



DISCOVER
SKILLS FOR CARERS

DELIVERABLE

Project Acronym: DISCOVER
 Grant Agreement Number: 297268
 Project Title: Digital Inclusion Skills for Carers bringing Opportunities Value and Excellence

D3.1 Content Specification v1.5

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Project co-funded by the European Commission within the ICT Policy Support Programme

Dissemination Level

P	Public	
C	Confidential, only for members of the consortium and the Commission Services	✓

Revision History and Statement of Originality

Revision History

Revision	Date	Organization	Description
#0.5	19th July 2012	BCU	Underlying Assumptions and Concept Design, Drivers and considerations
#0.6	25 th September 2012	BCU	Additional Rationale, structure of courses, comments from OU and BIRM
#0.7	26 September 2012	BCU	Comments from BIRM, CASSALA
#0.8	27 th September 2012	BCU	Comments from ASTRA and OU
#1.0	28 th September 2012	BCU	Full version complete
1.1	25 th April 2013	BCU	Updated executive summary,
1.2	14 th May 2013	BCU	Updated Executive summary
1.3	15 th May 2013	BCU	Updated Early Findings and Baseline Assumptions, updated design and navigation schemas. Indicate further additions
1.4	4 th June 2013	BCU	Added Guide to Iconography, updated assumptions section to describe explicit focus on Carer needs rather than digital skills development. Added section of skill and experience, stepping on and stepping off.
1.5	5 th June	BCU	Added section describing new Learning Zone structure, details on navigation for first Learning Area and summary of indicative content for each additional area.

Statement of originality:

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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Executive Summary

This paper outlines the design, navigation, topic focus and indicative content to be used within the Learning Zone area of the Discover project. The conclusions and suggestions in this paper have been informed by the focus group research conducted by the OU during the first 12 months of this project (See Appendix 4) and the interviews and consultations with Carers and stakeholders that were conducted during the bid preparation process. Our conclusions have also been influenced by existing research and regular online and face to face partner meetings.

The first section of this paper, describes the drivers and considerations that will influence the content developed for informal and formal carers during DISCOVER.

The most important Carer needs identified by DISCOVER thus far are:

- Support in accessing quality web based information that promotes greater understanding of various health conditions such as Dementia in addition to a range of other topic areas such as Finance and Basic Digital Skills.
- Support in using technology to communicate more effectively with others in order to gain support, share experiences and access services.
- Support in using technology to enhance care skills
- Support in using technology to evidence skills and prepare for further employment.

A high level design for the Discover Learning site was agreed during the Thessalonica partner meeting in February 13. This approach simplifies the earlier “Pathway” design and provides more flexibility for pilot partners to request some variation in their respective Discover Learning sites. The second section of this paper describes how the Discover Learning element, known now as the DISCOVER Learning Zone, is divided into four areas:

Learning Area 1: Accessing Quality Web Based Information

Learning Area 2: Connecting for Care

Learning Area 3: Enhancing Care Skills

Learning Area 4: Making Your Skills and Experience Count

These Areas within the Learning Zone will each provide content, learning activities at Beginner, Intermediate and Experienced levels, and assessment and certification opportunities.

Carers will be able to select the Area(s) of most interest to them and from there choose topics and activities based at skills and knowledge levels they feel most comfortable with.

Learning Activities will be predominantly followed by some form of automated assessment, success with which leads to the production of a certificate.

Introduction

This document represents work conducted thus far towards D3.1 Content Specification for DISCOVER learning. This work has been informed by a number of focus group interviews and desk based research conducted both during the bid preparation process and more recently through activities based within WP2.

Although titled “Content Specification” this document describes a much wider range of related issues that we consider important in ensuring optimal learning. These include learning design, usability, the factors involved in multi-channel delivery of learning, choice of media, the heterogeneous nature of our informal and formal carer populations and the diverse contexts in which they may be living, working and learning.

As our thinking about content specification and learning design has evolved an increasing number of questions have been raised that we aim to address as this project progresses. Relatively little is currently known, for example, about how informal and formal carers learn and what their learning needs are. Little is known about the access carers have to the internet, technology in general and their motivations to learn. Understanding of how these factors vary across countries is at an equally nascent stage.

A series of information gathering strategies described in WP4 D4.3 have been designed to provide, through iterative data collection, a clearer perspective on some of these issues.

We fully anticipate that this data will influence our approach to resource design and content specification and as such D3.1 will continue to evolve as DISCOVER progresses. This document therefore is a living document that will be regularly revised throughout this project.

As a starting point however, we have made a number of baseline assumptions about design, access to technology, learning opportunities and content specification that have been informed by the focus groups we have conducted to date and by relevant information currently available. This document starts by summarising these early findings and outlining these initial assumptions. It progresses to describe how these have led to our current design, technology and subject choices.

The content information identified here will form the basis of an initial release of the DISCOVER Learning platform that will launch in July 2013. The release will have components translated in the language of the four pilot sites and will be designed to test our baseline assumptions helping to ensure that further developments provide optimal and relevant learning opportunities to our sample pilot populations and the wider populations they represent.

Early Findings and Baseline Assumptions

Findings from Focus Group Interviews with carers in the UK and desk based research conducted during the bid preparation process and within Work Package 2 have produced a valuable foundation upon which an early iteration of DISCOVER learning can be created. Full findings from recent focus group interviews can be found in Appendix: 4. These findings have informed the following key assumptions about carers and their need for and learning of digital literacies. These assumptions will be tested and amended as DISCOVER continues and provide an important basis upon which content development and course design can begin.

Our assumptions are organised under five headings:

- Technology Used by Carers to Access Discover Learning Experiences
- The Nature of Carers
- Pedagogy
- Recognition and Certification
- Subject Focus

Each assumption is followed by a brief description of its influence on the design and development approaches DISCOVER will take and, where relevant, the lines of enquiry that DISCOVER will explore within the first pilot led by WP4 starting in July 2013.

Assumptions about technology

Devices Used to Access the Internet#

Most carers will access the internet and therefore Discover Learning, via a desktop or laptop computer. Our findings thus far lead us to anticipate that many of our carers will NOT possess SMART phones and/or tablet devices. Similarly, we anticipate that only a small percentage will access the web via IPTV or games consoles. However, as DISCOVER aims to future proof itself against the rapid and/or impending growth of technologies such as SMART phones and IP and Digital TV we are committed to providing, wherever possible, a multi-channel approach to delivery of learning opportunities.

We are working on the premise that laptop and desktop computers used to access DISCOVER learning will be no more than 4 years old.

Influence on Design and Development and further Research:

Creating content for multiple platforms and channels increases authoring effort and enhances the risk that too little content will be produced to have an impact on our

carer populations. DISCOVER will therefore lean towards technology that affords single capture to multi-platform publication. That is, create learning materials once and then publish those materials so that they are playable on a variety of platforms. The Sonic Foundry Mediasite system (See Section 4) will be used therefore to produce content for both mobile and desktop computers and smart phones. A technology and service provider in the UK, Looking Local, is also able to publish information to a range of digiTV, IPTV and mobile devices. This service is limited to supporting text and images as media. However given the increasingly widespread adoption of IPTV for example, we will develop “light versions” of DISCOVER learning using Looking Local in order to exploit the channels that this service provides.

The nature of some DISCOVER learning will include interactive multimedia that can only be reliably accessed on a desktop or laptop computer. In these instances we will sign post using icons the types of device that any media used to support Discover Learning can be reliably accessed through.

Further Enquiry: Further research with our Carer populations within WP4, during the initial pilot delivery, will be conducted to determine access to devices and preference for using these.

