablet devices with her group and the tutor in Observation F was in a room with very old slow computers, both tutors employed a similar instructional strategy that allowed the integrated use of the various technologies to support the learning objectives of their classes. In each case the tutor adopted the role of facilitator where she provided guidance to the learners who worked on the tasks provided. While the learners worked independently, they also helped one another and at certain stages of the class the group convened for a plenary discussion which created a relaxed collaborative learning environment. This constructivist approach where the tutor facilitated learners in problem solving and where learners helped one another corresponds to Martin and Grudziecki’s (2005) Digital Usage Level where situational embedding allows learners to apply their life knowledge to the task and also mirrors Wenger’s Community of Practice (2006).

5.7 Summary
This chapter examined the research findings with relation to the literature. Tutors need to be digitally literate themselves in order to support their learners to reach their full potential (Poore 2011). The research findings appear to suggest that while tutors expressed the importance of being digitally literate to function in society, in some cases, they themselves lacked the skills required particularly in the area of the technologies that are likely to become more widespread such as tablets and ebooks (Flanagan 2013, IDC 2013, Griffey 2012).
The majority of literacy tutors indicated that while they are competent ICT users and have comparable skills to the average European citizen but have varying levels of skills in using newer media. A high number of tutors expressed their lack of knowledge in the areas of copyright and other legal and ethical areas.

The practice of using technologies in literacy instruction is varied, with some tutors not using technology at all, preferring to focus on the printed text, while others seamlessly integrated digital literacy into their programmes and were open and enthusiastic about using existing and newer technologies.

Overall, some tutors indicated that they themselves do not have the digital skills to keep up with“…the evolving needs derived from rapid technological change and uptake” (Ferrari 2012). Consequently, professionally they may not be in a position to fully support their learners to be “empowered” (Martin 2005, Dillon-Marable & Valentine 2006, Jacobsen 2012).
Chapter 6 – Conclusion

6.1 Introduction
Being literate is seen as a powerful tool in challenging inequality and dependency (Freire 1998) and adult literacy tutors need to be able to facilitate learner empowerment as part of the learning process (NALA 2004). Over time the definition of literacy has evolved and NALA now define literacy as being able to speak, listen, read, write, use numeracy and use technology to communicate and handle information (2012a) in everyday life. In order to support individuals who have literacy issues, adult literacy tutors themselves need to have the skills required to support their learners to develop and reach their full potential. These skills include digital skills.

6.2 Review of Investigation
The purpose of this research was to explore the digital skills of BES tutors, to examine their views regarding the use of ICT resources and to investigate current practice regarding the use of digital technologies in literacy tutoring. A case study methodology allowed the researcher to examine the real-life situation of the tutors in some depth. Triangulation by using multiple tools of data collection allowed for the examination of the various variables from different perspectives (Bell 2010) and helped to ensure the validity of the data. The findings were analysed in relation to the literature and outcomes of the research are outlined in the following section.

6.3 Research Outcomes
6.3.1 Literacy Tutors – Digital Competences
The research found that while there was almost unanimous agreement about the importance of being digitally competent, not all tutors considered themselves to be digitally competent. Overall the tutors expressed high levels of confidence levels in traditional ICT skills, email and basic Internet searches. In contrast, tutors expressed they were less confident in using newer technologies such as tablets, social media and other Web 2.0 tools. Younger tutors expressed higher confidence in their digital skills overall and stated they were more likely to be proficient in the use of tablets and social media.
An area for concern was the high numbers of tutors who expressed their lack of skills in the areas of evaluating online information and online privacy, security and copyright matters. In particular, the high numbers of tutors who expressed that they had little or no understanding of copyright with reference to copying text and images from the Internet. Regardless of the level of the learner, the researcher would suggest that it is vitally important that all tutors have a high level of knowledge of copyright issues if they are to support learners in doing research and assignments.

6.3.2 Literacy Tutors – Use of Digital Technologies in Teaching
The second area of the research focused on the use of digital media and resources in adult literacy teaching and learning. The answers provided in the questionnaires suggested that the majority of tutors felt it was important to use digital technologies with learners. However, other findings showed that in practice the use of technologies in literacy teaching was varied. Some tutors did not use any digital media or resources at all, while others closely integrated the use of technologies into their teaching. The tools most commonly used were desktop computers, literacy software and learning websites.

The use of digital technologies was not necessarily related to age with some younger tutors preferring to use pen and paper. Older tutors were open to using IT resources such as literacy software even if their own technical skills were not advanced. Where technology was used, it appeared to help the learner to gain confidence and to promote learner independence.

6.4 Recommendations
6.4.1 Continuous Professional Development (CPD)
The VEC ICT Strategy and the AES Strategic Frameworks examined during the data collection would suggest that the literacy tutors are part of a digitally supportive organisation. Using ICT in teaching and learning is a strategic goal in the AES and the service provides ongoing support for staff in the form of regular ICT training and a supported Learning Resource Centre for both staff and learners. It is recommended that this practice of CPD and support continue, with the researcher feeling that particular emphasis should
be put on developing competences in the areas where the tutors expressed they had lower skills such as copyright.

**6.4.2 Areas for CPD**
Current use of technology in literacy teaching is predominantly focused on the use of literacy software, word processing and Internet use. Therefore, specific areas for CPD could be Web 2.0 tools (Lesgold & Welch-Ross 2012) such as group collaborative communication software, bulletin boards and discussion tools, speech-to-text and text-to-speech tools and social media. These tools are text-rich and therefore provide the potential for adults to practice their literacy skills in real life scenarios.

It is also recommended that CPD be provided in the use of technologies that the research indicates are likely to become more prevalent. CPD should provide the tutors with the opportunity to engage with digital reading environments, and could include the use of tablets, smartphones and other mobile devices (EU High Level Group of Experts on Literacy, National Digital Strategy for Ireland 2013). This would provide the tutors with the opportunity to upskill their own personal digital skills and also develop their professional skills.

**6.4.3 CPD for Volunteers**
As volunteers play a large part in providing adult literacy tuition, it is also recommended that training and support be provided to volunteers in the use of digital media with their learners. Currently, using ICT in literacy teaching comprises one short session as part of Initial Volunteer Training. It is recommended that additional sessions be provided on an on-going basis and the Service could explore the possibility of volunteers sharing best practice in a similar way to the paid tutors. Likewise, it is recommended that the service provide support to those volunteers who need to update their own digital skills.

**6.4.4 The Future**
The VEC in which the research took place, merged with two other VECs in 2013 to create a new ETB. It is currently unclear what implications this will have for adult literacy education in the region. While it is recognised that
there can be challenges in the merging of organisations, it is also felt that there may be an opportunity for practitioners from the literacy services of the three existing VECs to collaborate and reflect on the use of digital media and on the changing nature of literacy in the digital age. It is recommended that the possibility of shared training sessions or the extension of the Communities of Practice model be considered where practitioners can share their experiences. By co-operating on professional development initiatives, new shared experiences can be created. Given the wide geographical location of the three VECs, technology could be used to support any such initiative.

The current recruitment procedures for literacy tutors include the requirement to be competent in ICT however, it is not specified which competences are required. In the future, it may be beneficial to set out the specific competences and the levels a literacy tutor requires. Where a successful candidate does not meet these requirements, training or support could be provided. This could be the case for both paid tutors and unpaid volunteers.

6.4.5 Policy
The Further Education and Training (SOLAS) Bill 2013 requires SOLAS to develop a strategy to promote and develop literacy and numeracy (NALA 2013b). It is the view of this researcher that digital literacy could be integrated into this strategy and perhaps the SOLAS strategy could also link to the National Digital Strategy (2013) which includes the provision of training to increase citizens’ digital skills by and initiatives to increase ICT use in education.

It is also recommended that integrated curricula should be developed in the area of adult literacy to include digital literacy as a core skill to be embedded in the provision of basic skills such as reading, writing, numeracy and communication. This could be similar to the work being carried out by the National Council for Curriculum and Assessment (NCCA) at primary level and the reforms of the Junior Certificate that include digital literacy.
6.4.6 Further Research

The first results of PIAAC due to be released by the OECD in October 2013, will provide international benchmarking regarding adult skills in the areas of literacy, numeracy and the ability to solve problems in technology rich environments while the Survey of Schools: ICT in Education released in 2013 explored the use and attitudes to technology in Europe’s primary and secondary schools.

There is scope for further research and benchmarking specifically in the adult literacy sector to explore the digital skills of tutors and the andragogical perspective of using digital technologies. This small scale study focused on literacy tutors, both paid and unpaid volunteers, within one adult education service, however, there is an opportunity for further investigation to ascertain how adult literacy tutors compare with their colleagues nationally and internationally.

6.5 Summary

*Digital Competence is both a requirement and a right of citizens, if they are to be functional in today's society. However, it has been shown that citizens are not necessarily keeping up with the evolving needs derived from rapid technological change and uptake.*

(Ferrari 2012)

Given the increasing use of digital media in all areas of life, it is critical that all citizens including adult literacy tutors possess the skills required to function in everyday life. However, not alone do tutors need to be digitally literate themselves, but they also, where appropriate, need to be able to introduce digital skills to their learners so that they can reach their full potential.

As a follow on from this research, the researcher has met with the BES Literacy Co-ordinator and the organisation’s Learning Technology Officer with the view to creating a CPD programme to provide training and support for tutors on the use of digital media. Some of the findings of this study will feed into the development of this CPD programme. One of the items agreed was the inclusion of the use of digital media in curriculum plans and the
possibility of using a Community of Practice model where tutors can share best practice with their peers in an informal and supportive environment.

