

Each article is copyrighted to its author(s) and all rights are reserved. No part of this publication may be reprinted or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage or data retrieval system without prior written permission from the author(s) and full acknowledgement to ALISS.

Editor: Heather Dawson  
h.dawson@lse.ac.uk

Published by ALISS.

## Special issue: Mobile Learning

Editorial  
*Heather Dawson*

Making the Case for the Social Sciences  
*Madeleine Barrows*  
*Communications Officer*  
*Academy of Social Sciences*

### Projects

Mobile Learning: useful resources for starting research  
*Heather Dawson*

Learning with mobile devices in the wild  
*Nicola L. Beddall-Hill*  
*ESRC research studentship, City University, London*

Walking Through Time  
*Chris Speed*

Intute Mobile Internet Detective  
*Katy Morrison, Intute E-Learning Editor*  
*With additional contributions from:*  
*Andrew Priest, Intute Senior Technical Officer*  
*Diana Massam, Intute Project Manager*

### Library Innovations

Mobile Phones and Libraries: experimenting with the technology  
*Kate Robinson: Head of Academic Services, University of Bath Library*

Supplementing inductions with text messages, an SMS 'tips and tricks' service.  
*Andrew Walsh, University of Huddersfield*

### The Profession

The Library Routes Project  
*Ned Potter, LIFE-SHARE Project Officer, University of Leeds Library*

## Editorial

Welcome to the latest edition of ALISS Quarterly. It has been published by ALISS (Association of Librarians and Information Professionals in the Social Sciences).

This special issue addresses Information and resources relating to Mobile learning. It also includes some news about two new resources we think every professional should know about. The new report on the importance of the social sciences which has recently been published by the ESRC and the library routes project which is a fascinating and inspirational read – using web 2.0 technology to enable library and information workers to tell everyone about how they entered the profession an their career paths.

The interest in mobile learning arose from the increasing number of news reports on new mobile websites which have been posted recently on the resourceshelf.com blog <http://www.resourceshelf.com> . This issue aims to spotlight a few recent innovative examples, from the world of libraries it includes a review of the use of QR technology by the University of Bath to enable users to save library class marks to their mobile phones and the work of the University of Huddersfield using SMS text messaging to communicate with library users. The issues also highlights a number of academic applications. Namely the development of mobile version of the internet detective information literacy package and the use of mobile technology to aid learning on geography fieldwork trips.

Remember that you can keep up to date with ALISS news by subscribing to our free electronic mailing list LIS\_SOCIAL SCIENCE at <http://www.jiscmail.ac.uk/lists/LIS-SOCIALSCIENCE.html> Or consulting our website at: <http://www.alissnet.org.uk>

From 2010 we are starting a new feature this will be a monthly round up of new articles relating to higher education and students, which hopes to pinpoint those of most interest to academic and research libraries.

See our first example at <http://issuu.com/heatherdawson/docs/heeducationfeb2010>

We hope you enjoy the issue!

Heather Dawson.

ALISS Secretary

## Making the Case for the Social Sciences, Volume 1: Wellbeing

Madeleine Barrows, Communications Officer, Academy of Social Sciences

At a time when the shorthand of 'STEM subjects' seems to have become a synonym for 'useful' or 'valuable', and public money is tight, the social sciences are under threat. However, it is apparent that this threat is not one of being deliberately devalued, as government ministers all confess their reliance on social science work and major newspapers regularly cover social science based stories; rather it is one of being unappreciated. As part of its mission to be the voice of the social sciences in the UK, the Academy of Social Sciences has grasped the initiative in making the case for social science. Together with the Economic and Social Science Research Council (ESRC) it has recently issued the first in a series of free, quarterly, themed and easily accessible reports which bring together stories that demonstrate social science in action. A PDF version of the report is available from the Academy and ESRC websites.

<http://www.esrcsocietytoday.ac.uk/ESRCInfoCentre/PO/releases/2010/february/case.aspx>

And

<http://www.acss.org.uk/news.htm>

The first volume, launched in February 2010, covers an overall theme of 'wellbeing', and future issues will look at ageing, climate change and crime amongst other major topics of interest and public concern. With the aid of the ESRC and its Society Now mailing list, the series is being widely distributed at all levels, from government departments and MPs to colleges and sixth forms and the format has been chosen with these key audiences in mind. On the one hand, the booklets are part of a wide-ranging consciousness-raising exercise, aimed at keeping the value of social science explicitly at the forefront of the public mind. On the other, the Academy is responding to clear advice from within government that ministers require short summaries of research which clearly highlight potential benefits to society and policy implications; longer and more scholarly writings only come into play at a later stage of policy development and it is vital to make an initial case for any research outcomes very clearly and succinctly. As a result, an easily carried A5 booklet format was chosen, with each issue containing a dozen or so themed clearly written 300-word stories enhanced with colour graphics and illustrative photographs.

The case studies in the first booklet show how evidence-based research can be translated into policies that will improve everyone's wellbeing because they are based on what research has shown people will be prepared to accept and act upon. Taking the guesswork out of tackling major social problems is vital. The stories show, for example, how health and safety measures only work if people actually follow them, so that developing the right measures and implementing them properly is crucial. Other stories show that intelligent approaches to crime prevention and reduction can produce real results, and that knowing that not all deprived areas need the same help, or that struggling communities can improve themselves through entrepreneurship, can save money and make a real and lasting difference to people's lives.

A common theme in the case studies is that 'common sense' often turns out to be more mythical than real, demonstrating that successful solutions must be based on a sound understanding of issues. For example, are regular family meals really a dying tradition, or

were they only ever the product of a rose-tinted view of history? Do people eat badly just because they are weak-willed, or are there real issues of poverty and knowledge behind people's diets? Are children really better off removed from difficult parents or should keeping the 'natural family' together be a priority? Do fathers and grandparents make much of a difference to children's lives or are mothers and grandmothers sufficient? Does it matter who receives the benefit money intended to help the children as long as it gets to someone in the family? *Making the Case for the Social Sciences Vol 1: Wellbeing* shows how all these questions and some others have been investigated by social scientists trained to gather and analyse data carefully. As a result real help can be provided to those who seek to produce the answers that are required to move society forward and improve the wellbeing of all.

The report's launch on 10 February 2010 was attended by over two hundred people, including many from academia and within Whitehall, demonstrating the scale of the concern that exists about the future of social science research in the UK. A video of the discussion can be viewed by following the link from the Academy's homepage ([www.acss.org.uk](http://www.acss.org.uk)). The politicians present all expressed support for social science as an intrinsically important part of policy making. However, recent events surrounding funding decisions indicate that it is vital for the social science community to ensure that its research is not taken for granted when other voices are shouting louder. Adrian Alsop (Director for Research Development at the ESRC) considered that the UK social science research base was under-appreciated, despite the demonstration by the Research Assessment Exercise that it is world leading.

David Willets MP, Shadow Secretary of State for Innovation, Universities and Skills, asked, "if we don't study our own society then who will?", and linked an understanding of the mutual interdependence of social and natural science with the need for evidence-based research in influencing policy decisions. He also commented on the value of a rounded picture of research outcomes: while it is easy to support evidence-based policy when the results are positive, the decisions are harder when the evidence is negative even though negative results contribute just as much as positive ones and are therefore just as important. He added, however, that it was unrealistic to hope for a purely evidence-based approach, as politicians could not wait for a critical mass of research to be reached. The panel of MPs and leaders of think-tanks broadly agreed that good social science research was vital for the future development of our society but added that it was crucial for researchers to understand that messages to government need to be simple and clear. *The Making the Case* series aims to be just that: a vivid demonstration of social science in action in the UK.