Internet Connectivity

In the UK over 70% of households have access to broadband with an average speed of 8Mb/s. (ref OFCOM). DISCOVER for the moment will assume most carers will be able to access internet connection speeds of 1-2Mb. This assumes that, where carers do not have fixed line broadband connections in their homes, they have access to the internet through publicly available services such as libraries, community centres, wifi dongles and cafe’s.

Influence on Design and Development and further Research

Provide learning resources that have the lowest memory and bandwidth footprints possible without compromising on pedagogy and interactivity. Where higher internet connection speeds are required then sign post this clearly, make optional and/or provide alternatives.

Further Enquiry: Collate information on the internet connectivity of informal and formal Carers engaged with DISCOVER during the Pilot phases.

Software

Most carers will not have access to the latest operating systems or browsers and where such software is used this may be several years old.

Influence on Design and Development and further Research

Try and ensure that where browser plug-ins are required these are cross browser compatible and compatible with older versions of those browsers.

Further Enquiry: Collate information on the type of software carers are using during the initial Pilot phase

Assumptions about the Learning Needs of Carers, their Digital Skills requirements and their Caring contexts

Overt Focus on Meeting Carer Needs vs Digital Literacy Skills Development

Although the ultimate aim of Discover is to promote digital inclusion and digital skills development, we are aware that individual Carers' may not describe their immediate priorities, needs and concerns in terms of Digital skills learning. Some Carers expressed they had little time for learning and little interest in technology for example.

We are cognisant that too much focus of digital skills and digital inclusion may deter some Carers from engaging with Discover.

Influence on Design and Development and further Research:

Discover Learning will ensure that it first and foremost appeals to the key concerns of Carers. For example, how to most effectively find information on health conditions or finance. How to enhance Care skills and how to gain support for themselves and those they care for. The guided activities we will provide will support Carers to meet these needs by using technology more effectively, however digital skills development will be implicit rather than explicit when many learning activities are designed.

Further Enquiry: During the pilot phases explore the extent to which topics and activities we have designed are meeting the needs of Carers. Explore ways in which Carers can contribute to content development and/or ideas for further learning.

Skill and Experience Level

Carer populations have a diverse range of digital literacy skills and experience of and exposure to technology as evidenced by our focus group interviews. Skills and experience range from complete novice to proficient. See Figure 1: Spectrum of digital literacy competencies across carer populations. This provides a challenge for DISCOVER as our sample populations will consist of individuals with a broad range of learning needs, interests and of-course learning contexts.

Some Carers may be interested in a particular topic area, for example learning about Dementia, but may already have experience in accessing web based resources on this topic. Such Carers may value access to higher quality resources and/or may

benefit from activities that support them in evaluating the information that such resources provide. Other Carers may also be interested in this topic but have little idea of what the web is!

Designing for such a heterogeneous population is challenging!!

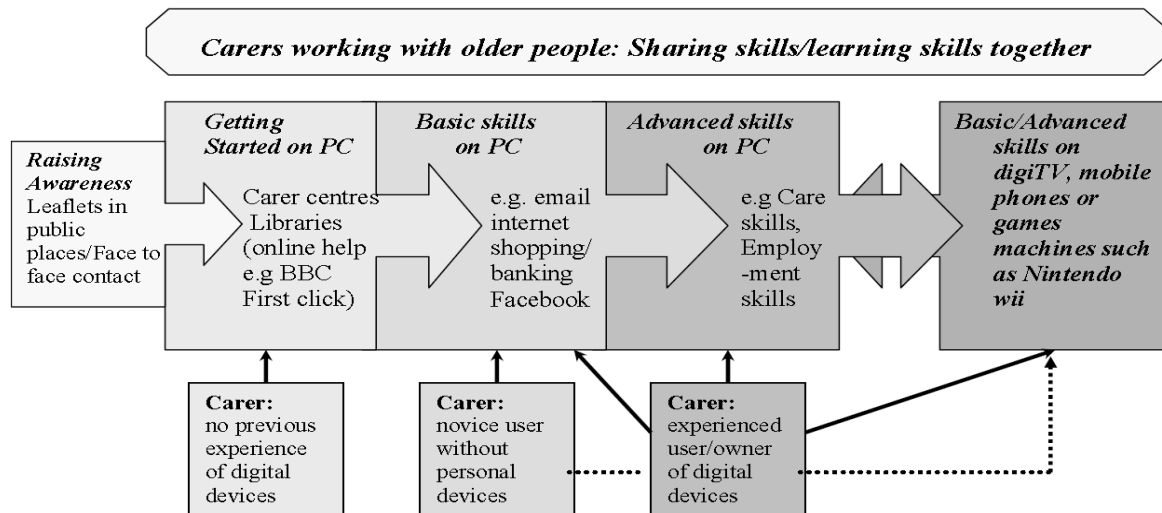


Figure 1: Spectrum of digital literacy competencies across carer populations

Discover Learning also needs to cater for the variety of skills and experience that exist within even small populations of Carers. For Carers starting at a nascent stage in terms of subject knowledge or digital skills, then Discover will need to provide a skills escalation opportunity within that topic. That is, an opportunity for those Carers to move from Basic Skills to more Advanced Skills.

For Carers with more Advanced Skills or simply more experience of using technology then such Carers should have an opportunity to “Jump” to learning activities that may provide a better fit with their learning needs.

Influence on Design and Development and Further Research

Carers will be presented with topic and skills options that reflect their Carer needs. As they navigate down towards more defined topic and skills interests they will be presented with an opportunity to identify themselves as either Beginner, Intermediate or Experienced in that area. By selecting one of these categories they will then be able to access learning activities that should provide a better fit with their needs.

Further Enquiry: Explore extent to which this approach works with carers. Explore extent to which Carers escalate up from Beginner to Experienced.

Disabilities and Accessibility

Attention to accessibility will be important for all of the resources DISCOVER produces.

Influence on Design and Development and Further Research

Resources will, as far as possible, provide accessibility options and/or will provide navigation tools that allow the Carer to engage with the resources at their own pace.

DISCOVER learning will be accessed via an icon based navigation schema. Here symbols representing “Areas” of Learning, Topics, Activities, Help, etc. will be used rather than text based descriptors.

A colour scheme and font size will be chosen to promote the most optimal font and background contrast and interactive media will support where possible accessibility controls.

Pedagogy

Preference for Visual Media and Time to Learn

Findings from our own research and the literature indicate that, for informal carers particularly, the sheer burden of care prevents or significantly limits opportunities to engage in non-care activities. We anticipate that for informal carers the time they have available to access DISCOVER resources will be minimal. We are also aware that resources must be closely and overtly linked to carer needs and thus provide carers with a strong motivation to use them. Many informal carers will probably wish to dip in and out of DISCOVER and will have limited time to abstract meaning from un-contextualised media. If they don't find what they need quickly, or find the activities designed too challenging or time consuming, they will be less likely to return.

Contemporary thinking on factors that lead to effective learning suggests that learners playing an active role in their learning will have better learning outcomes.

Influence on Design and Development and Further Research

Learning activities and resources in general will be labelled so as to convey immediate relevance to Carer needs. DISCOVER learning will need to accommodate short bursts of user activity. This will be achieved by ensuring resources can be accessed to completion in approximately 10 min and/or have high levels of navigability to promote easy pick up from point where left off, and/or have save options that allow progress to be saved and future sittings to re-start at saved point.

DISCOVER learning will use images and video in addition to highly visual interactive and contextualised resources to promote meaning to formal and informal carers.

Where possible learning resources will provide levels of interaction that support learner engagement and feedback.