While this research has focused specifically on tutors in one adult education service, it is hoped that the project, albeit in a very small way, has contributed to the advancement of knowledge regarding digital literacy from the perspective of the adult literacy tutor.
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Appendices

Appendix A  Permission to Conduct Research
Appendix B  Covering Email to Participants
Appendix C  Questionnaire
Appendix D  Class Observations (A-F)
Appendix E  Interviews (G-K)
Appendix F  Document Analysis
Appendix G  Qualitative Data Themes
Appendix A – Permission to Conduct Research

Email to Adult Education Officer – 10 March 2013

Dear [Name],

I am currently doing a research Masters in Digital Media Development for Education through the University of Limerick and I would like to undertake this research in the Adult Education Service Basic Education Solutions programme.

The focus of the research is digital literacy and the use of digital technologies in adult literacy teaching and learning. I would be grateful therefore, if you would give me permission to distribute questionnaires, observe classes and interview staff and learners within the Basic Education Solutions Programme.

Many thanks

Deirdre Aherne

Reply from Adult Education Officer – 10 March 2013

Hi Deirdre

I have no problem with you doing your research in AES Basic Education Solutions programmes.

Regards

[Name]
Email to Basic Education Solutions Co-ordinator – 10 March 2013

Dear [Name]

I am currently doing a research Masters in Digital Media Development for Education through the University of Limerick and I would like to undertake this research in the [Area].

The focus of the research is digital literacy and the use of digital technologies in adult literacy teaching and learning. I would be grateful therefore, if you would give me permission to distribute questionnaires, observe classes and interview staff and learners within the Basic Education Solutions Programme.

Many thanks

Deirdre Aherne
Appendix B – Covering Emails to Participants

Email to Adult Literacy Tutors -

From: Deirdre Aherne
Sent: 11 March 2013 17:08
To: BES - Tutors; AES - ALSS Core Staff
Subject: Assistance with Research

Dear Tutors

I am currently doing a research Masters in Digital Media Development for Education through the University of Limerick. The focus of the research is digital literacy and the use of digital technologies in adult literacy teaching and learning.

As part of the research I am required to collect data on the above topics and I would be very grateful if you would give a few minutes of your time in order to complete an anonymous online questionnaire which I will forward next week.

Any information will be treated in the strictest of confidence and there will be no means of identifying you in the final thesis report.

Many thanks
Deirdre Aherne
Hello everybody

I think [redacted] mentioned to you that I am currently doing a research Masters in UL. The focus of the research is digital literacy and the use of digital technologies in adult literacy teaching and learning.

As part of the research I am required to collect data on the above topics and I would be very grateful for your assistance by completing a questionnaire which can be accessed here:

https://www.surveymonkey.com/s.aspx?sm=_2bez8IiTB7nCgB_2bNB9P_2fUKw_3d_3d

There are 14 questions on 8 screens (pages) and it should take no longer than 10-15 minutes to complete.

Any information will be treated in the strictest of confidence and there will be no means of identifying you in the final thesis report. If, however, you wish to opt out of doing the survey, please click here:

https://www.surveymonkey.com/optout.aspx?sm=_2bez8IiTB7nCgB_2bNB9P_2fUKw_3d_3d

Thanks a million in advance for your assistance – I really appreciate it.
Deirdre Aherne
Appendix C - Questionnaire

Digital Technologies in Adult Literacy Teaching and Learning

1. Are you a?
   - Full time resource worker
   - Part-time tutor
   - Volunteer
   - Other (please specify)

2. Which of the following do you teach? Please tick all that apply
   - Literacy
   - Numeracy
   - ICT/Digital Media
   - ESOL
   - Other (please specify)

3. Are you male or female?
   - Male
   - Female

4. What is your age?
   - 18 to 24
   - 25 to 34
   - 35 to 44
   - 45 to 54
   - 55 to 64
   - 65 or older
5. Digital competence involves the confident and critical use of Information Society Technology (IST) for work, leisure and communication. How important do you think it is to be digitally competent?

- Very important
- Quite important
- A little important
- Not important at all

Comment

6. How important do you think it is to use digital technologies in adult literacy teaching?

- Very important
- Quite important
- A little important
- Not important at all

Comment
7. How would you rate yourself on each of the following?

<table>
<thead>
<tr>
<th>Task</th>
<th>I have no skills in this area</th>
<th>I have limited skills in this area</th>
<th>I am quite skilled in this area</th>
<th>I am very skilled in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a computer</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using a printer</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using a mobile phone</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using tablet device (iPad or Android)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Taking digital pictures with a camera, phone or other device</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Transferring photos to a computer</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Uploading photos to email, photo sharing website, Facebook etc.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using an e-reader (e.g. Kindle)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Downloading a book/newspaper or magazine to an e-reader or tablet device</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
8. How would you rate yourself on each of the following?

<table>
<thead>
<tr>
<th></th>
<th>I have no skills in this area</th>
<th>I have limited skills in this area</th>
<th>I am quite skilled in this area</th>
<th>I am very skilled in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using web browsers such as Internet Explorer, Safari, Firefox</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Typing a web address in the address bar</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using a search engine such as Google or Bing</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Navigating a website using hyperlinks</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Scanning a website to find information that you want</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowing if information on a website is reliable and up to date</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowing if a website is trustworthy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Knowing if a website is secure</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Filling out an online form (e.g. booking a flight, shopping)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Shopping or booking a flight online</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Carrying out financial transactions online (Banking online, paying a bill car tax or property tax)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
9. How would you rate yourself on each of the following?

<table>
<thead>
<tr>
<th></th>
<th>I have no skills in this area</th>
<th>I have limited skills in this area</th>
<th>I am quite skilled in this area</th>
<th>I am very skilled in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using email (reading, writing, sending emails)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using attachments in emails (Opening, saving, sending attachments)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Archiving and deleting emails</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Participating in an online forum</td>
<td>○</td>
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</tr>
<tr>
<td>Collaborating with others in an online workgroup</td>
<td>○</td>
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</tr>
<tr>
<td>Using social networking sites such as Facebook, Twitter, Pintarest, Instagram</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Using YouTube</td>
<td>○</td>
<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>Using Skype</td>
<td>○</td>
<td>○</td>
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</tbody>
</table>
10. Security and Ethics - How would you rate your understanding of each of the following?

<table>
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<tr>
<th>Topic</th>
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<th>I am quite skilled in this area</th>
<th>I am very skilled in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copyright regarding downloading music, video and images from the Internet</td>
<td>○</td>
<td>○</td>
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</tr>
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<td>Copyright with reference to copying text and images from the Internet</td>
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</tr>
<tr>
<td>Licensing issues with regard to software</td>
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<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Phishing</td>
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<td>○</td>
</tr>
<tr>
<td>Spam</td>
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<td>○</td>
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</tr>
<tr>
<td>Spyware</td>
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</tr>
<tr>
<td>Firewall</td>
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</tr>
<tr>
<td>Anti-virus software</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Setting secure passwords</td>
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<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>Changing privacy settings on sites such as Facebook</td>
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</tbody>
</table>
11. How would you rate yourself on each of the following?

<table>
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<tr>
<th>Task</th>
<th>I have no skills in this area</th>
<th>I have limited skills in this area</th>
<th>I am quite skilled in this area</th>
<th>I am very skilled in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using a Word Processing package such as Word to create documents</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Creating a Presentation using a tool such as PowerPoint or Prezi</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>Saving a file with a specific name</td>
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<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Understanding the difference between files and folders</td>
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<td>○</td>
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<td>○</td>
</tr>
<tr>
<td>Copying files and folders to different locations</td>
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<td>○</td>
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</tr>
<tr>
<td>Deleting files and folders</td>
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<tr>
<td>Emptying or recovering files from the recycle bin</td>
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<tr>
<td>Renaming files and folders</td>
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<td>Downloading a file to a specific location on a computer/laptop</td>
<td>○</td>
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</tbody>
</table>
12. In class with your learner(s), have you ever used a/an?

<table>
<thead>
<tr>
<th>Resource</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer/laptop/netbook</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Interactive whiteboard</td>
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<td>○</td>
</tr>
<tr>
<td>Digital camera</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Mobile phone</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ipad or other tablet device</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Ereader</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Software such as Starspell, Ultimate Phonics, Lexia, Numeracy Workout</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Websites such as writeon.ie, bbc.co.uk.skillswise, Safir, Spellzone.com</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Other (please specify)

13. If you have used any of the above resources, please specify how you used the resource and how it affected the teaching/learning experience.