Footnote:

The Academy's mission is to promote social sciences in the United Kingdom for the public benefit. It promotes research, publishes learned material, distributes information, organises workshops and events, and contributes to public debates on issues affecting the social sciences. Its focus is multidisciplinary and encompasses both theoretical and applied work.

The Academy is composed of over 600 Individual Academicians, who are distinguished scholars and practitioners from academia and the public and private sectors, and 37 Learned Societies promoting excellence in the social sciences. Most of the UK's Learned Societies in the social sciences are represented within the Academy. There are also a number of individual and organisational affiliate members.

## Mobile Learning: useful resources for starting research

Heather Dawson

According to the *International Telecommunications Union (ITU)*.

<http://www.itu.int/ITU-D/ict/statistics/ict/index.html> by the end of 2007, almost one out of two people had a mobile phone. In Europe, penetration has almost reached the 100% mark. Even in poorer areas of the world access is widespread as more than one out of 4 Africans and one out of 3 Asians have access to a mobile phone. In the USA, the Pew Internet and American Project has highlighted that their usage is growing strongly amongst teenagers and college age students. <http://www.pewinternet.org/Reports/2009/14--Teens-and-Mobile-Phones-Data-Memo.aspx>

The rise of this technology would therefore seem to offer new ways of delivering educational content. As not only are students used to it, but it is convenient, more readily accessible than other more expensive PCs and flexible enough to support different types of usage. Yet according to a recent article in *Educause Quarterly* *The Advent of Mobile Learning Technology, The Revolution No One Noticed: Mobile Phones and Multimobile Services in Higher Education*, by Alan Livingston

Educause quarterly vol32 no.4

<http://www.educause.edu/EDUCAUSE+Quarterly/EDUCAUSEQuarterlyMagazineVolum/TheRevolutionNoOneNoticedMobil/163866>

Some opportunities to utilise them are being missed.

Indeed the annual *Horizon Report* which is a collaborative effort between the EDUCAUSE Learning Initiative (ELI) and the New Media Consortium (NMC) 2010 identified it as one of the key areas which will effect learning in the near future, being closer in adoption than other more widely used mediums such as ebooks. Each year, the report identifies and describes six areas of emerging technology likely to have a significant impact on teaching, learning, or creative expression in higher education. The areas of emerging technology cited for 2010 were:

- Time to adoption: One Year or Less Mobile Computing Open Content
- Time to adoption: Two to Three Years: Electronic Books Simple Augmented Reality
- Time to adoption: Four to Five Years, Gesture-based Computing, Visual Data Analysis

The full text of the report can be downloaded from

<http://www.educause.edu/ELI/2010HorizonReport/195400>

Here are some suggestions of good starting points for finding out what Library staff can do.

*Using Mobile Technology to Enhance Students' Educational Experiences* is a report which is available from the EduCause website. It was published in 2005, and is therefore rather dated, but still inspirational <http://net.educause.edu/ir/library/pdf/ers0502/cs/ECS0502.pdf>

The case study, which examined educational applications of mobile technology in The Netherlands, was ECAR's first case study from outside of North America. Three Dutch universities—Wageningen University and Research, Radboud University Nijmegen, and Vrije Universiteit Amsterdam incorporated 3G services into mobile applications used by students. Funded by the Dutch SURF Foundation, these institutions explored flexible uses of technology in and out of the classroom, mainly through the GIPSY project and the Manolo project. Their experiences offered guidance and insights to institutions of higher education in the United States and elsewhere.

Another useful older resource is Cobcroft, R (2006). *Literature Review into Mobile Learning in a University Context*, Queensland University of Technology which can be downloaded from the Queensland institutional repository <http://eprints.qut.edu.au/archive/00004805>

This document represents an extensive survey of the literature surrounding mobile learning or 'm-learning'. It indexes over 400 publications, ranging from conference papers, reports, reviews, and research projects. Although most of the research was undertaken from December 2005 and January 2006, and has not since been updated, the literature review does offer some background which considers contemporary changes to learner behaviours, institutional directions plus realistic guidelines for embedding mobile learning into the curriculum.

A more up to date survey is ECAR *Study of Undergraduate Students and Information Technology*. Smith, Shannon, Gail Salaway, and Judith Borreson Caruso, with an Introduction by Richard N. Katz. The ECAR Study of Undergraduate Students and Information Technology, 2009 (Research Study, Vol. 6). Boulder, CO: EDUCAUSE Center for Applied Research, 2009, available from <http://www.educause.edu/Resources/TheECARStudyofUndergraduateStu/187215>

Since 2004, the annual ECAR Study of Undergraduate Students and Information Technology has focused upon how information technology effects the American college experience. Researchers ask students about the technology they own and how they use it in and outside of the academic setting. The ECAR Study of Undergraduate Students and Information Technology, 2009 was an extension of the earlier 2004, 2005, 2006, 2007, and 2008 longitudinal studies. It used quantitative data from a spring 2009 survey of 30,616 freshmen and seniors at 103 four-year institutions and students at 12 two-year institutions; plus student focus groups that included input from 62 students at 4 institutions; and review of qualitative data from written responses to open-ended questions. Information gathered covered student ownership, experience, behaviours, preferences, and skills with respect to information technology. In addition the 2009 study also included a special focus on student ownership and use of Internet-capable handheld devices. This section can offer ideas on its potential usage in education and any challenges educators might face in incorporating it.

Another recent study which ALISS committee members have found useful is *The Use of Handheld Mobile Devices: Their Impact and Implications for Library Services* Joel Cummings, Alex Merrill Terrell; Steve Borrelli; Washington State University which was published in *Library Hi Tech* / Vol. 28 No. 1 / 2010 / pp. 22-40 / DOI 10.1108/07378831011026670

The authors carried out a survey amongst American students in order to better understand the nature of handheld mobile computing use by academic library users and to determine whether there was a significant demand for using the library services with these small screen devices. They found that total of 58.4 % of the respondents who owned a web-enabled handheld device indicated that they would use small screen devices, such as PDAs or web-enabled mobile phones to search a library catalogue. Additional findings from more open ended questions also offer a broader understanding of handheld mobile computing impact on, and implications for, the services provided by academic libraries.

If you are looking for similar examples of recent research on the potential use and challenges faced by all forms of mobile learning key organisations, whose websites you could bookmark include:

*BECTA which has an emerging technologies research website*  
<http://emergingtechnologies.becta.org.uk/>

This brings together news stories, articles, research, views and opinions on emerging technologies for learning. These cover all forms of mobile devices with a particular emphasis on use by classroom teachers. It is also worth reading the BECTA Harnessing Technology: Next Generation Learning Strategy, which can be downloaded from the website

Another recent interesting paper which is available there is *Learners – should we leave them to their own devices?* (John Traxler, Learning Lab) 2009 [http://emergingtechnologies.becta.org.uk/index.php?section=etr&rid=14148&filter=ArtTec\\_001&print=1](http://emergingtechnologies.becta.org.uk/index.php?section=etr&rid=14148&filter=ArtTec_001&print=1)

This article looks at the current technology and types of these devices and how they might be used. He focuses upon economic, political and pedagogical aspects. Also covered are issues around institutions allowing and encouraging learners to use their own devices.