Further Enquiry: Gather data on the average time spent by Carers engaged with Discover Learning.

Group and Independent Learning and Level of Trainer Facilitation

We are currently unclear about the extent to which carers will wish to learn with other carers as part of a group activity and the extent to which carer learning within DISCOVER will be facilitated or simply mediated by trainers or others. We assume that many carers will value direct contact and/or support with a “trainer”, however, we are also cognisant of the resource implications this may place on pilot sites and the implicit time implications that for example group focussed activities may require of our Carer populations.

However, isolation and desire for peer support are needs that have been expressed within the focus groups DISCOVER has conducted to-date. DISCOVER provides an exciting opportunity to explore the use of a number of web 2.0 technologies that promote communication and sharing and it seems prudent to explore the potential that such technologies may hold during the pilot phases.

Influence on Design and Development and Further Research

Offer and support the use of discussion forums within Moodle and Mahara in order to encourage Carers to share experiences and gain support.

Design learning activities within the initial DISCOVER release in July 13.

Further Enquiry: Explore the extent to which Carers engaged in DISCOVER already access support networks, identify these networks and collate information as to their value in providing peer support. Fully assess the capability of pilot organisations to provide face to face and/or online support when/if Carers are encouraged to communicate with each other online.

Accreditation and Certification

DISCOVER has a nominal commitment to the EC, to ensure that 50% of its content provides some indication of certification and/or accreditation.¹ This commitment is dependent upon demand being expressed from our Carer populations and/or their representative organisations.

¹ See DISCOVER Approach to Certification and Accreditation of DISCOVER Learning doc in DropBox/Discover/WP3/Certification

Some carers, whether informal or formal, may wish to use DISCOVER to not only learn new knowledge and skills, but to also demonstrate this learning. These carers may value some form of certification and structure and may value an opportunity to evidence the skills and knowledge they have achieved either through their caring role or more immediately through DISCOVER learning activities.

Other Carers may view such approaches as being too formal and of no relevance to them. Certification and Accreditation information may actually deter engagement.

Influence on Design and Development and Further Research

Currently we anticipate that DISCOVER learning will have academic weightings named Beginning, Intermediate, Experienced, equivalent to Levels 1-3 in the UK (i.e. Pre-Undergraduate). Most of the Learning Activities will have quiz based, self-assessments opportunities that lead to certification generation if successful.

The learning activities and assessments we designed will be reviewed a training certification agency such as CPDUK and we will explore where certification through this route is viable, as their will be a charge for this service.

Subject Focus

Informed by our focus group interviews the following needs have been identified most consistently amongst Carers:

- Communication – Carers often feel isolated and would value skills support in how to use technology in ways that help them communicate with other carers, and those cared for and to enhance ability to care and access services.
- Knowledge of health conditions – Carers have consistently requested support in accessing web based information on a variety of health conditions.
- Employability – Carers have expressed interest in being supported to develop the skills required to write a CV and covering letter and to capture their learning, experience and skills in order to prepare for employment of access to more formal training.
- Basic Digital Skills – All focus groups have revealed that for a number of Carers there is a need to address very basic digital skills and literacies development.
- The last theme pre-supposes that some carers will operate from an extremely low Digital Skill base and that a suite of resources contextualised for carers and aimed at enabling access to basic digital technologies will be required if we are

to avoid excluding some carers at the outset. E.g. What is a browser and how can I use it to find and organise information about health conditions?

Internationalisation, Localisation and Translation

To complete

Structure of DISCOVER Learning Zone

The Learning Zone and Learning Areas within the Zone

Work between M1 and M5 and beyond M5, following receipt of the User Requirements report, led to an early meta design for the structure of Learning Activities within Discover.

The design, addressed many of the issues described above in terms of promoting non-linear icon driven navigation but emphasised the creation of clear “learning pathways” cross referenced against areas of learning need. Following discussion with partners during the partner meeting in Greece and subsequent discussions prior to and during the subsequent partner meeting in Spain, it was decided that the initial pathway design was too complicated and needed to be simplified.

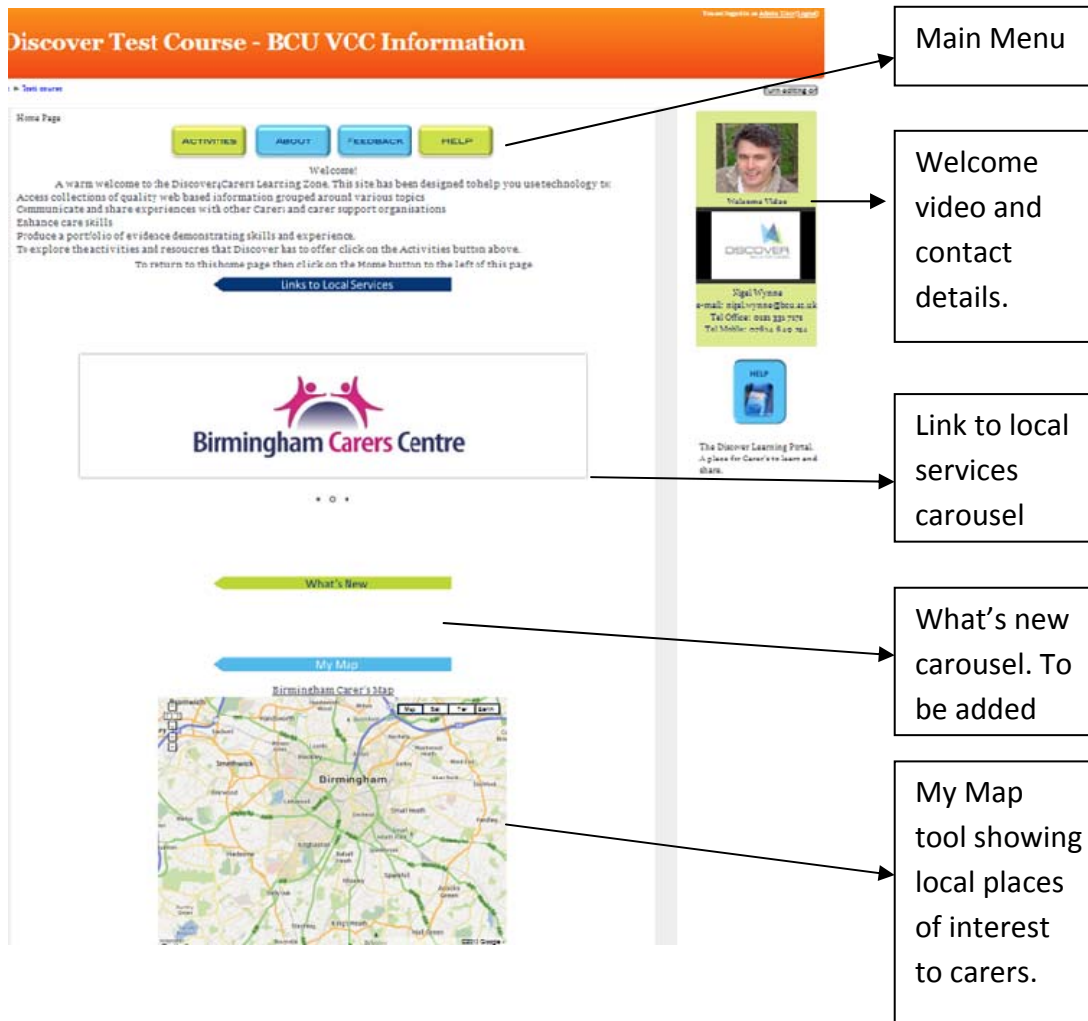
It was also decided that, whilst all pilots would adopt an overall common design for how Discover Learning would be organised, flexibility in this design should allow individual pilots to make bespoke adjustments to the learning they offered their specific Carer populations.