14. If you have not used any of the above resources, what are your reasons for not doing so?
### Appendix D - Observations


**Observation Log Sheet – Teacher A**  
**Date:** 19th March 2013 (11.00am to 1.00pm)

<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Space (layout of physical setting) | • Description of classroom | • Table with chairs around 3 sides  
| | | • Teacher at front |
| | • Description of the tutor | • One female teacher – part-time does 12-15 hours and also works elsewhere  
| | • Description of the learners | • 7 learners 4 male and 3 female  
| | | • Lithuania, Poland, Bulgaria and other countries  
| | | • 3 missing |
| Actors (people in the situation) | | |
| Activities (sets of related activities that are taking place) | • What topics are being covered?  
| | • How are they being covered?  
| | • What teaching/learning methods are being used? | • Discussion about St Patrick’s Day  
| | | • Grammar – plural of nouns  
| | | • Q and A, Teacher & Learner  
| | | • Teacher led – didactic  
| | | • Drill and practice  
| | | • Communicative method of language teaching  
| | | • Pair work |
| | | |
| Objects (physical elements, furniture, resources) | • What is the room layout? | • Table with chairs around it – whiteboard on wall  
<p>| | • What digital resources are in the room? | • None |</p>
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acts (specific actions that the participants are doing)</strong></td>
<td>• What is the tutor doing?</td>
<td>• Leading the class – circulating and giving assistance during pair work</td>
</tr>
<tr>
<td></td>
<td>• Does the tutor use any digital resources?</td>
<td>• None</td>
</tr>
<tr>
<td></td>
<td>• How comfortable is the tutor using the digital resources?</td>
<td>• N/A</td>
</tr>
<tr>
<td></td>
<td>• What are the learners doing?</td>
<td>• Listening and answering questions</td>
</tr>
<tr>
<td></td>
<td>• Do the learners use any digital resources?</td>
<td>• Engaged in the discussion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Listening and speaking in pair work – everyone participated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No</td>
</tr>
<tr>
<td><strong>Events (particular occasions e.g. meetings, sets of activities that are taking place)</strong></td>
<td>• How the class fits into the programme?</td>
<td>• Grammar work – plurals</td>
</tr>
<tr>
<td></td>
<td>• Continuation of previous lesson?</td>
<td>• Yes, discussion about St Patrick's Day</td>
</tr>
<tr>
<td></td>
<td>• Preparation for QQI portfolios etc.</td>
<td>• No</td>
</tr>
<tr>
<td><strong>Time (sequence of acts, activities, events)</strong></td>
<td>• Duration of the class?</td>
<td>11.15 to 12.45 (90 mins)</td>
</tr>
<tr>
<td></td>
<td>• Schedule</td>
<td>Intro</td>
</tr>
<tr>
<td></td>
<td>• Timing of activities</td>
<td>Revision)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practice Pair work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback</td>
</tr>
<tr>
<td></td>
<td></td>
<td>See Observation Notes below for details</td>
</tr>
<tr>
<td><strong>Goals (what the participants are trying to achieve)</strong></td>
<td>• What are the learning outcomes?</td>
<td>• Ask and answer questions in English about food</td>
</tr>
<tr>
<td></td>
<td>• What can learners do?</td>
<td>• Identify their own grammar mistakes</td>
</tr>
<tr>
<td>Spradley’s Checklist</td>
<td>Observation Questions</td>
<td>Notes</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Feelings (what people feel and how they express this)</td>
<td>- Interaction between tutor and learner</td>
<td>- Good engagement between teacher and learners</td>
</tr>
<tr>
<td></td>
<td>- Learner engagement</td>
<td>- Good – very polite and good humoured e.g. discussion re horsemeat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Learner to learner relationship good</td>
</tr>
<tr>
<td>Reflection (Bogdan &amp; Biklen)</td>
<td>- Descriptions</td>
<td>None perceived</td>
</tr>
<tr>
<td></td>
<td>- Methods used for data collection</td>
<td>Good to get real-life insight</td>
</tr>
<tr>
<td></td>
<td>- Ethical issue</td>
<td>No technology available</td>
</tr>
<tr>
<td></td>
<td>- Reactions of observer</td>
<td>What level are they? Level 2</td>
</tr>
<tr>
<td></td>
<td>- Points of clarification</td>
<td>Are they the same nationality? No</td>
</tr>
<tr>
<td></td>
<td>- Lines of further inquiry</td>
<td>Are they preparing for certification? No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview teacher?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interview learners?</td>
</tr>
</tbody>
</table>

What level are they? Level 2
Are they the same nationality? No
Are they preparing for certification? No
Observation A – General Notes

Before the class the tutor had asked the learners if it was ok to observe the class. When the researcher arrived, the tutor introduced her and all learners were happy to be observed. The researcher also introduced herself and explained the purpose of the observation.

Introduction – The tutor passed around a sign-in sheet and asked the learners to switch off their mobile phones.

The tutor introduced the topic of St Patrick’s Day and went around the class and asked the individual learners to say what they had done on St Patrick’s Day.

The tutor asked questions and the learners answered.

After this, the tutor put vocabulary used in the discussion on the board and the learners copied the words into their notebooks. The whiteboard was used to reinforce grammar that arose during the discussions.

Revision – Q and A about St Patrick’s Day followed by revision of grammar – singular and plural nouns with addition of “s” for plurals. Teacher led the class using the whiteboard and asking questions and eliciting answers from the learners.

Teacher then referred to Safir online English course and encouraged the learners to practice the grammar in Module 2 on the website.

The teacher spoke about the Limerick Lifelong Learning Festival that was occurring the following week and spoke about the various events and distributed leaflets.

Teacher said there would be no new grammar this week but led a discussion about food. She explained the exercise and passed out a hand out to the class. The exercise was to identify the food in the pictures. The teacher went around the room and each student identified what was in a picture.

Learners practiced asking what food the teacher liked.

- What do you like?
- How important is food in your life?
- What food do you hate?
- Have you tried Chinese/Italian food?
- Which do you like best and why?
- What other foods do you like?
- How often do you cook?

Going around the class each learner answered the questions and asked the questions of the teacher - Teacher – Learner & Learner – Teacher while the other learners listened

Then there was pair work - Learner 1 asking question - Learner 2 answering - L1 Writing down the answer for reporting back

While the learners were doing this the teacher circulated and gave assistance

Some learners use their dictionaries to check the words

In some cases the learners used their own language to discuss and explain the exercise – but teacher encouraged them to use English
All learners engaged well in the activity

When tutor worked with one group, the others worked well together but used their own language

About halfway through the exercise, the teacher asked a learner to feedback the answers about their partner to the full group

The tutor put the answers on the board and gave positive feedback. Then she gave feedback on any grammar mistakes made by the learner and the learner corrected him/herself.

Then the tutor moved on to another learner – same procedure – the learner gave the answers to the question and the tutor provided feedback on the learner’s grammar.

The tutor moved on to another learner – same procedure again – teacher good at giving feedback re grammar errors made by learner.

One learner wrote all the answers in his notebook.

12.28 Tutor explained exercise – pairs swapped around. The person who was answering was now going to answer the questions and vice versa.

12.45 Feedback from learners as before using the whiteboard

At the end of class the tutor said there was going to be 2 weeks break and encouraged the learners to use the website during the break.

The group seemed very motivated and had a good rapport. Reading and writing was not an issue. The focus in the class was on grammar and speaking and listening.

After the class – the tutor explained that the focus was on progression and activation.

Move from levels 1 to 2 to 3 then to a Communications class with Irish learners.

There were no IT facilities in this classroom. She said she could book another classroom but didn’t. The tutor said her own IT skills were limited.

She said all the learners except one had Internet facilities at home.

Researcher’s reflection re Data Collection

In addition to the template, the researcher also decided to log what was going on in the class.
**Observation Log Sheet – Teacher B**  
**Date:** 19th March 2019 (6.30pm to 9.30pm)


<table>
<thead>
<tr>
<th>Spradley’s Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space (layout of physical setting)</td>
<td>• Description of classroom</td>
<td>Prefab – shared classroom</td>
</tr>
</tbody>
</table>
| Actors (people in the situation)      | • Description of the tutor  
• Description of the learners                                                                                                                                                                                          | Female tutor  
6 male learners  
1 female learner                                                                                                                                       |
| Activities (sets of related activities that are taking place) | • What topics are being covered?  
• How are they being covered?  
• What teaching/learning methods are being used?                                                                                                                                 | Taking photos, Spellings  
Explanation and learning by doing  
Active learning, practical hands-on activities                                                                                                          |
| Objects (physical elements, furniture, resources) | • What is the room layout?  
• What digital resources are in the room?                                                                                                                                                                        | Computers around the wall  
Table in the middle of the room with chairs around it  
Teacher at top  
Interactive whiteboard, computers  
Suite of ipads                                                                                                                                           |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **Acts** (specific actions that the participants are doing) | • What is the tutor doing?  
• Does the tutor use any digital resources?  
• How comfortable is the tutor using the digital resources?  
• What are the learners doing?  
• Do the learners use any digital resources? | Directing class/circulating  
Yes, suite of ipads and interactive whiteboard  
Very comfortable – even when asked a question she didn't know she said so and they found the answer together  
Listening, asking questions, Using the ipads |
| **Events** (particular occasions e.g. meetings, sets of activities that are taking place) | • How the class fits into the programme?  
• Continuation of previous lesson?  
• Preparation for QQI portfolios etc. | Literacy class and this was ICT integration  
Yes, they had used ipads the previous week  
Yes |
| **Time** (sequence of acts, activities, events) | • Duration of the class?  
• Schedule  
• Timing of activities | 3 hours  
Intro  
Ipads for photos/video  
Ipads for spelling  
Reading and spelling |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Goals (what the participants are trying to achieve) | • What are the learning outcomes?  
• What can they do? | Take photo, video  
Practice reading lists of words |
| Feelings (what people feel and how they express this) | • Interaction between tutor and learner  
• Learner engagement | Good rapport between teacher and learners – learners comfortable asking questions  
Very positive |
| Reflection (Bogdan & Biklen) | • Descriptions  
• Methods used  
• Ethical issue  
• Reactions of observer  
• Points of clarification  
• Lines of further inquiry | After the break, they were doing reading and the tutor said that they might not seem so comfortable being observed so the researcher left |
Observation B - General Notes

Introduction – The teacher confirmed arrangements for trip to the theatre the following night.

Teacher gave an iPad to each learner and the learners immediately started using them

Teacher explained that they were going to use the iPad to take photograph

There was a discussion about the cost of iPads and iPhones

Learners asked about making phone calls on the iPad. The teacher said she would demonstrate Facetime but the learners had already found it and asked how to use it.