For information on mobile learning in the post 16 Higher education environment, a good starting point is the *JISC website*  
<http://www.jisc.ac.uk/whatwedo/topics/mobilelearning.aspx>

For instance see their basic introductory podcast on mobile learning technology and education <http://www.jisc.ac.uk/news/stories/2009/08/podcast85mobilelearning.aspx>

The site contains news stories and information on mobile learning projects (both current and historic) which JISC has funded. You can read or download research reports and follow the links to numerous project websites where further more detailed information and examples of developed courses can be found. Associated with this is the *Techdis* website which offers specific advice on resources on the use of mobile learning technologies by users with special needs. It includes sections on assisted learning technologies in specific relation to mobile devices.  
[http://www.techdis.ac.uk/index.php?p=9\\_5](http://www.techdis.ac.uk/index.php?p=9_5)

*Handheld learning* <http://www.handheldlearning.co.uk> Is part of the Learning Without Frontiers organisation. It was formed in 2004 by Graham Brown-Martin and aims to create an online community of experts, practitioners and researchers whose focus is

on how current learning and teaching practice can be enhanced by the use of mobile technologies. Since 2005 it has hosted one of the largest international conferences focussing specifically on this rapidly emerging trend in learning. Some abstracts and proceedings from these events, plus other associated materials can be viewed from the website.

For example see the 2009 papers at <http://www.handheldlearning2009.com/proceedings>

*Association learning technology ALT-C*

<http://www.alt.ac.uk/ALT> is the leading UK body bringing together practitioners, researchers, and policy makers in learning technology. It was formed in 1993, and is a registered charity. Features of its website include news, listings of events, contents pages from its publications and abstracts from its annual conference. The latter is a particularly good showcase for academic research on the theory and practice of the implementation of new technologies. Recent years have included examples of mobile devices in the context of elearning  
<http://www.alt.ac.uk/altc2009/> [http://www.alt.ac.uk/alt\\_c\\_abstracts.html](http://www.alt.ac.uk/alt_c_abstracts.html)

Further examples of conference abstracts can be found on the *M-Learn.org website* <http://www.mlearn2010.org/> This is maintained by The International Association for Mobile Learning (IAmLearn) and the University of Central Florida and is renowned for its international conferences on all aspects of mobile learning, including technology, policy and practice.

It is possible to view some papers and abstracts online see these examples from 2009  
<http://www.mlearn2009.org/keynotes.asp>

*Multimedia Information and Technology Group*

<http://www.cilip.org.uk/get-involved/special-interest-groups/multimedia/Pages/default.aspx> (MMIT) is a specialist sub-group of CILIP, the UK professional body for librarians and information professionals. As part of its focus on multimedia technology. It often includes short informative articles in its journal. A recent example is the article *Mobile Learning: what exactly is it?* *Multimedia Information & Technology*; Feb 2010, Vol. 36 Issue 1, p22-23, 2p which reviews a recent event where practitioners discussed the theory and ongoing projects.

*Futurelab* <http://www.futurelab.org.uk/>

is an independent not-for-profit organisation that is dedicated to transforming teaching and learning, making it more relevant and engaging to 21st century learners through the use of innovative practice and technology.

Its website has a number of inspirational discussion papers on recent technology and the way that it might be used <http://www.futurelab.org.uk/resources>

*m-learning.org* <http://www.m-learning.org/> is a website maintained by Tribal, an organisation that works with local government, central government, the EU commission, employers, schools, colleges, universities and international organisations to develop, incorporate and embed mobile learning into all areas of education and training. While its website primarily exists to promote its services. It does have some free case studies with examples of how technology has been used. <http://www.m-learning.org/case-studies>

Finally a good example of an educational research centre from the USA is the *Duke Centre for Instructional Technology* (CIT) [http://cit.duke.edu/reports/reports\\_type.html](http://cit.duke.edu/reports/reports_type.html). Although primarily created to support the academic mission of Duke University, the fact that it helps instructors find innovative ways to use technology to achieve their teaching goals, means that many of its projects have a wider interest. Examples of case studies and reports can be read online at the website. [http://cit.duke.edu/reports/reports\\_type.html](http://cit.duke.edu/reports/reports_type.html)

In addition you might want to follow some of the many useful blogs on this subject area. Some useful examples are listed below. All of these can serve to alert you to recent developments, news, projects, publications and events. Sometimes they offer comment from the authors.

*Upside learning blog* is about innovation, design, development, and trends in the Learning Solutions domain. It includes a M-Learning section which can be accessed at: <http://www.upsidelearning.com/blog/index.php/category/mobile-learning/>

*M-Learn Africa* <http://mlearningafrica.net/about/> is sponsored by the Shuttleworth Foundation and the Meraka Institute. It is about news, projects and research related to mobile learning on the continent — by Africans, for Africans. It covers mlearning as well as mobile usage and adoption, especially by youth. Efforts from related sectors, such as mhealth projects that involve mlearning, are also described.

*Toy to Tool, Cellphones in Education, 2010*, is a useful Blog maintained by American educator Liz Kolb which has handy weekly updates on the use of mobile phones in schools, primarily in the U.S. <http://www.cellphonesinlearning.com/>

Finally

*The Spectrum blog*  
<http://mobile-libraries.blogspot.com/>  
 is maintained by Gerry McKiernan from the Library of Iowa State University. It has some really good discussion of all sorts of mobile technology and their potential uses in libraries (primarily academic) It also has live twitter feeds and news rss feeds covering events, new technology and publications relating to M-Learning.

## Learning with mobile devices in the wild

*Nicola L. Beddall-Hill*

*ESRC research studentship, City University, London*

*Part of the TLRP TEL project Ensemble*

<http://www.ensemble.ac.uk/>

### Background

This research was undertaken as part of an ESRC studentship at City University, London. It focuses on the role mobile devices play in learning on field trips. The studentship is attached to the Semantic Technologies for the Enhancement of Case Based Learning (Ensemble) project. This is one of eight projects within the Technology Enhanced Learning (TEL) Programme funded jointly by the ESRC and EPSRC. These projects are part of the broader Teaching and Learning Research Programme (TLRP).

### Introduction: Mobile technology and education

The introduction, development and growth of 'smart' mobile devices have had a profound effect upon education within the last decade. The issues surrounding their use in education are currently a popular area of research. There are a plethora of projects, interventions, applications and evaluations across education and worldwide exploring the potential for this technology.

### Research theme

The setting of interest lies outside the classroom in a formal but unique context: the field trip. The research concerns social interactions within collaborative learning activities with mobile devices and the role these devices play. The focus of this article is what 'objects' the students used to negotiate the challenges they faced when using these devices.

### Learning in the wild

Fieldtrips are an essential part of many higher education geoscience courses. They play a pivotal role in realizing student integration on a social and academic level while further facilitating understanding and subject knowledge (Boyle et al., 2003). Within this setting the tutor, learner, curriculum and device create complex interactions. The key aim for this research is to investigate the construction of knowledge within these complex interactions.