All pilots therefore will access DISCOVER learning materials and activities from an element of the Discover service called the LEARNING ZONE. Each pilot will have access to their own version of this Zone which will be rendered in the native language of the respective pilot.

Throughout the development and initial pilot phase we will create as many common elements as possible across pilot Learning Zone designs, although some bespoke design will also be supported.

The Learning Zone will be accessed from the main Discover website through a simple self-enrolment system requiring a username and password.

Enrolment will provide access to the Home Page of the Learning Zone. See **Error! Reference source not found.**



The screenshot shows the landing page for the Discover Test Course - BCU VCC Information. The page features a main menu at the top with buttons for 'ACTIVITIES', 'ABOUT', 'FEEDBACK', and 'HELP'. Below the menu is a welcome message and a 'Links to Local Services' button. A carousel for the Birmingham Carers Centre is displayed, followed by a 'What's New' section and a 'My Map' section showing a map of Birmingham. On the right side, there is a 'Welcome video and contact details' section featuring a video player and contact information for Yalazma Yildiz, and a 'Link to local services carousel' section with a 'HELP' button and a description of the Discover Learning Portal.

Callout boxes on the right side of the page identify the following features:

- Main Menu
- Welcome video and contact details.
- Link to local services carousel
- What's new carousel. To be added
- My Map tool showing local places of interest to carers.

Discover Learning Zone landing page features and navigation.

Description to be added

Description of Learning Activity Areas within Learning Zone

The Learning Zone will provide access to learning activities grouped within four areas. (see Figure 2. These areas are called:

- Accessing Quality Web Based Information
- Connecting for Care
- Enhanced Care Skills

- Making My Skills and Experience Count



Figure 2: Areas of Learning Activity with Learning Zone.

Each area within the Zone can be accessed from the Activity icon on the Home Page of the Landing Zone.

Clicking this icon reveals a new page containing the icons shown in Figure 3:



Figure 3: Icons representing activity areas within the Learning Zone

Accessing Quality Web-Based Information

This Learning Area makes extensive use of a technology called Scoop.it; licenses for which were purchased in February 2013.

A fuller description of Scoop.it technology will be provided in subsequent iterations of this document. However in summary, Scoop.it allows Discover developers and trainers to collect

thumbnail information from live websites and group this information together with thumbnails from other websites, around a common topic theme. See Figure 4



Figure 4: Scoop.it collections for UK pilot

In this way for example each pilot can create a Scoop.it topic site that provides Carers with access to the very best web based information relevant to that topic.

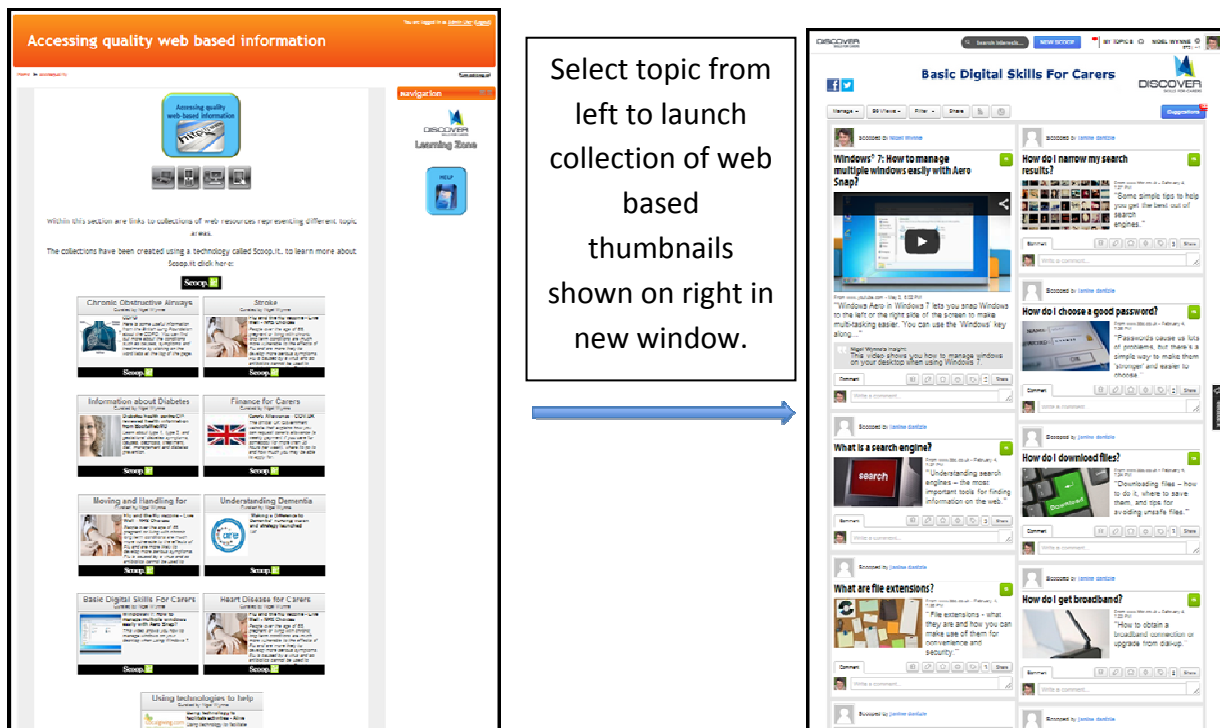


Figure 5: Display of different Scoop.it topics within the Learning Zone.

Each pilot organisation has been provided with support to help created up to 15 Scoop.it curations. In total 49 Scoop.it sites have been created, branded and linked to the Discover web, Facebook and twitter sites. Each pilot is choosing their own combination of Scoop.it topics. At least three topics will be common across all pilots.

These are:

- Digital Skills
- Dementia
- Using Technology to Help Carers Care

The different topics are represented within the Learning Zone using the icons shown below:

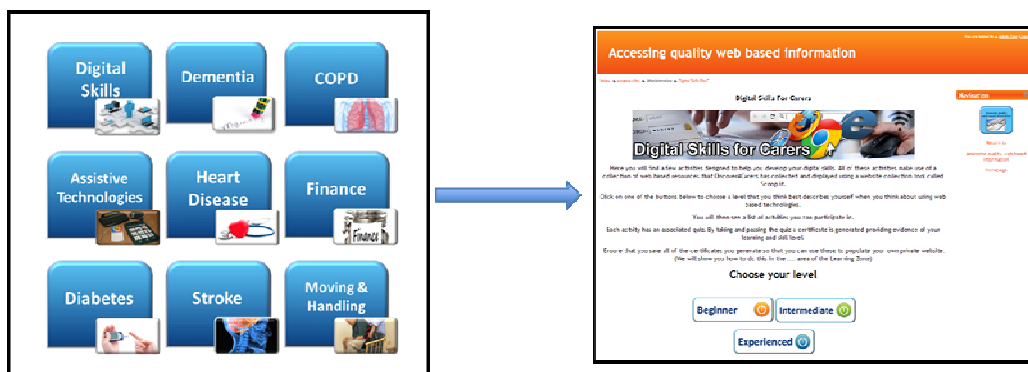


Figure 6: Topic activities and choice of level of learning.

Selection of a topic of interest to the Carer leads to a page that prompts the Carer to select the level of guided activity they feel most closely reflects their learning needs. See Figure 6

When the Carer selects their level of Learning they are presented with a page that is structured similarly to that shown in Figure 7.



Figure 7: Learning activity page.

