Turn off that mobile

Based on a paper presented at the 34th UKSG Conference, Harrogate, April 2011

Is there a role for mobile devices in the modern library?

What are the issues, challenges and opportunities of using mobile devices to support learning and resource discovery in the library?

Is it time to stop telling people to turn off their mobile phones?

From communication, collaboration, storage, notes, books, journals and more, mobile technologies are changing the way in which users can and are using libraries.

JAMES F CLAY
ILT & Learning Resources Manager
Gloucestershire College

If there has been one technology in the last 20 years that has had a profound impact on society, most people would say it was the mobile telephone. An almost similar impact happened over 100 years ago with the invention of the telephone. The ability to have a conversation with another person who was not even in the same room or the same building caused major social change. A hundred years later, it could be argued that the mobile telephone had an even greater social impact. Whereas the original land-based telephone had a minimal impact on the library, the mobile phone originally had a disruptive effect on it, whilst the smartphone, though also disruptive, is having a positive impact on how users can and will use the library.

Generally, people make invalid assumptions about technological change. They assume it will happen faster than it does and do not realize how old some 'modern' or 'futuristic' technologies are. If you ask people when the first mobile phone call was made, the answers may range from the 1990s or as early as 1982. In fact, the first mobile phone call was made on 17 June 1946: 65 years ago. However, this was not a 'true' mobile phone call as it was made from a car. As for the first handheld mobile phone call, well the first cellular phone call was made on 3 April 1973. Mobile phones as we know them today have been around for nearly 40 years. Of course, the mobile phones that library users carry with them today are very different from those early phones, and as the rate of technological change moves forward, the phones they will be carrying in the near future will be more powerful and multifunctional.

Early mobile phones were designed to make phone calls. The use of short messaging service (SMS) or texting added a feature that allowed for asynchronous communication. Today's modern smartphones are incredibly complex mini computers with a constant internet connection. These devices are capable of so much more than just phone calls and texting. They are able to access the web and mobile browsers, and mobile websites mean that the web browsing experience is nearly as good and effective as from a computer-based browser. The internet connection allows for wider access to a range of communication media such as e-mail, social networking, video calls and voice-over internet services such as Skype. The storage capabilities on these mobile devices allow users to carry with them large amounts of audio and video files, as well as textual resources such as e-books, e-journals and magazines, PDFs and other electronic documents. The growth of the 'app' culture means that devices are now used for so many different kinds of social, leisure and learning activities that until a few years ago would not have been possible on such small devices. Built-in cameras allow for the recording of video and the taking of images that can be almost instantly shared with the world via the web. The mobile phone today is an incredible piece of technology that has had a dramatic impact on the way that people work, learn and play. It has changed the way we access information, communicate, share,

collaborate and what we do for entertainment. The mobile phone is an innovative piece of technology that is and will continue to have an impact on society.

As with the introduction of any new technology, there is scepticism about the benefits it can bring. However, scepticism about new technologies is not new and every time a new technology is introduced, there is resistance to the innovation and a note of caution given. At a Teachers' Conference in 1703, criticism was made about the introduction of slates, along the lines of:

> *Students today can't prepare bark to calculate their problems. They depend upon their slates which are more expensive. What will they do when their slate is dropped and it breaks? They will be unable to write.*[1]

Similar comments have been made today about the iPad and other tablet devices.

So why are we sceptical about innovation? One of the key reasons is that people do things in a certain way because they have always done them that way. Colleges and universities have long summer breaks, as in the past students would need to be at home to get the harvest in. Despite the industrial revolution and the decline of agriculture, students still have long summer breaks, because they have always had long summer breaks. We do what we do because we have always done it that way. The culture we have in the library is a result of what we do, and what we do is what we have always done.

When new technologies are introduced into an environment, the culture of many libraries is one of resistance and scepticism. This is often because it creates problems and, potentially, conflict with the established order of things. As a result, 'solutions' are put in place with the aim of trying to prevent the use of the new technologies from impacting on the status quo. These 'solutions' often result in bizarre contradictions within the library. On one sign you can be asking users not to use their mobile phones and on another sign you will have telephone numbers to call when you need help or support! Too often the solution to a problem in the library is to add a rule and put up a sign; rarely will the technology be seen as an opportunity, it will only be seen as a problem to be overcome.

So what problems do mobile phones and devices cause in the library? Well, the obvious one is that of noise, from loud and intrusive ringtones, to noisy conversations. People will use their phones and devices for social networking, games, watching video and listening to music. Often these activities will be done without consideration or respect for other users in the library. The result is often conflict or complaints. The solution is often banning the use of mobile devices and phones. Users then ignore these bans and, as a result, library staff spend time policing the library and having arguments and verbal battles with users on their use of mobile devices and phones.

The problem with this approach is that it misses the point of what is happening. The problem is not one of new technologies, but one of behaviour and respect. The response is not one that puts the focus on the behaviour, but squarely puts the focus on the technology. The end result, more often than not, is that the 'solution' does not solve the problem, but just creates new problems. If users of the library are not respecting other users and the library staff through the use of mobile technologies, than that is the issue that needs to be resolved; the banning of phones and mobile devices is not the solution.