### Case studies

Two ethnographic observations of field trips were undertaken in 2009 with MSc geographic science courses. The first was to Coniston in the Lake District with City University. The second was kindly hosted by Kingston University and the JISC funded MORSE project and took place in Malta. A variety of data was collected with different techniques predominately audio-visual. A head mounted camera was used to record the student's interactions in the group and with the device. This method offered a different

perspective and a safer method given the physical nature of the work. It also enabled the researcher to have a record of interactions without having to maintain a close proximity to the students, which may have inhibited them. The students were set case based projects similar to those they might encounter while working in GIS careers. On the Coniston trip they had two days per project and were assessed via a presentation at the end. During the Malta trip the emphasis was upon learning to use the equipment and collect data with it. Analysis and report writing were to be completed upon return to the UK.

### Devices in the wild

There exist mobile devices specially developed for the 'wild', while others can be modified to do the job. So far observation has only taken place within geographic information science (GIS). Hence the emphasis is upon the devices used in this setting (hitherto referred to as GIS devices). These devices contain sensor technologies that allow data capture, self-positioning via Global Positioning Systems (GPS) and communication. They have a sliding scale of capabilities largely dependent on their individual cost. The high-end GIS devices supply readings accurate within a few centimetres. GPS devices used for leisure may have up to several meters variation. But when supplying coordinates for an air landing strip this range of error becomes unacceptable.



Figure 1. The Trimble GeoXH, a high-end designated GIS device



Figure 2. A Hewlett Packard Personal Digital Assistant modified to act as a GIS device

### Social devices

Unlike many other technologies some mobile devices have personal importance attached to them and can enable an identity to be portrayed by the user. However the mobile devices used on the field trips did not display these features. They were largely unfamiliar to the students and had to be shared within a collaborative context. Their introduction to the activity created challenges for the students to overcome. These included: interfacing with the device, inputting data that reflected the reality they were trying to record and assessing the accuracy of the information the device provided. The students sought common understandings and reference points from which to work out these challenges.

### Objects for shared understanding

How do the students between themselves and with the device jointly construct knowledge in these situations? They varied in experience of GIS and the devices used. But had to come together in this context to solve a problem. That is how to conduct the most appropriate project to be awarded the most deserving marks. It is proposed they sought 'Boundary objects' to negotiate this collaborative activity. A boundary object can be a concrete material object such as a GIS device. But it does not have to have a physical form; instead it could be a learning aim or classification system. The concept was developed by Star and Griesemer (1989) who found that bird specimens acted as boundary objects for negotiations between different parties at a natural history museum. The birds held different meanings for the different museum workers but were recognizable between them. This means boundary objects have common identity across contexts but maintain a flexibility to meet the different needs of the actors (Bowker & Star, 1999).

### Where are the boundary objects?

It was useful to seek what potential boundary objects were being used when constructing knowledge with mobile devices on the field trips. Generating an awareness of what boundary objects are used might inform curriculum and technology design for learning settings, which use mobile devices. It was initially thought that the GIS device itself might have acted as a boundary object. However after further analysis of the difficulties the students often experienced interacting with these devices: such as menu navigation, input and battery life this seems unlikely.

### Working conclusions



Figure 3. The paper based map as a boundary object

Therefore the GIS device itself did not act as a boundary object. However other candidates were revealed which students used during group discussions and while interacting with the device. They helped the students overcome challenges in the learning

process. Candidates included old technologies such as the student's notebooks and their paper based maps. But also the digital visualisations produced by ArcPad (run on the GIS device). This is a mobile version of a program the students were already familiar with. Familiarity may be key. If so the student's personal mobile devices could act as boundary objects. As they are intimately known to the individual it may enable quicker appropriation of the activity to be completed in less time and may also be used to help understand the brought in GIS device. The personal mobile device thereby may provide a mediation service for a range of interactions with others and technology

### Future work

Within recent years 'smart' phones have merged with many of the capabilities of lower end dedicated GIS devices. The attention of this research will turn to the role that these personal mobile technologies may play in knowledge construction within the fieldwork setting. The author would therefore welcome further opportunities to observe mobile device use in other fieldwork settings to build on this current work.

### Acknowledgements

The author would like to take this opportunity to thank those who made this research possible: ESRC for funding, the universities of City and Kingston, their GIS students and especially Dr Ken Field for use of the head camera.

### References

Bowker, G. C., & Star, S. L. (1999). *Sorting Things Out: Classification and its Consequences*. MIT Press

Boyle, A., Conchie, S., Maguire, S., Martin, A., Milsom, C., Nash, R., Rawlinson, S., Turner, A., & Wurthmann, S. (2003). Fieldwork is Good? The Student Experience of Field Courses, *Planet*, 5:48-51

Star, S. L., and Griesemer, J. R. (1989). Institutional ecology, "translations" and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science* 19:387-420.

### Links

TLRP TEL programme <http://www.tlrp.org/tel/>

Ensemble project homepage <http://www.ensemble.ac.uk/>

MORSE project <http://www.jisc.ac.uk/whatwedo/programmes/elearning/curriculumdelivery/morse.aspx>

## Walking Through Time

Chris Speed

<http://www.walkingthroughtime.co.uk>

### 1 Introduction

Smart phones are becoming a standard across creative and consumer communities and their locative properties are beginning to change the way that we navigate physical and social spaces. Platforms such as the Apple iPhone and Google Android that contain GPS (Global Positioning Systems) technology are becoming a powerful research platform for exploring rural and urban landscapes. Traditionally used as an academic and industrial aid to fieldwork and navigation, 'locative media' systems are beginning to offer platforms for creative experimentation for landscape architects. This paper reflects a funded research project that offers an 'on the ground' insight into urban landscapes: Walking Through Time.

### 2 Walking Through Time

#### 2.1 Overview

Walking Through Time : <http://www.walkingthroughtime.co.uk> is a mobile application that allows smart phone users with built-in GPS to not only find themselves in the present, but find themselves in the past. By making available historical maps of Edinburgh, users are able to scroll through time, and navigate places using maps that are hundreds of years old. Funded by a JISC rapid innovation grant, the application was developed collaboratively between Edinburgh College of Art and the University of Edinburgh<sup>1</sup>.

Upon launching the phone application, users are able to find themselves in 'present' space, but by selecting from a series of historical maps they find themselves in a map of the same area but 150 years earlier (for example). The software then allows users to follow streets and walk through walls that have since been transformed through urban re-development. The investigators were initially interested in the sense of identification that users have expressed as they identify themselves as the 'blue dot' on the screen that is able to 'walk' on a historical map as though it was laid beneath their feet across 'present' space. Whilst this is a generic attribute of the application, the author (one of the development team) has begun to employ the software into the context of Landscape Architecture, and through short workshops is discovering how the application is able to reveal different interpretations of landscapes.

#### 2.2 Case Study: AHRA Field/Work Conference

During the AHRA Field/Work conference in December 2009, the Walking Through Time application was used by a small group of academics to explore the urban landscape surrounding the University of Edinburgh. The morning workshop concentrated upon an area that has seen dramatic urban redevelopment both architecturally and through landscaping.

A group of three conference delegates walked from a street corner on the edge of the University campus, across an area of mixed development, past George Square gardens and

into the vicinity of an old city hospital that is now being refurbished into new apartments.

The route of their walk began at the corner of the University of Edinburgh's campus that has seen radical changes in the last 100 years (region 1). Upon launching the application and selecting a map from the 1850s, the group were faced with a new building (School of Informatics) that sat directly on Bristo Street which on the 1850 map stretched out diagonally before them (Fig. 1). This immediate difference between past and present allowed the group to establish the level of transformation of the urban landscape. It is important to note that the participants were encouraged to remain in the 1850 map; the application offers a hybrid view that mixes the Google map of today with the historical map.