Connecting for Care

This area of the Learning Zone will provide learning activities that help carers use technology to communicate in order to share experiences and to provide and gain support.

Navigation will be similar to that described above and will provide topic areas and then level of learning options.

Topic areas identified thus far include:

- Using discussion forums in Moodle
- Accessing and engaging with existing web 2.0 technologies such as Twitter and Facebook as well as forums used by other Carer organisations.

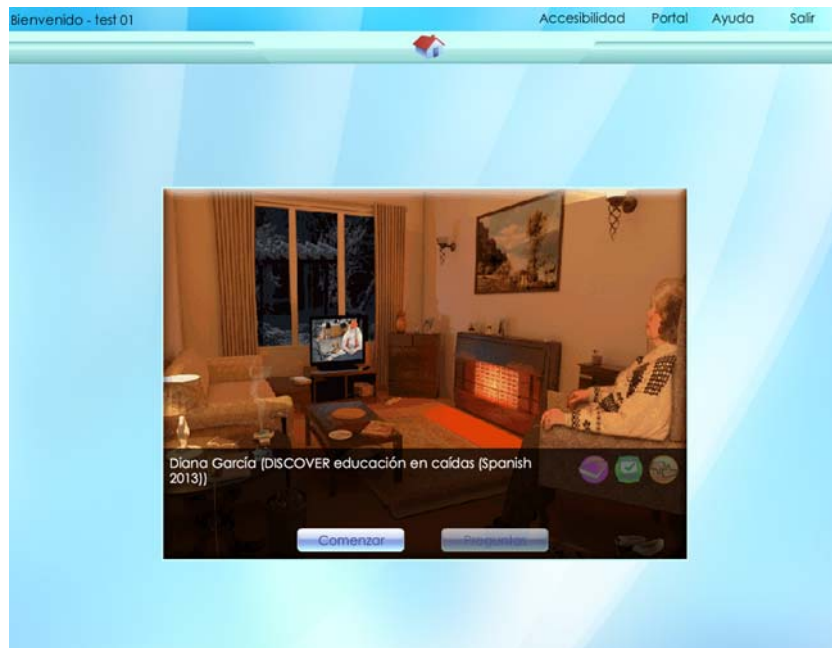
This area of the Learning Zone will support Carers to:

- Set up their own communities using Mahara
- Use web 2.0 safely.
- Conduct self-assessments and provide certificate generation opportunities.

Further details and content will be added as the project evolves and will depend to some extent on the nature of trainer and facilitator support available to mediate online activity.

Enhanced Care Skills

This area of the Learning Zone will utilise serious games, simulations and “Moodle mini-courses, provided by AUTH, to support Care Skills development amongst Carers. See Figure



8

Figure 8; Serious game that teaches about falls prevention

Games based learning using VCC to support “Falls Prevention”, “Using Assistive Technology in the Home”, and two additional scenarios

Within this area will be a mini Moodle course on Dementia that will utilise Open Labyrinth scenarios to facilitate knowledge and skills development.

This area will also provide self-assessment opportunities.

Significant work has been undertaken to customise VCC in order to support language selection (see Figure 9) and more simplified enrolment. See Figure 10

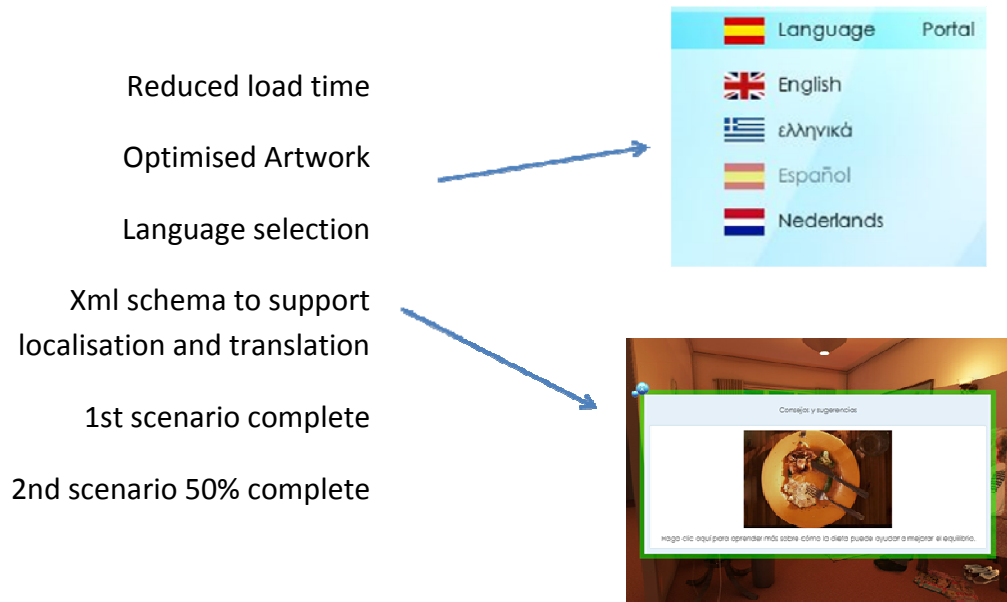


Figure 9: Summary of VCC Enhancements and Progress.

Sign up (Different URL's for each language)



Language variable passed to login-in page

Log-in (initially in chosen language)



Simulation



Portal (Chosen language URL)



(New browser window, overlaid, simulation still visible)

Figure 10: Flow chart showing simplified log-in procedure to both components of VCC.

Progress on adapting, and creating VCC scenarios.

To include:

- Internationalisation effort
- Description of scenarios
- User testing and optimisation work re: low bandwidth environments.
- Planned future developments

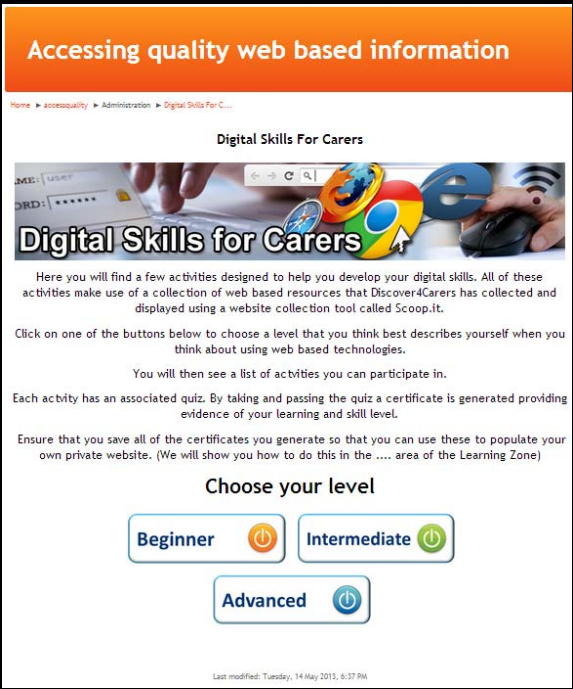
Making My Skills and Experience Count



This area will provide support to Carers:


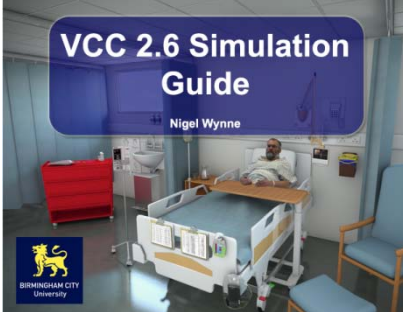

- Introductory activities based on e-portfolios and Mahara (Beginner)
- Creating a CV in Mahara (Intermediate)
- Collecting evidence of skills and experience using Mahara (Experienced)