The tutor was able to move from the planned activity to show learners how to use Facetime - something the learners had asked for.

The teacher then explained the activity – the learners were going to take a photo. Learners were very engaged and took pictures of one another while the teacher moved around the room and helped individual learners.

The learners seemed to really enjoy the activity and there was a lot of banter between the learners.

The teacher took a photo of the learners using the iPads for QQI verification. She then used the digital projector to demonstrate how to view a slideshow of photos taken by displaying a photo that she had taken of the group on the screen.

Teacher then asked the learners to take a photo of the group. The learners worked together and talked while carrying out the task. Learners stood up and walked around. There was very active engagement in the activity.

Using the overhead projector the teacher did a demo on screen of how to switch from camera to video and how to record themselves.

All learners seemed engaged and there was lots of discussion. The teacher then explained that the learners could use the iPad to help with spelling. One way would be to record words and spellings and then play it back.

Tutor gave out lists of spellings and asked learners to practice. All learners worked on the activity while the tutor circulated and gave assistance. While the tutor was helping one learner, the others worked on their own on their own lists.

Learners said it was a good idea and said it was something they would do themselves.

The class then moved to another function of the iPad. The tutor explained the activity using the iPad connected to the overhead projector. She explained how to type in a list using the Notes app.

She then asked the learners to type a list themselves. They worked individually to type in their list – all worked enthusiastically except one learner. He looked through his own exercise sheets.

She also explained that Notes could be used to type in spellings and how to save notes. She also showed how to delete notes.
Learners typed in some of the spellings from their word lists.

One learner did not engage in the activity but worked on his own – tutor allowed this and did not make an issue of it.

The tutor explained how to create a new note and how to open a note they had already saved. They then deleted all the notes (as the iPads are shared among different classes).

Teacher explained they had just covered 3 functions of the iPad.

The learners asked questions about charging the iPad.

Teacher then explained how to open Safari to open the Internet.

Teacher put words on board Limerick Leader

Asked all the learners to type in these words and do a search. Learner asked question about how to put in a space between the words.

Same learner above did not engage in this activity.

There was a question about how did the search engine know what we were looking for. Teacher explained key words. She did some examples of looking for jobs, photos of the St Patrick’s Day parade, Facebook. She explained scrolling.

Teacher asked learners if there was anything they would like to see e.g. sport, fishing. The different learners looked for a topic that interested them e.g. tractors

The learners were totally engaged except for one learner who went through his own papers.

The teacher then asked them to practice spelling out loud the words they were inputting into the search engine. All worked individually and the teacher circulated.

The teacher showed how to set an alarm and use iBooks.

iBooks was not installed on all the devices and teacher had to show a free ebooks which had more complicated language (one of the classics).

Teacher then explained how in ebooks you can find the meaning of a word.

There was a discussion about buying ebooks and also they expressed a great interest in Facebook.

2 of them don’t have Internet at home – the others do.

One learner said that you needed to have good spellings before being able to use the Internet.

All seemed totally engaged except for the one cited above.

During the break two learners stayed to use the iPads.

At breaktime the tutor explained that after the break they would be covering reading their textbook and the learners might not feel comfortable if the researcher stayed so she left.
Observation Log Sheet – Teacher C  Date: 9th April 2013 (2.30-4.30)


<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space (layout of physical setting)</td>
<td>• Description of classroom</td>
<td>• Shared classroom – previous tutor’s class finished at 2.30pm</td>
</tr>
</tbody>
</table>
| Actors (people in the situation) | • Description of the tutor  
• Description of the learners | • Female 65+  
• 8 male learners |
| Activities (sets of related activities that are taking place) | • What topics are being covered?  
• How are they being covered?  
• What teaching/learning methods are being used? | • Revision of tenses Present simple v present continuous  
• Examples,  
• Video, tutor examples, online exercises |
| Objects (physical elements, furniture, resources) | • What is the room layout?  
• What digital resources are in the room? | • Tutor’s area at front of room  
• Computer tables set in 6 rows  
• Interactive whiteboard  
• Overhead projector  
• 16 pcs & headsets |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Acts (specific actions that the participants are doing) | • What is the tutor doing?  
• Does the tutor use any digital resources?  
• How comfortable is the tutor using the digital resources?  
• What are the learners doing?  
• Do the learners use any digital resources? | • Leading the class/circulating  
• Yes, pc, overhead  
• Very comfortable, even when things went wrong she was relaxed and able to troubleshoot  
• Seemed especially engaged in the video  
• Yes, online activities on individual basis and one learner went to top of class and led the group for another exercise |
| Events (particular occasions e.g. meetings, sets of activities that are taking place) | • How the class fits into the programme?  
• Continuation of previous lesson?  
• Preparation for QQI portfolios etc. | • Level 2  
• Yes, revision of previous work  
• No, non-accredited |
| Time (sequence of acts, activities, events) | • Duration of the class?  
• Schedule  
• Timing of activities | • 2 hours  
• See log sheet  
• See log sheet for details |
| Goals (what the participants are trying to achieve) | • What are the learning outcomes?  
• What can learners do? | Use the present continuous and present simple tenses in everyday conversation |
| Feelings (what people feel and how they express this) | • Interaction between tutor and learner  
• Learner engagement | Good banter between the tutor and learners  
Learners seemed particularly engaged when watching the video |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Reflection (Bogdan & Biklen) | • Descriptions  
• Methods used  
• Ethical issue  
• Reactions of observer  
• Points of clarification  
• Lines of further inquiry | • Tutor changed the class because the researcher was there  
• Learners seemed very aware of the observer as they kept looking back especially at the beginning  
• Clarify the levels and nationalities  
• Interview the learners = follow up focus group to capture learner thoughts triangulation  
• Re the template the Space category overlaps with the Objects category  
• Events category overlaps with Acts category  
• Observer decided to complete a detailed log sheet as well as the template for all future observations |
Observation C - General Notes

The teacher introduced the researcher and the learners said they had no issue with her presence.

This was the first class after Easter and the teacher asked the learners what they had done over the break. As they answered the teacher corrected any grammar errors.

The teacher asked individual learners about topics that were relevant to them e.g. their children, fishing. While she was doing this, she switched on the pc which was very slow at starting up.

She passed around the sign in sheet and the learners signed and talked quietly in their own language.

The teacher gave back homework and gave feedback on it.

The teacher showed a Prezi presentation on the screen – this had some examples of the Present Simple and Continuous and how the two tenses are used.

Teacher explained the use of key words such as always, usually etc. using the examples on screen

She then asked learners to give examples using key words

Teacher gave a further explanation of the use of the two tenses. Then the tutor showed an online video where a presenter explained the two tenses.

All the learners were engaged watching the video.

After the video – the teacher asked each learner to give an example about themselves using the present simple. Each learner made a sentence and the teacher gave feedback.

Then each learner gave an example of the present continuous. There was some talk between learners in their own language.

Teacher asked the learners to write two sentences – one present simple and one present continuous. While they were doing this the teacher circulated and gave assistance. One or two learners were using the computers to check words while others wrote in their notebooks.

The tutor then opened a website and put the address on screen. She asked the students to open up this site on their computers. One of the students got help from another inputting the address.

The teacher asked if any of them had used the site at home and none had.
While waiting for all the pcs to start up, the tutor demonstrated the exercise. It was a drag and drop the verb into sentences to illustrate what was in pictures e.g. John is playing rugby.

Individual learning - The learners worked on the activity – all seem engaged in doing the activity – one learner was using a dictionary to check the meaning of words on screen.

There was some difficulty getting on the website see Technical issues note on observation log sheet.

There was a whole class activity – the learners said what was happening in pictures and the teacher showed the answers on screen. Learners were engaged.

2nd exercise – the teacher explained they were going to do it together. They translated words into their own language. The teacher wrote the words in English on the board and then one learner went to the board and wrote the translation.

One learner used his phone to check the words.

The learners did the exercise that was displayed on the board collaboratively.

The emphasis was on grammar – verbs. The tutor put in the answers that the learners suggested – they all followed on the boards and were engaged in the activity. The tutor then displayed the answers and gave feedback to the group (all online Safir website).

For the next exercise the learners worked individually on the computer to fill in the answers. The teacher then went through the answers and gave feedback.

**Technical Issues**

A few minutes was spent getting on the sites – this was frustrating for the teacher.

The computers are very old and very slow.

Technical issue on one pc – learner could not get onto the site – so teacher asked him to go and share with another learner.