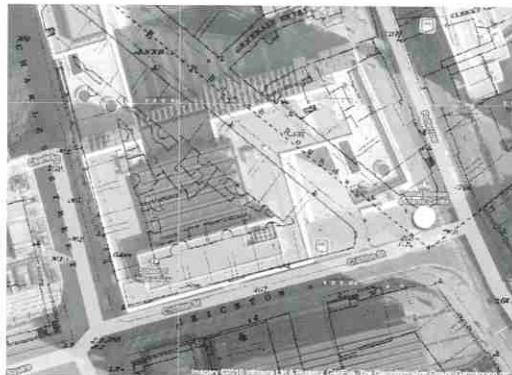


Figure 1. Region 1, the start of the walk began immediately with a new building that prevented them from walking down an old road

Moving East down Crichton Street the group headed toward George's Square Gardens, that was developed in mid 18th Century. Upon entering the gardens from the street the group were made a significant realization: whilst the line of houses shifted from the 18th Century to the 20th Century, the park remained relatively faithful to its original plan (Fig. 2). Able to use the historical map to navigate, the group walked through the park and claimed to be able to identify trees that seem to have remained in the same place since the 1850's. The reflected upon how the trees and not the buildings actually offered 'anchors' between the historical map and the present day experience, that contemporary digital maps often ignored.

Moving out of George's Square the group headed toward an area that is under going terrific change today. The Edinburgh Royal Infirmary occupies a large area on the edge of the Meadows (a very large public park). Established in 1729 the hospital consists of many old buildings that stand upon an urban plan that has changed significantly over the last 150 years. The group could not enter the site of the hospital because it is under-going large-scale transformation into apartments and facilities by architects Fosters and Partners. Now a building site that is mixing contemporary architecture whilst retaining many features of the old, the group found the historical maps offered significant differences to what they saw across the building site.



Figure 2. Region 2. The participants moved into a 19th Century garden to find little change

Up until this point the group had remained in the 1850 map of the area, but upon seeing the dramatic transformation of the Hospital, the group chose to jump forward in time to the 1870 map. Upon loading the 1870 map the group noticed further architectural and landscaping details that they could identify as being closer to the 'image' of the present day, although still dramatically different to what they saw was building constructed on the building site. Reflecting upon the experience of loading the second historical map on to the former, the group described how the software made it clear the scale of complexity within landscape development. Whilst the first map allowed them to demonstrate the difference between two time frames: 1850 and the present, use of the 1870 map reminded them of the many different iterations of design and transformation that the landscape had undergone.

One member described how by being 'in' one historical map you identified the obvious comparisons with the present day, but upon launching a map that was 'in between' the earliest map and the present, it dawned upon you how many iterations the landscape must have been through, and how useless maps are at charting change – only difference. Another group member commented upon how surprisingly few records we seemed to have that documented social and architectural transformation, even though they accepted that Edinburgh was reasonably well mapped compared to many other European cities.

### 2.3 Initial Findings

Although the workshop was not organised in a specific manner to gather detailed data, the preliminary feedback from the group indicated three areas of potential benefit for landscape designers:

1. The capacity for smart phones equipped with GPS to locate the individual as a marker within a map, coupled with the use of a historical basemap, allows users to identify themselves within period of landscape history that requires that they comprehend the changes in the environment around them. Whilst traditional paper maps offer the same information, the experience of identifying oneself as the marker within a map provokes more sophisticated spatial/temporal knowledge.
2. The experience of using a historical map to 'satnav' through a landscape allowed users to identify features that had remained throughout time. In particular the large trees that could be walked up to, and used as 'anchors' across past and present maps.

3. The quantity of quickly accessible maps that each retained the users position, allowed the group to quickly reflect upon the transformations in the landscape around them. The process of jumping between times also allowed them to identify key features that had been lost between maps, and described why new features had been formed in a particular way.

### 3 Conclusions

The playful interface of the iPhone and the cognitive ability to identify with the blue dot on the screen as ourselves perhaps encourages tourists to place more faith in the historical map than in the unfamiliar world around them. We have found that by introducing the application to a new users there is an exciting new experience that emerges as the user is forced to navigate two places simultaneously in which her minds-eye is using the self-identification with the dot on the screen as a proof of herself, and yet finds it (them) located in a place that has changed dramatically around them.



Figure 3. Walking Through Time, smart phone navigation software

The ability to explore history whilst standing in a live location offers a host of opportunities for user groups to 'walk' old streets, discover missing buildings and extend their understanding of the past. Whilst an obvious target of the application may be tourists, the author and developers of the application suggest that many people will choose to navigate their city not in the technologically determined 'present' in which the map is as up-to-date and 'fresh' as possible, but may prefer to use an old landscape which is occupied by old stories. Walking through streets that aren't 'cleansed' of memories by Google or any other mapping body, allows us to engage with historical events with increasing closeness. The augmented reality systems, within which the Walking Through Time software can be bracketed, offer many opportunities to interface with the past, and

the next time that you touch your phone's screen, or launch your Sat Nav consider not where you are, but when you might be.

### 4 Notes

1. Walking Through Time was funded by a JISC rapid innovation grant. The application is a working prototype for the city of Edinburgh and was developed collaboratively between Edinburgh College of Art and the University of Edinburgh. Conceptual and Historical Development: I. Campbell, C. Speed and K. Sutherland, ECA. Technical Development: D. Berry, P. Leimlechner and P. Pratt, UoE. Mapping Support: J. Reid, B. Butchart and T. Urwin, Edina, UoE. The project website is: <http://www.walkingthroughtime.co.uk> and access to the application maybe granted with permission, see website for details.

## Intute Mobile Internet Detective

Katy Morrison, Intute E-Learning Editor

With additional contributions from:

Andrew Priest, Intute Senior Technical Officer

Diana Massam, Intute Project Manager

*"I think if it's viable and it's a useful resource, then the more places it's accessible then okay."*  
London Focus Group, Male

### Introduction

The Internet Detective from Intute<sup>1</sup> is a popular and well respected online tutorial, developed to assist students with finding and using reliable information on the internet. A successful JISC<sup>2</sup> Rapid Innovations bid in 2008 made it possible to build on the existing service, adapt it, and make it available on a mobile platform.

The Mobile Internet Detective<sup>3</sup> aims to deliver a user friendly mobile site that is fast and inexpensive to load, providing concise relevant content, in the right order, with an engaging layout suitable for the mobile phone environment.

### Mobile Internet Detective: qualitative research

At the start of the Mobile Internet Detective Project Intute recognised that the existing tutorial would need a radical re-write to make it manageable on a mobile phone, (just as the BBC News site<sup>4</sup> summarises content on its mobile website).

To find out more and discover how to develop this initiative to suit the needs of students and academics, Intute commissioned consultants to undertake a market research programme. This took place in September 2009 in Manchester and London. In total 48 under-graduate students participated in four focus groups and four depth interviews. Participants were drawn from a range of red-brick and new universities, studying a wide variety of academic disciplines. The research had two main objectives:

- To provide detailed feedback on the proposed service based on student user needs.
- To determine user requirements and the technical specification for a prototype.

During the focus groups and depth interviews the students had access to the Internet Detective tutorial through laptops and were presented with a mock-up of the Mobile Internet Detective site.