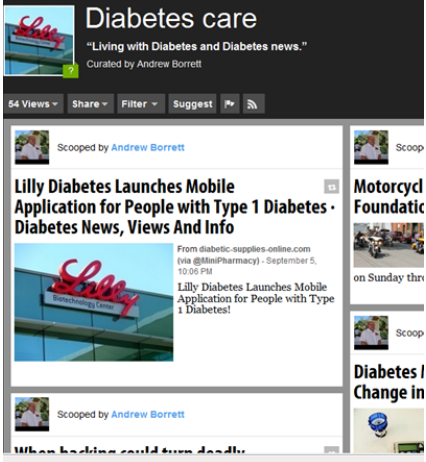
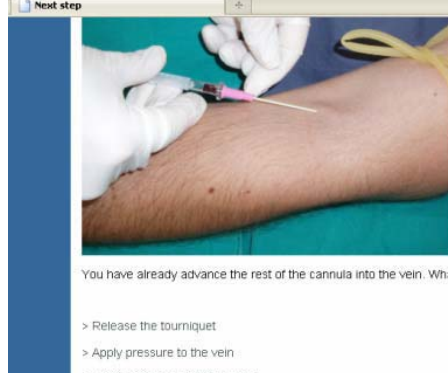
Content Authoring Tools and Delivery Channels

The table below outlines the main content authoring, content delivery and technology channels BCU is anticipating that DISCOVER will use across all Pilots sites. Looking Local has been included here despite being a UK only service, as it demonstrates how DISCOVER will provide access to content through the additional channels of IDTV.

Platform/Authoring Tool	Description	Role in DISCOVER	Channel
<p>MOODLE</p>	 <p>The Open Source Course Management and Virtual Learning Environment. One of the most widely used globally. Provides a rich suite of learning activities, reporting functions and certification functions. Easily customisable. Easy to quickly change learning</p>	<p>Main Platform for Providing Access to Learning Materials and Activities</p>	<p>Desktop PC/Mac, Tablet iOS and Android, Smart phone.</p>

<p>Mahara</p>	<p>design and resource presentation if needed.</p>  <p>An e-portfolio platform that allows users to create and organise their own webpages, create CV's, upload resources to display as evidence of learning and create user online communities to which they can control access.</p>	<p>Will be linked to from MOODLE and could be used to provide opportunities for Carers to provide evidence of learning, create CV's, and create peer support groups.</p>	<p>Desktop PC/Mac, Tablet and Smart phone, iOS and Android.</p>
<p>Virtual Case Creator</p>	 <p>A software platform developed by BCU to create interactive scenarios that support discovery learning, information finding and decision making skills development</p>	<p>Used to create engaging and stimulating content that perhaps Carers and those Cared for could complete together.</p>	<p>Desktop PC/Mac, cross browser</p>

<p>Mediasite</p>		<p>A teaching session recording and webcasting system, that provides easy distribution of content to a wide range of devices, providing a variety of templates</p>	<p>Rapid prototyping and distribution of ideas for content to DISCOVER partners.</p> <p>Efficient multi-channel delivery of content for Carers.</p> <p>Provides live and on demand multimedia streaming.</p>	<p>iOS (requires free app), Android, Blackberry, Phone and Tablets, Mac, PC, cross browser.</p>
<p>Camtasia</p>		<p>An e-learning content authoring tool kit. Allows efficient creation of interactive learning content engaging and interactive guides.</p>	<p>Creation of guides and bespoke DISCOVER content</p>	<p>PC Desktop Mac, some smart phone support.</p>
<p>Looking Local (UK Only)</p>		<p>An interactive service that supports text and image based information generally reflecting public services information and issues.</p>	<p>Distribution of basic content and signposting to additional DISCOVER learning opportunities.</p>	<p>IDTV, IPTV, Smart Phone and tablet iOS and Android, Nintendo Wii.</p>

<p>Scoop.it</p>		<p>A web tool that supports the quick curation of web pages around a specific theme.</p>	<p>DISCOVER may use this tool to create collections of web based information around disease and ill health, or other areas of need identified by Carers. We aim to explore whether some Carers and trainers would wish to take responsibility for their own Scoop.it site.</p>	<p>Desktop PC/Mac, smart phone iOS, Android.</p>
<p>Open Labyrinth</p>		<p>Open Labrynth provides interactive scenarios that can easily authored and that can integrate with MOODLE through SCORM.</p>	<p>Use OL to re-purpose existing content developed by AUTH to demonstrate how knowledge of health care conditions can enhance ability to Care.</p>	<p>Desk top, PC/Mac</p>

Development Schedules Key Milestones

Learning design and learning material development activities start during October 2012 following receipt of User Specifications

First release of content with some components translated for use across all pilots is scheduled for July 2013 (M13)

From July 2013 Phase 1 of the Pilots will take place during which additional content creation will take place. This Phase lasts 6 months (M16-M21) and ends Dec 2013.

Phase 2 of the Pilots is scheduled to take place over 6 months (M22-27) and begins immediately after Phase 1 completes.

Towards the end of Phase 2 the summative impact evaluation of DISCOVER will take place.

For this impact evaluation there needs to be as much content available as possible to all pilot sites.