The tutor said afterwards that the ideal would be to have the site open or to have checked in advance if the pcs were working. However, the reality is that the classrooms are shared and there was another tutor in the room immediately before this class so it was possible for the tutor to check.
Observation Log Sheet – Teacher D  Date: 11th April 2013 (2.30-4.30)


<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space (layout of physical setting)</td>
<td>• Description of classroom</td>
<td>• Classroom that is shared by a number of tutors</td>
</tr>
</tbody>
</table>
| Actors (people in the situation) | • Description of the tutor  
• Description of the learners | • Female 30s  
• 5 female learners Irish (30s +)  
• 1 male Irish (older middle age)  
• 2 male non-national (middle age)  
• 1 female non-national (younger) |
| Activities (sets of related activities that are taking place) | • What topics are being covered?  
• How are they being covered?  
• What teaching/learning methods are being used? | • Reading  
• Teacher-led discussion  
• Q and A, Discussion, Written exercises |
| Objects (physical elements, furniture, resources) | • What is the room layout?  
• What digital resources are in the room? | • Tutor’s area at front of room  
• Table and chairs set in the middle of the room  
• Computer tables set around the edges with Mac computers  
• Interactive whiteboard  
• Overhead projector  
• 16 pcs & headsets |
| Acts (specific actions that the participants are doing) | • What is the tutor doing?  
• Does the tutor use any digital resources? | • Leading the class/circulating  
• Yes, Teacher’s Mac and overhead for PowerPoint presentation  
• Very comfortable |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• How comfortable is the tutor using the digital resources?</td>
<td>• Listening and answering, doing the exercises</td>
</tr>
<tr>
<td></td>
<td>• What are the learners doing?</td>
<td>• No</td>
</tr>
<tr>
<td></td>
<td>• Do the learners use any digital resources?</td>
<td>• Level 3 Communications which covers Reading, Writing Interpersonal Communications</td>
</tr>
<tr>
<td></td>
<td>• Listening and answering, doing the exercises</td>
<td>• Only a few learners had attended the previous class (the last one before Easter) so this class reviewed/continued it</td>
</tr>
<tr>
<td></td>
<td>• Preparation for QQI portfolios etc.</td>
<td>• Yes</td>
</tr>
<tr>
<td>Events (particular occasions e.g. meetings, sets of activities that are taking place)</td>
<td>• How the class fits into the programme?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Continuation of previous lesson?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Preparation for QQI portfolios etc.</td>
<td></td>
</tr>
<tr>
<td>Time (sequence of acts, activities, events)</td>
<td>• Duration of the class?</td>
<td>• 2 hours</td>
</tr>
<tr>
<td></td>
<td>• Schedule</td>
<td>• See log sheet</td>
</tr>
<tr>
<td></td>
<td>• Timing of activities</td>
<td>• See log sheet for details</td>
</tr>
<tr>
<td>Goals (what the participants are trying to achieve)</td>
<td>• What are the learning outcomes?</td>
<td>• Identify key components of a book, plot, characters</td>
</tr>
<tr>
<td></td>
<td>• What can learners do?</td>
<td>• Analyse a book</td>
</tr>
<tr>
<td>Feelings (what people feel and how they express this)</td>
<td>• Interaction between tutor and learner</td>
<td>• Good banter between the tutor and learners</td>
</tr>
<tr>
<td></td>
<td>• Learner engagement</td>
<td>• Learners were very engaged</td>
</tr>
<tr>
<td>Reflection (Bogdan &amp; Biklen)</td>
<td>• Descriptions</td>
<td>• Learners were happy to have observer in the class – did really not pay any attention to observer</td>
</tr>
<tr>
<td></td>
<td>• Methods used</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ethical issue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reactions of observer</td>
<td></td>
</tr>
<tr>
<td>Spradley's Checklist</td>
<td>Observation Questions</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
|                     | • Points of clarification  
|                     | • Lines of further inquiry | • Syllabus for the Level 3 Communications esp. Hand Written Letter |
**Observation D - General Notes**

Review of what they did before the break.

Tutor gave an introduction to the topic. She had a PowerPoint presentation prepared with an image of a book cover on it. She asked the students to try to predict what the book was about based on the image.

The teacher asked if they looked at the cover of a book before they read it – there was an all class discussion about the covers of books.

The tutor gave a hand out of what they were going to do.

She asked them to write a few notes on the worksheet about what the book was about.

She explained things to look out for while reading.

The tutor elicited the elements in everyday language story, people etc. and then showed the keywords on the PowerPoint e.g. plot, setting, characters.

The tutor explained about the worksheet – they were going to look at a particular character in the book.

The tutor read the chapter of the book. Then they completed the exercise on the worksheet together as a group.

Then there was a general discussion describing the person with the tutor writing notes on the whiteboard.

They came up with questions that they had about Anna’s character – wrote the questions in the box on the worksheet.

The tutor explained the difference between ‘metaphor’ and ‘simile’. She asked them to come up with examples e.g. Ana was as curious as a cat.

They discussed the meaning of the word symbol and then she asked them to come up with a symbol that represented Ana e.g. binoculars, window, walking stick.

Next each learner picked another character and read that chapter themselves and then completed the exercise about the character – they had the option of working with a partner.

All the learners engaged in the activity – read a chapter and did the exercise.
**Observation Log Sheet – Teacher E**

**Date:** 16 April 2013


<table>
<thead>
<tr>
<th>Spradley’s Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Space (layout of physical setting) | • Description of classroom | • Main Adult Education Building
• Shared classroom - Prefab |
| Actors (people in the situation) | • Description of the tutor
• Description of the learners | • Female 30’s
• 4 female, 1 male (middle aged) |
| Activities (sets of related activities that are taking place) | • What topics are being covered?
• How are they being covered?
• What teaching/learning methods are being used? | • Learners working on maths exercises, equations
• Working together as a class and individually
• Q&A, examples, feedback from tutor |
| Objects (physical elements, furniture, resources) | • What is the room layout?
• What digital resources are in the room? | • Tables in centre of room with learners seated around, Tutor at front
• PC, interactive whiteboard |
| Acts (specific actions that the participants are doing) | • What is the tutor doing?
• Does the tutor use any digital resources?
• How comfortable is the tutor using the digital resources?
• What are the learners doing?
• Do the learners use any digital resources? | • Directing the group
• No
• N/A
• Working on the exercises, giving the answers
• No |
<table>
<thead>
<tr>
<th>Spradley’s Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Events (particular occasions e.g. meetings, sets of activities that are taking place) | • How the class fits into the programme?  
• Continuation of previous lesson?  
• Preparation for QQI portfolios etc. | • Class occurs twice a week  
• Yes  
• Prep for Junior Cert |
| Time (sequence of acts, activities, events) | • Duration of the class?  
• Schedule  
• Timing of activities | • 2 hours |
| Goals (what the participants are trying to achieve) | • What are the learning outcomes?  
• What can learners do? | Learners can do equations |
| Feelings (what people feel and how they express this) | • Interaction between tutor and learner  
• Learner engagement | Good relationship  
Very engaged and motivated/interested |
| Reflection (Bogdan & Biklen) | • Descriptions  
• Methods used  
• Ethical issue  
• Reactions of observer  
• Points of clarification  
• Lines of further inquiry | Tutor had explained to the group about the researcher and they had no issue with her observing the class  
Syllabus led – preparing for exam in June |
Observation E - General Notes

They started by doing exercises in the book

The learners did the exercises – then the group as a whole went through the answers. The teacher asked the learners to come up to the board and do the exercise.

The teacher was very sensitive to the needs of the learner and was careful to ask if the learners were comfortable going up to the board. All the learners were OK with it.

The Guidance Counsellor came in and gave a hand out about upcoming workshop about future options and where the group might go next year.

After she left, the group continued with the exercises – this was preparation for the Junior Cert. The learners went up to the board individually and the teacher gave feedback.

Then the tutor went around the table and asked the learners to give the answers verbally.

Then they moved onto a new topic in equations. The learners actively worked on the exercises individually. When the learner had done the exercises, the tutor got them to give the answers and she gave feedback.

The tutor asked them to complete the rest of the exercises for homework.
Observation Log Sheet – Teacher F  Date:  16th April 2013 (1.30-4.30)


<table>
<thead>
<tr>
<th>Spradley’s Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Space (layout of physical setting)</td>
<td>• Description of classroom</td>
<td>• Community Venue – classroom in Local Community Education Centre</td>
</tr>
</tbody>
</table>
| Actors (people in the situation) | • Description of the tutor  
• Description of the learners | • Female 40’s  
• 1 female and 4 males  
• All 40+ except for one younger male student |
| Activities (sets of related activities that are taking place) | • What topics are being covered?  
• How are they being covered?  
• What teaching/learning methods are being used? | • Life Skills  
• Discussion, Q&A, group & individual discovery learning  
• Some direct instruction but for the most part the tutor facilitated self-paced independent learning |
| Objects (physical elements, furniture, resources) | • What is the room layout?  
• What digital resources are in the room? | • Tables in centre of room with chairs around them, no tutor’s table, whiteboard at front  
• Computers around the walls  
• Speakers & headsets |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| **Acts (specific actions that the participants are doing)** | • What is the tutor doing?  
• Does the tutor use any digital resources?  
• How comfortable is the tutor using the digital resources?  
• What are the learners doing?  
• Do the learners use any digital resources? | • Asking questions, eliciting, directing and supporting  
• Not in demonstration, yes in support  
• Very comfortable  
• Listening, asking and answering questions  
• Yes, computers (Internet) and headsets (video) |
| **Events (particular occasions e.g. meetings, sets of activities that are taking place)** | • How the class fits into the programme?  
• Continuation of previous lesson?  
• Preparation for QQI portfolios etc. | • Life skills and working towards QQI level 3 Communications  
• Yes  
• Yes |
| **Time (sequence of acts, activities, events)** | • Duration of the class?  
• Schedule  
• Timing of activities | • 3 hours  
• 2nd of two 3 hour weekly sessions  
• See detailed notes |
| **Goals (what the participants are trying to achieve)** | • What are the learning outcomes?  
• What can learners do? | • Use imperative in sentences (writing)  
• Write a set of instructions  
• Use computer for research and practice |
| **Feelings (what people feel and how they express this)** | • Interaction between tutor and learner  
• Learner engagement | • Very good  
• All engaged – had a chat about boiling the eggs |
<table>
<thead>
<tr>
<th>Spradley's Checklist</th>
<th>Observation Questions</th>
<th>Notes</th>
</tr>
</thead>
</table>
| Reflection (Bogdan & Biklen) | • Descriptions  
• Methods used  
• Ethical issue  
• Reactions of observer  
• Points of clarification  
• Lines of further inquiry | • Learners seemed relaxed about the presence of the observer and invited her for tea at the break.  
• Bias? – the tutor also works closely with the researcher  
• Check syllabus for Communications  
• Examine tutors’ attitude in interviews? |
General Observation Notes

Learners looked at their own choice of website while waiting for everyone to come in.