As we had suspected, the strongest message from the research was the need to summarise the content so that users would be able to load the mobile website quickly and navigate easily around the tutorial, with minimal time and cost. Overall it became clear that the content of the Internet Detective is very relevant and students were able to identify some elements of new knowledge in it. However, at present the full tutorial was not the type of website they would use on a mobile phone.

### Using the Internet for Academic Research

The research also revealed information about how students use the internet for academic research. Virtually everyone had received some sort of training -either at school, as part of Key Skills, or at university, as a credited module. Information Literacy Seminars/Lectures run by the Library were also cited as ways students learned how to find and use academic websites and databases. Some had never received guidance and had taught themselves through trial and error.

*"I tend to check a lot of different websites and if they say the same thing over and over again I would say that's fairly reliable."* Manchester Focus Group, Female

*"(I use the internet) for absolutely everything. Why walk to the library if it's on the Internet. You just flick through it. Your university's signed up to all these journals and the journals are available to buy but you just look it up on the internet. You don't even bother going to the library."* London Focus Group, Female

### Students' Views about the Mobile Internet

Students regarded access to the internet as a necessary part of their academic life. A wide variety of uses included accessing lecture notes, library databases, sending e-mails, submitting coursework and receiving grades/feedback from tutors.

The extent to which the mobile internet was used varied greatly, but only a small number ever used their mobiles for academic work. The majority of students said they would be more likely to use the mobile tutorial if it was specifically recommended by their lecturer and backed by the university.

Cost and slow access to the internet were identified as the main reasons for not using the mobile internet. The availability of free, faster access at university or at home meant that there is little need to use mobiles for anything other than social purposes. Another factor was that very few students possessed new telephones with large screens, or had a contract with free internet access. However, mobile technology is changing fast and students were keen to trade up to the latest technology.

The Project Team decided to create a podcast to fill the gap and provide an alternative means of accessing the content of the Mobile Internet Detective. This is accessible from the main menu of the website<sup>5</sup>.

Despite the current difficulties many students stated that they would use the mobile internet for their academic work if:

- Their phones had larger screens
- It was quick and easy to load and navigate websites
- It was cheaper or free (included in their contract) to access the internet

*"The pros would be that it's handy, it's like more convenient to be able to use it there and then but the cons would be I don't know, it's like too small to look at it on the phone and I don't know, it would be too fiddly I guess."* Depth Interview, London, Male

## Mobile Internet Detective

The Project Team at Intute had some key issues to address, in order to produce a prototype with future developmental potential. Andy Priest's 'Mobile Internet Detective' Blog<sup>6</sup> had regular progress reports on the project and specifically on the technical issues involved.

Acting on the research findings from the market research we have produced a heavily condensed and concise version of the original tutorial content, retaining the most popular aspects (e.g. 'The Good, the Bad and the Ugly', and 'Keeping on the right side of the law'). The tone of the language has also been completely revised to engage with first and second year under-graduates, and the original detective branding diluted substantially to suit a more mature audience.

The Mobile Internet Detective acts as a reference guide to academic research on the internet for use when away from home or university. It can be seen as a useful checklist to refer back to when required.

The attractive site is simple and easy to use with colour coded links for easy navigation between sections. Links to external sites have been kept to a minimum and images have been removed to speed up loading time and keep connection costs down.

## Conclusion

The Mobile Internet Detective Project completed in December 2009, having achieved its main aim - to deliver a user friendly mobile site that is fast and inexpensive to load, providing concise relevant content, in the right order, with an engaging layout suitable for the mobile phone environment.

The final prototype lays the foundations for further development opportunities. A suite of subject specific tutorials could be adapted or re-written specifically for the mobile internet. Further feedback on the Mobile Internet Detective prototype would be required before undertaking such an initiative.

Finally, it's worth remembering that issues identified with current handsets will no longer be relevant as with technological development mobiles are increasingly becoming small laptops. This fact alone makes use of the mobile internet as a teaching tool for students a key feature for the future.

## References

- 1 <http://www.intute.ac.uk>
- 2 <http://www.jisc.ac.uk>
- 3 <http://irsdev.intute.ac.uk:8104/mobile/detective.html>
- 4 <http://www.bbc.co.uk/mobile>
- 5 <http://irsdev.intute.ac.uk:8104/mobile/detective.html>
- 6 <http://www.intute.ac.uk/blog/category/mobile-internet-detective/>

## Mobile Phones and Libraries: experimenting with the technology

*Kate Robinson: Head of Academic Services, University of Bath Library*

I have been reflecting on my changing attitudes to mobile phones in Libraries over the years. It was not so long ago that the mere mention of mobiles sent Subject Librarians blood pressure soaring and created a strong desire to stick notices decrying their use all over the Library. I'd become used to this, but more recently I think views have changed. Possibly this is a change in user behaviour as the urge to bellow into phones seems to have passed, even though to suggest the possibility of switching them off is still treated as an infringement of human rights. I think I've grown used to them, and I think I've even begun to see them as not just useful but also rather essential myself. So it was in this context that I found myself being excited by the idea of experimenting with their use in the Library here at the University of Bath, encouraged and inspired by my e-learning colleagues.

Mobile phones are, of course, ubiquitous. I suspect all our students have one, probably almost always on their person, particularly, it seems, when in the Library. Many of these phones are quite high-spec, and our students are confident using them and experimenting with new applications. So, this seems like a good institution to experiment a little; which is exactly what we did last year. Encouraged both by e-learning and by JISC funding we began to consider possible applications for QR (Quick Response) codes. These are 3D barcodes which can be scanned and read by camera phones with the appropriate application present. If your phone has a QR Code Reader application installed you can scan the code and it will link your phone to a webpage or specific content. So, by taking a picture of the code with your phone you can jump to information we have uniquely associated with the code. This could be an action such as sending a text, or, there could be an embedded URL in the code which takes you to a web page. For example, you could generate a QR code (each is unique) which links a poster about a library training session to the session time and location which can be directly captured on the phone itself.

This is an example of QR Code. By scanning this with a compatible mobile phone, you can download an MP3 audio tour of the third floor of the University of Bath Library to your phone.



This is one of the applications we experimented with. The other was around references from our catalogue. We have very long classification numbers in some areas (no, I'm not boasting) and although our users carry phones, they are often seen searching for paper and pen to scribble down class numbers on their way to finding books.

Our Systems Librarian wrote a programme which dynamically created a QR code for each title on the library catalogue, if it was available on the shelf and not on loan at the time the search was carried out. All a user had to do was take a picture of the QR code on the screen. The QR reader instantaneously translated this into the information embedded in the code, which in this case contained the class number, author and title of the item. No need for paper. The user could then move directly to the item, and even save the reference for future use.

This seemed like a fine idea to us and actually quite ecologically sound too, sparing the paper trail. So did it work? Well, technologically from our end it was easy, so our Systems Librarian tells me, but there were some barriers for the users. Not all phones have QR Readers on them, and although Readers can be downloaded this is only to the newer camera phones. However, a survey revealed that this should fit with many of our student's existing kit. The students also indicated they were confident with technology and that many of them had heard of QR codes. This seemed likely as 30% of our student body is international and although QR codes don't have a big presence in the UK as yet, they certainly do in countries such as Japan where they are widely used in marketing.