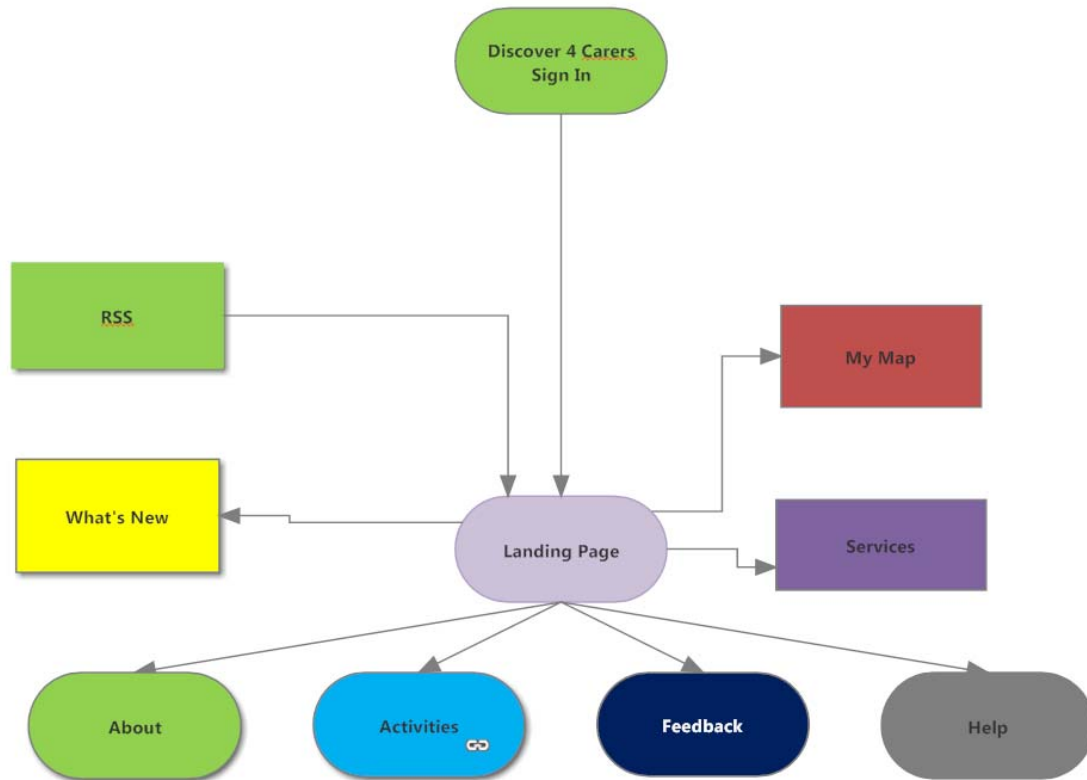
Summary

References

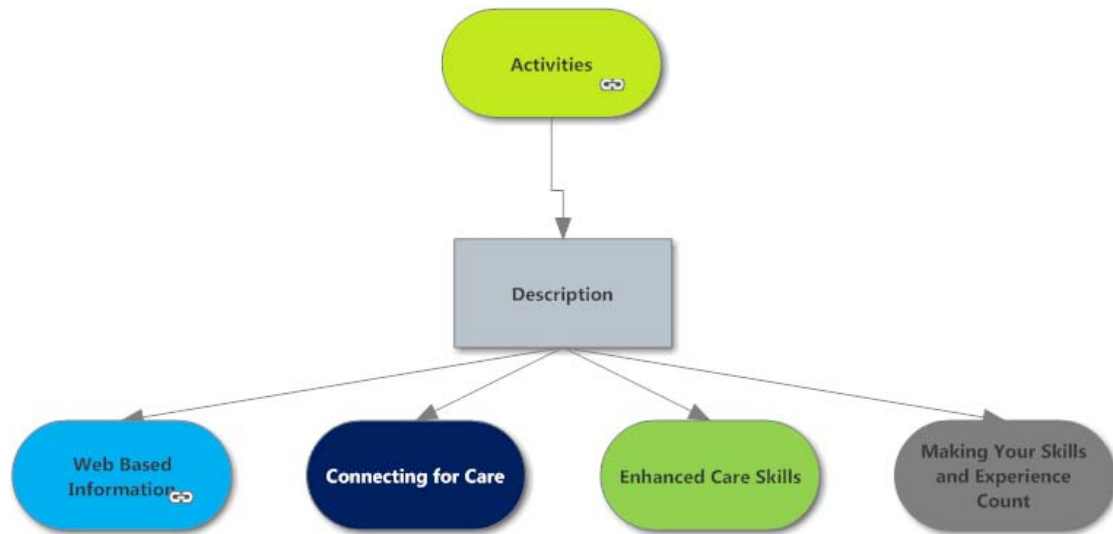
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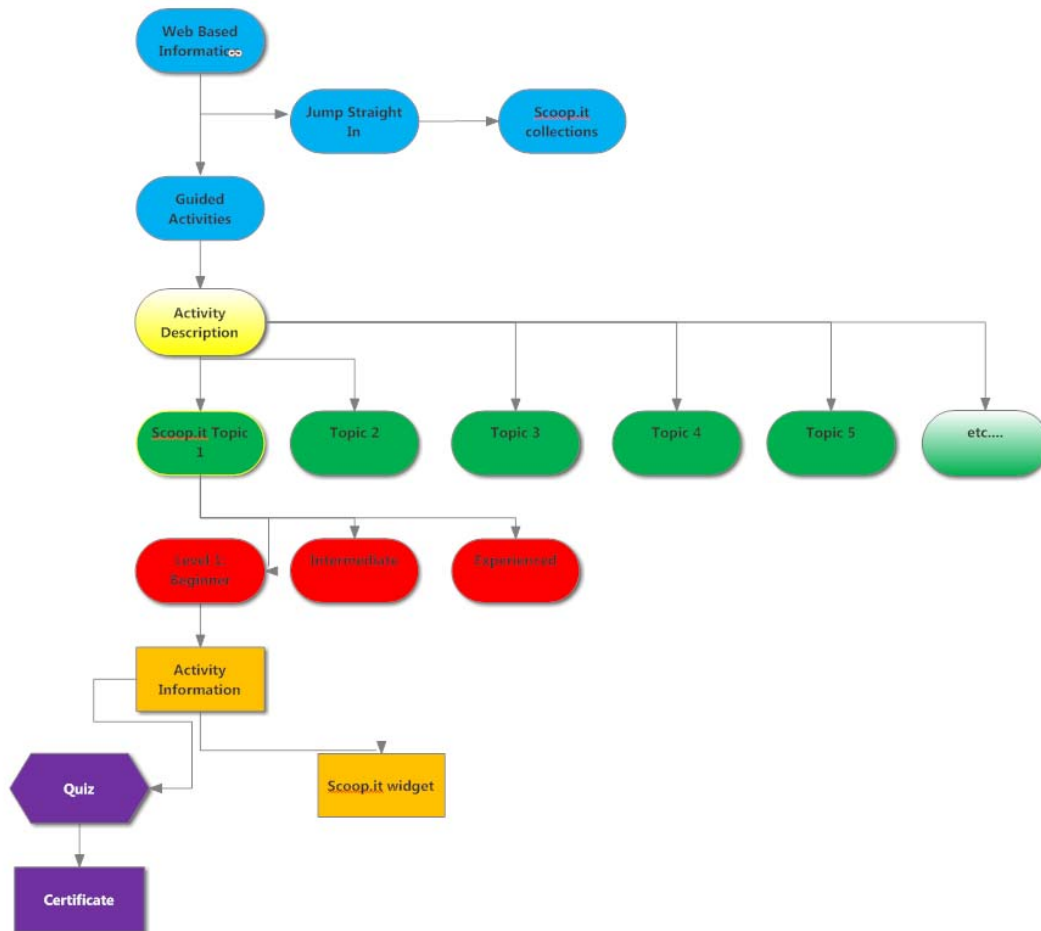
Appendix 1: Schema for Learning Zone Landing Page









Appendix 2: Schema for Activities Page






Appendix 3: Schema for Navigation from Area 1: Accessing High Quality Web Resources



Appendix 4: Icon Description

Icon	Role	Location
 <p>Return to Homepage</p>	Returns user to the Learning Zone Landing Page	Most pages other than landing page
	Navigates user to the different Learning Areas within the Zone	Home page of LZ
	Provides further information on Discover and the LZ	Home page of LZ
	Probably change to evaluation. Will either describe how users can provide feedback and evaluation information through the Learning Zone or will link directly to tools such as surveys that support this.	Home page of LZ
	Provides a Help Index and FAQ list	Home page of LZ
	Provides access to the Learning Area that focusses on Accessing Quality Web Based Information	Sub Pages within this Area

	<p>Provides access to the Learning Area “Connecting for Care”</p>	<p>Sub Pages within this Area</p>
	<p>Provides access to the “Learning Area Enhanced Care Skills”</p>	<p>Sub Pages within this Area</p>
	<p>Provides access to the Learning Area Making Your Skills and Experiences Count. Note: Need to change the image inset in this icon.</p>	<p>Sub Pages within this Area</p>
	<p>Provides Access to the Help Index and FAQ page.</p>	<p>All Pages within LZ</p>
	<p>Indicates to user which technology devices can be used to access certain media and/or complete particular learning activities</p>	<p>Adjacent to embedded media or learning activity descriptions.</p>

	<p>Example of a Topic Icon through which users can access guided learning activities”</p>	<p>Each Learning Zone Area will have clusters of Topics Icons to support nonlinear selection of Learning Opportunities</p>
	<p>Buttons allowing users to select the knowledge and skill level that would attribute to themselves with respect to a particular topic area</p>	<p>All pages that follow selection of a Topic Area</p>
	<p>Opportunity to take a self-assessment quiz. Success in the Quiz leads to generation of a certificate</p>	<p>Usually Embedded within Pages that follow selection of skill and knowledge level</p>
<p>Icons for e-portfolio</p>		
<p>Icon for Discussion Forum</p>		
<p>?Icon for VCC or Game</p>		
<p>Icon for Chat</p>		
<p>?? Improve Icons for Channels</p>		

Appendix 5: Results from Carer Focus Groups and Associated Research

Focus Groups

This summary is currently based on the findings from 3 focus groups undertaken in Birmingham, UK but the intention is to enrich this summary with the findings from the focus groups that will be held in the test bed sites.