The tutor introduced the session – it was a follow on from yesterday. She asked them all to come to the centre of the room and she spoke about the website they were going to use www.bbc.co.uk/skillswise. She explained that there are quizzes etc. on the site that they can access from home.

The tutor asked the learners how to access a website and she spelled out the address and wrote it on the board. She got them to explain how to put in the address in the address bar and spoke about the importance of spelling the address correctly, no space, all small letters, no capital letters, use of dot/full stop/slash etc. This seemed a way of integrating some literacy.

Spoke about the use of the imperative/command for giving instructions. There was a worksheet on this (writing instructions). She referred to yesterday’s class where they spoke about boiling an egg. Tutor gave tips for writing instructions:

- Using logical steps
- Writing the steps
- Clear short sentences

Went over the instructions for boiling an egg. The learners gave suggestions and the tutor wrote the steps on the board.

Tutor gave out a hand out on accessing the bbcskillswise site. On the back there were tips on writing instructions. She went through these.

Next she asked them go to the computers and use the hand out to open the skillswise site and find the exercises. There was an introductory video which they could watch using the headsets if they wished to do so first. They then had to print the exercise and complete it by hand. The worksheet was based on Health and Safety in the Workplace – Fire Action Sheet.

The learners worked individually at their own pace and the tutor circulated supporting them. All the learners worked enthusiastically on the activity – they opened the site and printed out the worksheet and then wrote the answers on the hard copy. Learners seemed very comfortable and got up and walked around and chatted to one another but it was always about the exercise they were doing.

The tutor was more of a facilitator.

The learners then did an online quiz. They answered questions and got feedback at the end to confirm if they had got the answers right or wrong. One of the learners mentioned that she worked on the skillswise site at home.

After about 30 minutes of working there was a break. During the break the learners spoke to the observer about the class (tutor not present).

The learners said they loved coming to class. They thought it was a great idea to mix English and computers. They found that being in class made them more independent when using the computer at home. All had Internet access at home – one used his playstation on his 42 inch screen so said the monitors in the centre seemed very small.

Before coming to the class they would have had to ask their children to help if they wanted to do something but now they can do it themselves- and they do exercises at home.
themselves. They spoke about typing in Word and how it is helpful with their spelling as they check the words.

All stressed how important it is to use technology – they all use mobile phones, cameras and the play station etc. They spoke about how computers are necessary to book flights. They mentioned how important it is to type everything in correctly when inputting the details and how the class helped with that. They also said it was important to have computer skills for any job now. They also mentioned how they enjoyed the bit of crack in the class.

They use the computer to look up things and to check spellings. They were all very positive and enthusiastic. They did English class before but they found that they forgot things. They said that using the computer was more interesting and helped them to remember things.

After the break they all sat around the table in the centre of the room and the tutor introduced the next task which was about washing symbols that you get on clothing. She gave out a hand out with symbols on it and spelled out the name of a website www.washingsymbols.co.uk. The learners had to go on the website to find out what the symbols on the worksheet represented. She explained that all the tasks were for certification.

The learners then went back to the computers and worked individually on the exercise. All worked and completed the exercise and the teacher circulated. She gave particular help to one learner who was having difficulty – meanwhile two other learners compared notes with one another. Another learner was using a dictionary to look up the meaning of a word. It was a relaxed mix of paper-based exercises and online exercises.

The tutor then gave some information about an upcoming session about future courses they might wish to do after this one. She also gave a book to the learner who had difficulty to read at home.

She then gave details of another task they would need to do for certification. They had to write 250 words with no more than 5 mistakes about any subject they liked e.g. a trip. They also had to give the story a title. She gave some tips about how to write e.g. using adjectives to describe and the paragraph structure. They were to start thinking about this.

At the end of class the tutor spoke about the next class and how it would follow on from this one. She told them to look at packets of soup, petrol pumps and other real-life examples where there are written instructions. In the next class they would be writing instructions on one of the topics she wrote on the board:

- How to heat up soup
- Fill your car with petrol
- How to use an ATM
- How to fix a puncture

They could also choose a topic of their own. They were to think about the instructions and the activity for the next class.

End of class

Specific Observations

The group are doing Level 3 Communications and also the possibility of Level 2 ICT. 1 learner more level 2 but it did not appear to be an issue.
Many computers were out of order. However, while the resources were slow and basic, they were being used.

Tutor did not use didactic approach – she adopted a role of facilitator. She gave guidance but allowed the learners to work away on their own. Does this lead to independent learning (lit review & detailed notes)

The learners emphasized how the class helped them to do things at home – the attitude of the tutor promoted independent learning and helped to create a supportive. During the class the learners swapped notes about corrections. It was more like a workshop than a teacher-centred class.
Appendix E – Interviews

Template based on Thomas (2010, Figure 8.2, The beginnings of an interview schedule, p165)

**Interview G**  
**Date:** 10th April 2013

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital literacy</td>
<td>How important do you think it is to be digitally literate these days?</td>
<td>What are the implications for someone who can't use digital media?</td>
<td>It’s very important today. There are so many people I meet who can’t switch on a computer. They might have gmail that someone set up for them but they wouldn’t know how to send an attachment. Some don’t know how to book a holiday. People don’t know how to do research for assignments. Might be age related – our learners are generally aged 35+. About 25% between 35-44 and the rest mostly older.</td>
</tr>
<tr>
<td>Digital skills</td>
<td>How would you rate your own digital skills?</td>
<td>How does this impact on your everyday activities?</td>
<td>I’m almost ashamed after completing the survey. I should know how to do all those things. Technology is evolving so fast that it’s hard to know what is available. The laptop at home has 1409 bugs and I don’t know how to fix it. I should be able to find antivirus software and install it. I am self-taught. I can do some Word and Excel and could amend something in Powerpoint or Publisher if someone has created it already. Need to be able to do more. Tried to do an Excel course but there weren’t enough people enrolled for it to continue.</td>
</tr>
<tr>
<td>assessment</td>
<td></td>
<td>How does this impact on you teaching literacy?</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions</td>
<td>Notes</td>
</tr>
<tr>
<td>-------</td>
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<td>---------------------------------</td>
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</tbody>
</table>
| Using digital technologies in teaching adult literacy | What is your experience of tutors using digital technologies in teaching adult literacy? | How do you use these resources?  
What is the effect of using these resources with your learner(s)?  
What are the factors that influence you using digital technologies in teaching adult literacy?  
If no, what are the reasons why you don’t use digital resources?  
What are the factors that influence you using digital technologies in teaching adult literacy? | Our courses are work place learning to upskill those in work. For example, Vintners is a current project. Diageo have a new online system and vintners need to be able to Order online and do online stocktaking.  
Tutors don’t know how to do some of the IT tasks in many cases. But because of the funding have to use literacy tutors. Have to be sensitive to the tutors as well if they don’t know how to do something.  
Some tutors have good skills and some don’t. They might have Internet skills and not Excel. Some would have Word and would do that with learners although learners especially men don’t like that.  
The success of the project is due to using literacy tutors. They are used to dealing with adults and they have patience and are sensitive to literacy issues with learners. Can integrate spelling etc into tasks Certification is optional in our courses-people can be intimidated by certification although at the national level there is a push now for certification but FETAC is not suitable eg now they have to do a typing test for word processing and a group didn’t want to do that at all. |
| Learners are up to level 3  
Reading is OK  
Spelling is an issue. Maths is an issue. IT is an issue |
**Interview H**

*Template based on Thomas (2010, Figure 8.2, The beginnings of an interview schedule, p165)*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital literacy</td>
<td>How important do you think it is to be digitally literate these days?</td>
<td>You can’t survive without it – can’t cope without it. Between the Internet, mobile phone, ordering stuff, online shopping</td>
<td></td>
</tr>
<tr>
<td>Digital skills assessment</td>
<td>How would you rate your own digital skills?</td>
<td>Average to good. I am good at Word and file management, not good at spreadsheets.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How about the Internet?</td>
<td>I can order stuff online and am comfortable using the Internet.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What about security?</td>
<td>I can download Norton and I am aware of not giving personal details online. I am not into social media – Facebook or online forums except the ones in Moodle. I don’t use Twitter. I made a conscious decision – have decided not to do it. I don’t want to engage with people I don’t know. It would drive me crackers. I have an iPhone, ipad, laptop. I can upload photos and have a Kindle so I can download books etc.</td>
<td></td>
</tr>
<tr>
<td>Using digital technologies in teaching adult literacy</td>
<td>Do you currently use digital technologies in teaching adult literacy?</td>
<td>Not currently – I have used the Internet and email when doing level 3 Internet and Email course – did course based on the syllabus. I also used the Internet with Junior Cert History class.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What was the effect of using these resources with your learners?</td>
<td>They find it good – a lot wouldn’t be digitally literate. They can’t access texts – they can make calls but not do text. They would have literacy problems with writing stuff. You wouldn’t really have time to teach them digital stuff in class. You would think that texting language would help people but they find it confusing – stuff like cu l8r. They don’t connect it with the English. If they don’t understand the English first, they find it hard to text.</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions? Probes</td>
<td>Notes</td>
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<tr>
<td></td>
<td>What about the availability of resources?</td>
<td>Resources are available – if you’re not teaching a computer course you don’t get a computer room. You could bring them to the Self-Access Centre. One pc in every room would be ideal. It is good in rooms with overheads, you can access information. Instead of doing hand-outs, you could put questions on the board. It would speed things up and save paper.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What are the factors that influence you using digital technologies in teaching adult literacy?</td>
<td>It depends on the group and how much they use it outside. Younger people are more au fait with phones.</td>
<td></td>
</tr>
</tbody>
</table>
**Interview I**