The main lesson we learnt though was not to believe everything we were led to expect! Having launched the QR codes on the catalogue and following some joined-up publicity with the student union, we soon found that not many people were using them. We even had an incentive as we had asked a local business to make chocolate QR codes for us. These could be claimed at the Issue Desk by users just showing their mobile screens, once they had scanned a code from the catalogue, and presenting their library card. A message would then appear on our Issue Desk screen saying 'give me chocolate', with an option for 'yes' if they hadn't already claimed one and 'no' if they had. Even chocolate wasn't enough, though, to encourage their use by as many students as we had hoped for. We tried again with our E-learning colleagues setting up a stall in the Library, helping users to load the Readers. This was useful as e-learning could to re-assess the support needed to get the technology to work. A few more students began to participate and the chocolates began to move out of my office.

It's a year or so on now and QR codes remain on our catalogue as an option for our users. However, we don't know how many people use them because of the nature of the use via a photograph of an automatically generated code means it is not possible to collect statistics. I suspect use is not high but as phones become fancier and more of them come with QR Readers as standard it might be time for another 'push'. I'm beginning to see QR codes creeping into other areas too such as on airline and train booking confirmations and even on Tesco clubcard statements. My thoughts at the moment are that Induction for new students would be the ideal time to experiment. If we could 'QR' the campus in conjunction with other areas such as the student union for induction events and other such activities, this may add sufficient value to encourage students to engage with and to use the technology. Once they've done so we could really start to play!

To read more about this project and QR codes, please see the M-Libraries 2 conference proceedings due to be published later this year.

## Supplementing inductions with text messages, an SMS 'tips and tricks' service.

Andrew Walsh, *University of Huddersfield*  
email: a.p.walsh@hud.ac.uk

### Background

The project described below was kindly supported by the UC&R Group's Innovation Award, presented to the author at the Umbrella conference, 2009. It takes place in the context of saturation in the mobile phone market within the UK, with 76.9 million active mobile phone subscribers in the UK in 2009 (Mintel, 2010), with a UK population of around 61.4 million (Office on National Statistics) giving roughly 1.25 mobile phones per head of population. Within this near universal ownership, 43% of people use their phones every day, mainly for phone calls and text messages (Mintel, 2009).

Few libraries, however, seem to be taking advantage of these devices that practically all our users have and use regularly. The project aimed to experiment with some mobile phone friendly materials, trying to find out what materials we could develop that our users would find useful.

### The project

Our overall project was concerned with mobile friendly materials in general, but the major part of it focussed on text messaging. There are many ways we could use text messaging in our libraries, some of which I've described previously (Walsh, 2009) but this project in particular developed a series of text message 'tips and tricks' in the Autumn term of 2009. This article will cover this text 'tips and tricks' service, describing the messages sent out; how we sent them; initial feedback from our students; and future plans.

The messages were designed to supplement our traditional inductions. We've long been aware that our students get bombarded with so much information in their first few weeks at University that we can't realistically expect them to retain it all. As such we've tried to make our face-to-face inductions more interesting and interactive; we cover the same material in our library and IT handbook that we give to all students; and we cover similar material in our online induction site 'The Basics'.

The text messages covered a series of topics that we'd normally talk about in our inductions, but were spaced out roughly one per week and delivered at times we thought were most appropriate. For example, a tip on renewing books was sent out in week three (when books issued in the first week would be due back), and a tip on accessing electronic resources wasn't sent out until nearly the end of term, when students were likely to be working on their first assignments.

The messages were a mixture of plain text and web links, as we were interested in how many would access the links or prefer simply the maximum 160 characters of text.

The messages in full:

Introductory text	Thank you for signing up to this series of tips & tricks to using the library. You'll receive a series of text messages during the term, starting on 28/09/09
Week 1	Just to start off, here is a quick audio guide to the Student Centre, that's the floor where you enter the library. <a href="http://studentcentre.notlong.com">http://studentcentre.notlong.com</a>
Week 2	Do you know how to find books? Use the library catalogue ( <a href="http://webcat.hud.ac.uk">http://webcat.hud.ac.uk</a> ) from any device connected to the internet. Demo at: <a href="http://hudcat.notlong.com">http://hudcat.notlong.com</a>
Week 3	Are your books due back and you still want to keep them? Try renewing them over the catalogue ( <a href="http://webcat.hud.ac.uk">http://webcat.hud.ac.uk</a> ) or on the self-service machines.
Week 4	With luck most of you will have had a library induction. If not (or you want to remind yourself of something) it's all online at <a href="http://www.hud.ac.ac/cls/thebasics">www.hud.ac.ac/cls/thebasics</a>
Week 5	Have you been checking your student email ( <a href="http://mail.hud.ac.uk">http://mail.hud.ac.uk</a> )? If it's easier you can redirect it to another email account – <a href="http://fwdemail.notlong.com">http://fwdemail.notlong.com</a>
Week 6	To use the printers and copiers you need print credit. Top it up using the print credit machines on every floor – <a href="http://printcredit.notlong.com">http://printcredit.notlong.com</a>
Week 7	Need more than book? Metalib ( <a href="http://metalib.hud.ac.uk">http://metalib.hud.ac.uk</a> ) is our gateway to a whole world of electronic resources.
Week 8	Save your work on your (k:) drive and want to get it from home? You can do this on the portal <a href="http://portal.hud.ac.uk">http://portal.hud.ac.uk</a> or mobile home <a href="http://mobile.hud.ac.uk">http://mobile.hud.ac.uk</a>
Week 9	Got a quick question? We've a text a librarian service available. Just text LIBRARY followed by your question to 81025 and we'll try and help.
Week 10	There's lots of basic help at <a href="http://www.hud.ac.ac/cls/thebasics">www.hud.ac.ac/cls/thebasics</a> – but for more help in searching for information try <a href="http://www.hud.ac.ac/cls/infolit">www.hud.ac.ac/cls/infolit</a>
Thank you message	That's all the messages from us. We hope you've found them useful. We'd love to receive feedback, so our very last message on how to do that will be in a moment!
An additional message followed immediately afterwards asking for feedback via a Google Docs online form.	
We used an online SMS portal to send messages out, enabling us to set all the messages up before the ever hectic start of term, simply adding students to a group when they contacted us, with the whole group being sent a message at the click of a button.	

## Results and feedback

The text 'tips and tricks' service was promoted largely through our face to face inductions with first year students, asking them to text HUDUNI LIB to 81025 if they were interested in starting to receive them.

A total of 60 students signed up during the first few weeks of term, many after the initial two messages had gone out, resulting in some students getting two messages a week initially, until all had 'caught up'. There were some teething problems with the online text messaging portal we used, and it seems that some students missed out on the first few messages.

The URLs in the text messages using the 'notlong.com' service include statistics tracking, so we could tell how many people used the links. They averaged only 2 clicks each, or only 1 in 30 of the recipients of the text messages. This matches comments we've received elsewhere in looking at mobile friendly materials, that students are still reluctant to access the internet using their phones.

There was little feedback received through the short online survey sent out at the end of the series of text messages, with only two respondents, though we were able to talk with another person who had received the messages and get their feedback verbally. The limited feedback we had through the online survey was positive, with the reservation that one person thought the messages were a little repetitive, for instance with links to 'The Basics' website appearing more than once. The person we received verbal feedback from was generally positive, stating they found "*a couple of bits were quite useful*", though again saying they found some elements repetitive. We were also told verbally that the tips and tricks were "*definitely going to work because a little bit of information over a long period is far more likely to sink in.... definitely a good way to get in touch with people*".