The aim of the focus groups was to elicit the carers' perspectives on

- Their caring situation
- Their use of digital technologies
- Their level of digital skills
- The value of technologies in assisting carers
- The use of technologies to improve the quality of life of carers and the people they care for
- The specific digital skills they would like to acquire
- The skills/information they feel would assist them in their caring roles/future employment

Desk research was also undertaken and the findings from the focus groups and desk research will be reported under each of the above headings.

Caring situation

Participants in the focus groups were either caring for some-one currently or had been a carer previously. There were no restrictions on the age of the carer or the cared-for person, or on the carers' specific caring roles and both formal and informal carers participated in the focus groups although formal carers were in the minority. In total, 40 carers, spanning the age range from young to older adults, participated in the focus groups.

The caring situations of the informal carers ranged from: fairly minimal care for a relative or friend who did not live with them to demanding and challenging care for a co-resident with a life threatening condition. The people they cared for were living with a variety of physical and mental long term health conditions and, depending on the level of care required by the

cared-for person, carers' paid employment spanned the complete spectrum from full-time to limited part-time working with some carers currently unable to work. Formal carers similarly cared for people with a range of conditions and levels of need.

Value of technologies in assisting carers

Carers with access to a PC felt the internet was a useful source of general information e.g. being able to compare costs of car insurance. Other used it in their carrying role to find out more about the cared-for person's health condition, although other carers relied on Age UK or leaflets at their GP surgery for this. Some carers regularly asked friends or family members to look things up on the internet for them. Some carers Most carers did not want to engage with online shopping or internet banking because they were concerned about privacy, identify theft and fraudulent use of their credit cards.

Use of technologies to improve the quality of life of carers and the people they care for

Participants felt that the opportunity to talk to other carers online through online communities would be welcomed by many carers. Apparently in Birmingham about 5 years ago there was a f2f support group for male carers – and those participants that used to belong to the group would find an online version useful.

Broadly speaking, these participants would welcome anything that would help the people they care for, such as new skills they could pass on, but also online activities that could stimulate and entertain cared-for individuals who have become house-bound or spend long periods on their own.

Some carers felt using technology was wasting valuable time that could be spent more constructively and others felt there was no time to sit and use PCs as all their time is taken by their caring role.

Some new applications of technologies were discussed and carers thought the following could be useful:

- Smart phones/ wristbands – to locate people with dementia, who tend to wander, or to enable cared-for person to call for help
- Talking clocks – to remind cared-for person to take their medication
- Telehealth Care – although they would like more information about this.

Specific digital skills they would like to acquire

Participants described how they had difficulties in downloading software to do what they want to e.g. they cannot download Open Office so they can't type letters. They would like to know how to block off inappropriate messages (SPAM) as they clog up their email; also some of the messages are offensive.

Desk-based research

Several organisations offer courses in basic computing skills but the more dedicated courses are focussed on deeper IT skills than carers probably require. The most useful checklist for digital skills acquisition may come from the Get Connected Investment Project which aimed to enable care providers to improve access for service users, carers, visitors and staff to ICT so they can use the power of the internet to communicate, learn and train. The project found:

Service users used PCs to

- communicate with their friends and family through email and Skype
- connect with the wider world e.g. watch graduation ceremony via video streaming
- better manage care needs
- access online services such as shopping and banking
- find out information
- play games
- listen to the radio and watch television programmes via the internet
- take and view photographs and videos

Staff used PCs to

- support staff learning, training and development:
- plan activities with and for service users e.g. reminiscence work;
- develop and maintain care plans with residents.
- Manage other organisational activities

Skills/information they feel would assist them in their caring roles/future employment

Participants would like to have more information about the health conditions of the people they care for. Also, there was great interest in developing employability skills such as CV writing, role playing interview techniques, matching your skills to job applications and writing covering letters.

Desk-based research

Several care agencies are running their own courses for carers and a two-year project was undertaken by the Scottish Government to develop a carers' toolkit. Helping carers back to

work is a priority for the Scottish Government and they identified a range of skills that they believe carers' acquire through their caring role for instance:

- Knowledge of the effects of specific disabilities and illnesses
- Experience of providing personal care – washing/dressing/assistance with toileting
- Moving and handling skills
- Management of medication
- How the Health Service works – and the particular roles of different professionals within it
- Assistance with therapeutic regimes
- Enabling independence
- Providing for particular dietary needs
- Managing and using equipment – e.g. wheelchairs, hoists, bath aids
- Specialist communication skills – e.g. sign languages or communication with dysphasic patients
- General communication skills
- Assertiveness (in negotiating with different professionals and service providers)
- Complex management skills

They identified that when caring ends some Carers' might wish to look for work in an environment where they felt they had some existing skills. Those who are still actively caring may also wish to consider working in the Health Service. Therefore accreditation of these skills through our materials will be very valuable. They also acknowledged that some Carers would prefer assistance to pursue careers other than caring, either rejoining their original profession to retraining.

The following list encompasses the range of courses typically on offer from caring agencies for their staff development.

- Adult Abuse, prevention of
- **Challenging Behaviour Courses**
- **Communication and Record Keeping Course**
- **Confidentiality Awareness Course**
- Continence Promotion
- CoSHH (Substances Hazardous to Health)
- **Dementia Awareness Training Courses**
- Develop As A Worker
- **Equality and Diversity Awareness Course**
- Effective teamwork
- Fire Training
- First Aid Awareness
- **Food Safety Awareness Course**
- **Health and Safety Awareness Course**
- **Infection Control Awareness Course**
- **Loss and Bereavement Awareness Course**
- **Medication Awareness Courses**

- **Mental Capacity Act and Deprivation of Liberties Courses**
- **Moving and Handling of People Courses.**
- **Nutrition Awareness Course**
- **Observation Skills for Carers Course**
- **Palliative Care Awareness Course**
- Person Centred Care
- **Person Centred Care Courses**
- Principles of Care
- **Risk Assessment Course -**
- Role of the Care Worker
- **Safeguarding vulnerable adults Awareness Course**
- **Stress Awareness Course.**
- **Stroke Awareness Course**
- Success with Learning Difficulties
- Supervision and Appraisal
- **The Ageing Process Course**
- Train the Trainer
- Understand Your Organisation
- Understanding autism
- **Wound Assessment Course**

Informal carers tend to be offered a subset of these courses for example:

- Long-term conditions
- Dementia
- Personal and practical care
- Health and social care services
- Equipment and adaptations
- Finance and benefits
- Carers and employment
- Older carers
- Parent carers
- Food and diet
- Emotional support and relationships
- Exercise and leisure activities
- Social and learning activities
- End of life issues

Conclusion

The focus groups revealed that these informal carers may not be aware of the possibilities that digital inclusion could bring, but were excited by the ideas that were suggested to them. Recent project have shown that when offered training in digital skills, carers and the people they care for engaged with the technologies, using them for them for a variety of purposes to support their well-being or professional needs. There are a number of training courses available for both informal and formal carers, ranging from a few hours to in-depth training over a longer period, but few focus specifically on digital skills. However, it is clear

that, in addition to acquiring digital skills, the participants in the focus groups also wish to acquire caring and employability skills.

Dr Verina Waights

September 2012