**Date:** 27 May 2013

Template based on Thomas (2010, Figure 8.2, The beginnings of an interview schedule, p165)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital literacy</td>
<td>How important do you think it is to be digitally literate these days?</td>
<td>What are the implications for someone who can’t use digital media?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extremely important. It is vital. If you don’t have digital skills, you don’t know what is going on. Nobody can contact you. It is almost like not being able to read – it’s like looking through a net curtain at life.</td>
</tr>
<tr>
<td>Digital skills assessment</td>
<td>How would you rate your own digital skills?</td>
<td>How does this impact on your everyday activities?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Excellent at all the following– Computer skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internet</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Camera/phone etc.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I learn by doing – I figure it out myself</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not really –for any new stuff I’d give it a go. I’m not afraid to do something.</td>
</tr>
<tr>
<td>Using digital technologies in teaching adult literacy</td>
<td>Do you currently use digital technologies in teaching adult literacy?</td>
<td>How does this impact on you teaching literacy?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If yes, what digital resources do you use? How do you use these resources?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>When it comes to teaching literacy, nothing can compare with pen and paper. Being able to pick up a pen and paper is vital. Digital technologies are a necessary part of teaching literacy. It gives a chance of hitting the various intelligences. VAC (visual audio kinaesthetic) You don’t sit beside someone when they are practising on the computer. <strong>Do you have to be able to read and write first?</strong> No you don’t. Even the most basic learner can use the computer, it promotes independent learning. Another thing, people find it easier to say they are learning on the</td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions? Probes</td>
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<tr>
<td></td>
<td>What is the effect of using these resources with your learner(s)?</td>
<td>computer than learning to read or write, for their self-esteem it is better. From the learner’s perspective, they learn quicker, if they have never used a computer it helps them both in literacy and in IT skills.</td>
</tr>
<tr>
<td></td>
<td>What are the factors that influence you using digital technologies in teaching adult literacy?</td>
<td>The person who can’t read/write – they are not unintelligent. They have to work hard to hide their problems. Just because they might have literacy problems does not mean they can’t use technology. A lot of people use donedeal.ie all the time.</td>
</tr>
<tr>
<td></td>
<td>If no, what are the reasons why you don’t use digital resources?</td>
<td>I use technology on a regular basis. I have long classes (3 hours) so using technology gives variety. Eg in ESOL you can do things for Speaking/Listening/Reading/Writing such as listening exercises online.</td>
</tr>
<tr>
<td></td>
<td>What are the factors that influence you using digital technologies in teaching adult literacy?</td>
<td>In literacy classes, we practise at the end of the class – it means they finish on a high – no frustration.</td>
</tr>
<tr>
<td></td>
<td>If no, what are the reasons why you don’t use digital resources?</td>
<td>They love using technology for a while – they are using it at home also. The ones who do work at home make great progress, the ones who don’t access any of the resources from home don’t improve.</td>
</tr>
<tr>
<td>Resources in Room</td>
<td>Resources in Room</td>
<td>Resources in Room</td>
</tr>
<tr>
<td>If there are no resources I recommend that they go to the Self-Access Learning Centre</td>
<td>If there are no resources I recommend that they go to the Self-Access Learning Centre</td>
<td></td>
</tr>
<tr>
<td>FETAC – have to get tasks done – the Curriculum would dictate a lot of what you have to do in class. It depends on the length of the provision. In a 3 hour class I can integrate technology easily e.g. doing a piece of writing and typing it up. It depends on the subject.</td>
<td>FETAC – have to get tasks done – the Curriculum would dictate a lot of what you have to do in class. It depends on the length of the provision. In a 3 hour class I can integrate technology easily e.g. doing a piece of writing and typing it up. It depends on the subject.</td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions? Probes</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Resources may not be available in the community. However, it might be that people may not be comfortable themselves with technology. What do you think of volunteers and technology? It’s brilliant if they use it. However, it is dependent on whether there is technology or not in the room – if it is available. Good for those with lower levels of literacy. For those with SLD there are so many resources e.g. Phonics Those with higher levels of literacy – may be issues with low confidence of the learners. They might need support with what they are doing in class – not using the technology. There is no point in someone sitting next to someone who is working on a programme.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training is not an issue. You can do all the training in the world – with volunteers we check their IT skills before they start.* They have all the support e.g. in our Self-Access Learning Centre. If a person is desperate enough they will do it – if their wages depend on it. If they don’t use technology it’s their laziness or their busy lives – it’s attitudinal. *3 or 4 can’t use IT</td>
</tr>
</tbody>
</table>

---
**Interview J**

**Date: 29 May 2013**

Template based on Thomas (2010, Figure 8.2, The beginnings of an interview schedule, p165)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital literacy</td>
<td>How important do you think it is to be digitally literate these days?</td>
<td>(on a scale of 1-4 where 1 is not comfortable at all and 4 is very comfortable)</td>
</tr>
<tr>
<td>Digital skills assessment</td>
<td>How would you rate your own digital skills?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How did you learn? Course, doing it yourself</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Implications for someone who doesn’t have digital skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Did some courses as part of my degree. Trial and error and self-taught</td>
<td></td>
</tr>
<tr>
<td></td>
<td>with help from family</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oh, it is very important. It is necessary for teaching</td>
<td></td>
</tr>
</tbody>
</table>

- Computer 2/3
- Internet 2/3
- Finding and evaluating info 2
- Camera 2
- Tablet 0
- Email 3
- Collaboration 0
- Security and Ethics 1
<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using digital technologies in teaching adult literacy</td>
<td>Do you currently use digital technologies in teaching adult literacy?</td>
<td>It is important – for the students to be able to access the websites.</td>
</tr>
<tr>
<td></td>
<td>Why use technology in class? What are the advantages?</td>
<td>They could continue at home – it is another way of learning – not just pen and paper.</td>
</tr>
<tr>
<td></td>
<td>What would you say to people who think you need good literacy skills before you can use technologies?</td>
<td>If literacy skills are poor, you can still have a mastery of IT. If you have any level you can use things like Facebook.</td>
</tr>
<tr>
<td></td>
<td>Have you any ideas as to people don’t use technology?</td>
<td>Availability of resources – there is no computer in G20 (classroom).</td>
</tr>
<tr>
<td></td>
<td>What about the Curriculum?</td>
<td>Also the teacher needs to be comfortable using the technologies.</td>
</tr>
<tr>
<td></td>
<td>Any thoughts about how to encourage the use of technologies amongst the</td>
<td>Also for me for example passwords put me off – the spelling websites the passwords are a nuisance.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not really the issue, it might be for accredited programmes. My ESOL class is non-accredited but some of the sites are a bit difficult for the level I am teaching. I have used spelling websites but a lot don’t have Internet at home and we only have class for 3 hours a week.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If I saw evidence to support technology, not just technology for technology’s sake. I am quite scientific and I would like to see some basis, studies to show that technology supports learning.</td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions? Probes</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>reluctant? Eg. training, resources, attitude</td>
</tr>
</tbody>
</table>
**Interview K**  
*Date: 28 May 2013*

Template based on Thomas (2010, Figure 8.2, The beginnings of an interview schedule, p165)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital literacy</td>
<td>How important do you think it is to be digitally literate these days?</td>
<td>Hugely important. More and more access to information and communication involves using digital resources. If you are not digitally literate you have problems finding and evaluating information. Access to a lot of services is now online/Banking/Property Tax. You don't have the same quality info if you aren't online eg bundle of tv and broadband – if you don't don’t online research you can lose out. There is a lot of free info available online. Also courses in LCFE now are booked online so if you can’t book online you could miss out on a course you want.</td>
</tr>
</tbody>
</table>
| Digital skills assessment | How would you rate your own digital skills?                               | • Computer - comfortable enough to try something out  
• Internet - very comfortable  
• Finding and evaluating info - very comfortable  
• Camera - comfortable  
• Tablet - comfortable  
• Email - comfortable  
• Collaboration - would like to do more  
• Security and Ethics - comfortable  
How did you learn?  
Course, doing it yourself  
Never did a course. Have taken online courses, used Google and Youtube. Learned by doing it myself – independent learning |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
</table>
| Using digital technologies in teaching adult  | What are your views on using digital technologies in teaching adult literacy? | It is essential in terms of engaging learners. With phonics technology allows the learners to work away themselves and also become self-managed learners. It increases contact time and there is the potential for learners to direct their own learning. Technology is a motivational tool and it is a literacy in its own right – it is not separate to reading and writing – there is the opportunity to learn these together. Using technology takes away the stigma of doing literacy – by saying you are doing a computer class you remove a barrier – easier for learners.  

I check by talking to people, looking at course outlines and at planning meetings and training events.  