## Looking forward

The limited feedback we received seemed consistently positive, though with a preference for the pure text messages rather than additional 'mobile friendly' but web based materials and a note that they didn't want messages repeating and reinforcing each other, but each to stand alone. These messages have come through several times from our students, with even those who can access our university wifi network for free by using their phone, seeming reluctant to use the 'mobile web'.

We're therefore considering whether to develop the existing messages to reduce duplication and with limited online materials, but offering them automatically to all first year students, giving them a chance to 'opt-out' rather than having to choose to 'opt-in', making it part of the common first year experience at the University of Huddersfield. Plans are still at an early stage however, with no decisions yet made.

## References

- Mintel (2010) Mobile Phones and Networks - Re-igniting The Replacement Cycle, UK.
- Mintel (2009) Telecoms, UK.
- Walsh, A. (2009) Text Messaging (SMS) and Libraries. *Library Hi Tech News*, 26 (8), pp. 9-11.

## The Library Routes Project

Ned Potter, LIFE-SHARE Project Officer, University of Leeds Library

How does anyone become a librarian? Unless you are already working in the sector, it is very hard to imagine the skills you might need to pursue a career in this line of work. The information professional's role is shrouded in a veil of unhelpful stereotypes, but even those who can see through that and grow up wanting to be librarians may find the profession changes so quickly that it bears little relation to what they originally aspired to, by the time they get their first post. I was born in 1980: if my childhood ambition had been to work in libraries, and even if I'd thoroughly researched what being a librarian meant in the 80s, I'd have scarcely been able to conceive of the role I occupy now...

The Library Routes Project documents the career paths of over 100 Information Professionals. The concept is that people working in the Library sector record the roots of their involvement in the profession, and their route through it, and link to this testimony from the Project home-page. The home-page is a wiki, which anyone can edit once they've registered.

The purpose is to shed light on what is something of a hidden profession. What we do, and how and where we do it, is changing rapidly; public perception is struggling to keep pace. Library Routes gives those outside the sector an opportunity to better understand the contemporary role of the Information Professional, and those inside the sector an opportunity to explore and reflect on the myriad paths through a career in libraries.

### Origins

The Library Routes movement began on Twitter, the micro-blogging site. During the Autumn of 2009 there were conversations among Twittering librarians, discussing how and why they chose the profession. This led to a spate of blog-posts from bloggers in the library sector, documenting their roots.

One such blog-post by Laura Woods (who blogs at *Organising Chaos*), generated many comments. One of these, from Law librarian Jennifer Findlay, read: "Maybe we should all write about our routes / roots!" Reading this, I suggested that we formalise the movement and set up a website to record all the posts. It was a simple matter to create a wiki using free software<sup>i</sup> and free hosting. From that point onwards, Laura Woods and I worked to promote the Project and increase contributions to the wiki.

### Methodology

From the beginning, this movement was a uniquely web-based phenomenon; it simply wouldn't have been possible without the media of Web 2.0. The Project went from being a suggestion to a reality in literally half an hour. Because it was able to harness the existing momentum of the 'Why I became a librarian' meme, the wiki very quickly had enough entries to constitute an interesting and useful resource.

The principle of allowing users to write content on their own web-platforms, and simply providing links to these via the Project homepage, was appropriated from a similar online

movement known as Library Day in the Life. Set up by US Librarian Bobbi Newman, Day in the Life runs for a week twice annually, encouraging bloggers to write about what they actually do on those days, for similar reasons to those which motivates Library Routes: to offer increased exposure to the modern Information Professional's role.<sup>ii</sup>

Of course, not every library worker keeps a blog, so there is provision to use the wiki itself to write one's entry, and just link to that. Although Library Day in the Life also offers this functionality, it is notable that very few contributors take that option whereas around 10% of Library Routes testimonies are stored on the wiki itself. Whether this down to the subject matter better lending itself to a one-off online article, or the fact that there is a large notice on the wiki assuring users that 'Non bloggers are welcome!' is not clear.

### Promotion and the viral marketing model

The Library Routes Project conforms to the 'viral marketing' model almost by default. Viral marketing can be described as self-sustaining and self-replicating, via existing social networks. Each time a blogger writes a post on their roots and routes, they are linking to the homepage, contributing to the total number of entries, and advertising it further to all their subscribers. Any number of those subscribers may then choose to blog on their own roots, linking to the wiki, and so perpetuating the process. A great number of the posts are prefaced by sentiments along the lines of: "Librarian X has recently blogged on his / her entering the library profession, as part of the Library Routes Project," and so on. When it is brought to their attention by fellow professionals they admire, people are encouraged to take part themselves.

We also pursued publicity for the Project through more conventional means; both myself and Laura wrote articles for CILIP<sup>iii</sup> publications (Laura's appearing in *Gazette*, which is sent to all circa 20,000 members), and several other library related newsletters and publications have run features on the Project. However, by tracking the dates at which entries appeared, it is possible to see that these traditional print publications did not cause as much of an upsurge in entries to the wiki as did contributions from notable library bloggers with large followings. In particular, there was a post drawing attention to the Project on the influential blog *Stephen's Lighthouse*, written by the former President of the Special Libraries Association, Stephen Abram. His brief article provoked a flurry of entries in a short space of time, particularly from American bloggers. This was gratifying as the demographic had been very UK-centric up until that time.

The third way in which we attempted to generate contributions was by approaching key figures directly. This had varying degrees of success – all of the bloggers approached are influential exactly because they are leaders in their field, which makes them heavily in demand, and time-poor. Some emails were ignored entirely (understandable as in most cases neither Laura nor I had spoken to the individuals before), some drew cautious responses which had to be followed up, and some worked exactly as intended. A pleasing number were really enthusiastic about the Project, and not only wrote contributions which advertised the wiki to a large audience, but passionately advocated that others do the same. At the time of writing, the Project has been running for a little under four months, and has been viewed over 13,000 times.

## The testimonies

There isn't room here to analyse the testimonies themselves; the wiki itself is worth visiting to get a feel for the many entries. Suffice to say, no two roots or routes appear to be the same. It is astonishing how little overlap there is between the contributor's career paths, and the circumstances which led to their entering the profession in the first place. Careers Advisors appear to play a key role: a well-placed suggestion to a future librarian at an early age leads to the revelation that the library world is the one for them. Those who don't get that suggestion often seem to go on an occupational wild goose-chase, before eventually realising they'd wanted to be librarians all along.

## Library Routes 2.0

The number of entries on Library Routes appeared to reach a natural plateau at around 110, although recently began to increase again. Plans for the future concern how to build in some kind of annual element, to ensure the Project has repeat-value and endures with continual refreshment. It may be possible to borrow more ideas from Library Day in the Life, which operates in 'rounds': Round 4 was this January, and Round 5 will be later in the year. Perhaps people could update the 'route' part of their testimonies, although clearly their 'root' would remain the same.

Another change upcoming for the Project will be the introduction of more multimedia entries. US Librarian Buffy Hamilton, an innovative and influential online presence, suggested adding a vocal recording of her contribution, and we may encourage others to do the same (or video, or any other suitable format) for what will inevitably come to be known as Library Routes 2.0.

You can view the Project homepage, read the testimonies, and of course add your own, at [www.libraryroutesproject.wikii.com](http://www.libraryroutesproject.wikii.com).

## References

- i MediaWiki, as used by Wikipedia
- ii Bobbi Newman was consulted and has given her blessing for essentially copying her idea... Indeed, she's contributed her own root / route to the Project.
- iii The Chartered Institute of Library and Information Professionals