- Full time - they would use technology more for admin work, there is an openness to using technology but it may be in a limited way ie the tried and tested such as using software and preparing handouts, they don’t use Web 2.0 tools  
- Part time - they would use tech for preparing handouts and using CD-Roms  
- Volunteer - Sonic Phonics buttons and CD-Roms  

People probably wouldn’t miss technology if you took it out the classroom eg if you unplugged the interactive whiteboard. |
<p>| literacy                                          |                                                                           |                                                                                                                                                                      |
| What are your views on the current use of technology amongst staff? (Do you check?) |                                                                           |                                                                                                                                                                      |
| What would you say to someone who says you have to be able to read and write before you can use technology? |                                                                           | That’s madness – nuts. Technology is a huge aid to those at the lower levels – you could be waiting for years for someone to be able to read and write. I think that idea is people’s own fears and not on behalf of the learner. |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
<th>Possible follow up to questions? Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Have you any ideas as to why tutors use technology?</td>
<td>It's not age related. People won’t try stuff. It’s the attitude, openness, fears, confidence. They feel uncomfortable, need to be more analytical evaluating things. You’d need to look at a few things so it’s more work than the traditional approach. It’s more challenging – sometimes it could wreck my head trying to understand something, when you don’t understand something 360.</td>
</tr>
<tr>
<td></td>
<td>Have you any ideas as to why they don’t use technology?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What about the Curriculum?</td>
<td>Need to have openness to learning ourselves, independence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>People haven’t mastered the art of integrating technology. If it is included in a module descriptor e.g. assessment is a video then they will use it, otherwise they won’t. It is easier to do a worksheet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Training – no it’s not training, well yes it’s part of it.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources – this is not the issue. There are resources in the classrooms but they aren’t used. There are interactive whiteboards that aren’t used. There is a suite of iPads that isn’t used. The issue is not the resources; it is the relationship with the resources.</td>
</tr>
<tr>
<td>Topic</td>
<td>Questions</td>
<td>Possible follow up to questions? Probes</td>
</tr>
<tr>
<td>-------</td>
<td>-----------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td></td>
<td>Any thoughts about how to encourage the use of technologies amongst the reluctant?</td>
<td>Attitude – you need to bring people with you. You need to have a vision of what kind of an organization you want to have. In a lot of ways we have this e.g. Staffshare, this is a web-based system for sharing files amongst staff. Insisting on people using email was effective. We need to have an organisational approach. Recognise good practice and encourage good practice. We need to lead by example and use technology in a positive way – look at how people started using Prezi. One person started then someone else and it caught on Learner might know more about the technology. There is a different dynamic. The tutor is more of a facilitator. It can be embarrassing if the students know more than you. Also students expect to be taught… Tutors feel they need to know it all. It means there are different roles – shift in ownership of the knowledge – if the person brings their own opinion. If you teach, why are you so reluctant to learn? The teacher who won’t learn new skills around technology. Look at the amount of information that is available online – whole archives are available. We haven’t joined the dots between the real world and what we teach. All the learners are using radio, TV, phone, computers, Internet. The interactions of people don’t mirror what we teach.</td>
</tr>
</tbody>
</table>
Appendix F – Documents


**Document A - LCAES Annual Report 2012**  
**Date:** 28 May 2013

<table>
<thead>
<tr>
<th>Checklist</th>
<th>Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity</td>
<td>• Is the document genuine?</td>
<td>Yes, approved by Adult Ed Board</td>
</tr>
<tr>
<td></td>
<td>• Is the document what it purports to be?</td>
<td></td>
</tr>
<tr>
<td>Representativeness</td>
<td>• Is the document typical of its type?</td>
<td>Yes, similar to previous reports</td>
</tr>
<tr>
<td></td>
<td>• Does the document represent a typical instance of what it portrays?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is the document complete?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Has the document been edited?</td>
<td>Final version of the doc</td>
</tr>
<tr>
<td></td>
<td>• Is the extract from the document “in context”?</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>• Is the meaning of the words in the document clear and unambiguous?</td>
<td>The doc was used to find information about staff numbers in BES service. Factual information so hidden meanings in this section unlikely.</td>
</tr>
<tr>
<td></td>
<td>• Are there hidden meanings in the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Does the document contain argot and subtle codes?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are there meanings which involve “what’s left unsaid” or “reading between the lines”</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>• Is it accurate?</td>
<td>Organisational Doc – as a report likely to highlight the positive results of the year rather than the challenges</td>
</tr>
<tr>
<td></td>
<td>• Is it free from bias and errors?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• For what purpose was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Who produced the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If the document reports on events, was it a first-hand report directly written by the author? How long after the event was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When was the document produced? In what social context and climate?</td>
<td></td>
</tr>
</tbody>
</table>
### Checklist Questions

#### Authenticity
- Is the document genuine?
- Is the document what it purports to be?

#### Representativeness
- Is the document typical of its type?
- Does the document represent a typical instance of what it portrays?
- Is the document complete?
- Has the document been edited?
- Is the extract from the document “in context”?

#### Meaning
- Is the meaning of the words in the document clear and unambiguous?
- Are there hidden meanings in the document?
- Does the document contain argot and subtle codes?
- Are there meanings which involve “what’s left unsaid” or “reading between the lines”?

#### Credibility
- Is it accurate?
- Is it free from bias and errors?
- For what purpose was the document written?
- Who produced the document?
- If the document reports on events, was it a first-hand report directly written by the author? How long after the event was the document written?
- When was the document produced? In what social context and climate?

#### Notes

- Official doc from Dept of Education and Skills
- Guidelines to literacy services – would seem to be complete at the time it was issued (2012)

---

**Document B - Adult Literacy Operational Guidelines**  **Date:** 1 June 2013


*As a general principle, ICT provision should be integrated with other literacy and numeracy tuition.*

Does not provide specifics about how ICT could be integrated

Uses language that could be construed as jargon by those working outside the area of adult literacy.

Official document outlining guidelines for the running of adult literacy services.
**Document C - ALOA Document**  **Date: May 2013**


<table>
<thead>
<tr>
<th>Checklist</th>
<th>Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity</td>
<td>• Is the document genuine?</td>
<td>Yes, official publication by Adult Literacy Organisers’ Association (ALOA)</td>
</tr>
<tr>
<td></td>
<td>• Is the document what it purports to be?</td>
<td></td>
</tr>
<tr>
<td>Representativeness</td>
<td>• Is the document typical of its type?</td>
<td>This was published to set out the priorities and strategies for providing basic education for adults.</td>
</tr>
<tr>
<td></td>
<td>• Does the document represent a typical instance of what it portrays?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is the document complete?</td>
<td>This is the final version of the document.</td>
</tr>
<tr>
<td></td>
<td>• Has the document been edited?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is the extract from the document “in context”?</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>• Is the meaning of the words in the document clear and unambiguous?</td>
<td>The document details the priorities and strategies displayed in bullet point format. Clear layout and language.</td>
</tr>
<tr>
<td></td>
<td>• Are there hidden meanings in the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Does the document contain argot and subtle codes?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are there meanings which involve “what’s left unsaid” or “reading between the lines”</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>• Is it accurate?</td>
<td>Purpose to set out priorities for consideration by the new Education and Training Boards (ETB) in the area of adult literacy.</td>
</tr>
<tr>
<td></td>
<td>• Is it free from bias and errors?</td>
<td>Published in the context of the 33 VECs being merged to create 16 ETBs.</td>
</tr>
<tr>
<td></td>
<td>• For what purpose was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Who produced the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If the document reports on events, was it a first-hand report directly written by the author? How long after the event was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When was the document produced? In what social context and climate?</td>
<td></td>
</tr>
</tbody>
</table>
**Document D – DES Review**  
**Date:** May 2013


<table>
<thead>
<tr>
<th>Checklist</th>
<th>Questions</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authenticity</td>
<td>• Is the document genuine?</td>
<td>Yes, report sent to DES.</td>
</tr>
<tr>
<td></td>
<td>• Is the document what it purports to be?</td>
<td></td>
</tr>
<tr>
<td>Representativeness</td>
<td>• Is the document typical of its type?</td>
<td>Appears to use standard template that was issued by DES.</td>
</tr>
<tr>
<td></td>
<td>• Does the document represent a typical instance of what it portrays?</td>
<td>This seems to be the final version.</td>
</tr>
<tr>
<td></td>
<td>• Is the document complete?</td>
<td>The document could potentially be edited by anyone with access to it.</td>
</tr>
<tr>
<td></td>
<td>• Has the document been edited?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Is the extract from the document “in context”?</td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>• Is the meaning of the words in the document clear and unambiguous?</td>
<td>Statistics re numbers of learners in classes etc.</td>
</tr>
<tr>
<td></td>
<td>• Are there hidden meanings in the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Does the document contain argot and subtle codes?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Are there meanings which involve “what’s left unsaid” or “reading between the lines”</td>
<td></td>
</tr>
<tr>
<td>Credibility</td>
<td>• Is it accurate?</td>
<td>Not an officially published document. Produced by BES to give review of service to DES.</td>
</tr>
<tr>
<td></td>
<td>• Is it free from bias and errors?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• For what purpose was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Who produced the document?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If the document reports on events, was it a first-hand report directly written by the author? How long after the event was the document written?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• When was the document produced? In what social context and climate?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F - Qualitative Data Themes

Themes from Qualitative Data

Benefits of using digital technologies in class
- Interactive
  - Lead by example
  - Different Intelligences
    - Learners are using technologies anyway in real world
    - Motivation/emotions/turnbotes
  - Integrate Skills
  - Independent Learning

Digital Divide
- Digital Competences
  - Essential/Important
  - Personal & Social
  - Opens opportunities/jobs
  - Self-Management

Reasons for not using technologies
- Access to Resources
  - Teacher Skills
  - Teacher Attitude
  - Learner Attitude