In my own libraries the key to this issue is twofold. Firstly, remove the culture of 'no' and 'do not'. Instead of having 'rules' in our library that are lists of things the learners are told not to do, we have a code of practice that focuses on the positive and is seen as a contract between the learner and the library. A simple example is rather than say: "Do not use your mobile phone in the library", we ask the learners to agree that: "I will use my mobile phone in a way that does not disturb the learning of others". I have trained my staff to talk to the learners about the issues and the code of practice and as a result we believe we create a culture of mutual respect which results in better behaviour. With a different positive culture we can start to maximize the potential of the mobile devices that our users are carrying.

So what can we do with mobile devices in the library? With the variety of devices that are used, not all devices can do everything and some are better than others at some activities. However by offering a range of possibilities, though a user may not be able to do everything, they should be able to do something. The use of mobile devices is not about replacing an activity, but is there to enhance, enrich or extend an existing activity.

The ability to access the web on a mobile device may seem bizarre, especially if the library environment contains a wealth of internet-capable desktop

computers. Some libraries also have laptops that can be borrowed which have web access enabled. So why would users want to access the web on their mobile device, one with a really small screen? Well, convenience is one reason: why move from a table or desk to a computer when you can access the web there and then when you need to. It therefore makes it useful for users to be able to access library services and catalogues from their mobile devices. Likewise, integration with institutional VLEs will allow users to link their library activity with their learning via an online platform without needing to move from their table to a desktop computer or open a laptop.

Mobile devices are now easily able to access e-books and e-journals. The fact that learners can read content on their mobile devices means that the library is not just the physical building, the user can carry the library with them. It is essential that libraries can provide easy access to e-books and e-journals to users through mobile devices. The same can be said with access to authenticated online and digital resources. If access can only be had through Windows and Internet Explorer then you may need to rethink how users authenticate and access these kinds of content.

Mobile phones were designed for communication, though loud conversations are not always desirable. Texting or SMS allows for virtually silent asynchronous communication and can be done on the cheapest of mobile phones. Smartphones and tablets allow for a range of communication mediums including e-mail, live chat, video chat and social networking. Using mobile phones and other mobile devices, users will not only be able to communicate and collaborate with each other, they will also be able to communicate directly with library staff. Users seeking advice, help and support may find it easier and quicker to use their mobile device.

Though cameras on mobile devices can be used to take photographs and record video, rights issues may mean that this is not necessarily desirable activity by users. You may not want them to take photographs of book pages and other content. However, cameras can be used to quickly get information into the device. Technologies such as QR codes allow users to get information into their mobile device.

QR codes can be used to:

- display text to the user
- add contact details to the user's device, a vCard
- open a uniform resource identifier URI (most usually a web address of some kind)
- compose an e-mail address with the correct address
- compose an SMS text message with the correct SMS number.

Opening a URI (for example a web address) is an often used function of QR codes; we use it ourselves in the Gloucestershire College libraries. The best way, though, to think of QR codes is as a URL shortener, like TinyURL, bitly or is.gd, taking a long URL and providing learners with a shortened version. One mistake that people make is forgetting that when using QR codes, the web page will 99.9% of the time be then displayed on a mobile device, probably using 3G. So there is little point in pushing out web content that will not work on mobile devices, or is huge. Remembering that QR codes are merely a way of shortening URIs for mobile devices means that users will get a better experience – don't just use a QR code because you can, use it because it makes a difference, makes it easier for users and makes it faster to access 'the something else' that the users need.

In the future, mobile phones will have near field communication (NFC). NFC allows for simplified transactions, data exchange, and connections with a touch. Think of the Oyster Card for the London Underground and you will have an idea of how this works. These NFC-capable phones could be used by library users instead of their library card. Or they could be used to gain further information on particular topics or subjects from different areas of the library.

The key reason for embedding mobile device usage into the library is that once done, it then allows the library to leave the physical confines of the building and allows the user to take the library experience with them.

It's not all plain sailing, there are issues and problems with embedding the use of mobile devices within the library environment. These can include cost, e-safety issues, connectivity, staff development, pace of change, time and priorities and the technology itself. However, these should not be taken as the reasons for not using the technologies within the library environment, but merely minor challenges that need to be overcome. The main challenge is and will be cultural.

So, there are many benefits to using mobile devices within the library; they can enhance,

enrich and extend the library experience for users. This is why we should be thinking and developing how we can use mobile devices and not doing things in a certain way because we have always done them that way.

Reference

1. Bean, M, *A journey in innovation*, ALT-C 2009, University of Manchester, Manchester, UK (see also 'further reading' below).

Further reading

Ally, M (ed.) and Needham, G (ed.), 2010, *M-Libraries 2*, Facet, London.

Price, K (ed.) and Havergal, V (ed.), 2011, *E-books in Libraries: Provision, Promotion and Use*, Facet, London.

Attewell, J, *The Impact of Mobile Learning*, 2009, LSN, London.

e-Learning Stuff: http://elearningstuff.net/ (accessed 13 September 2011).

JISC Mobile and Wireless Technologies Review: http://mobilereview.jiscpress.org/ (accessed 13 September 2011).

Bean, M (2009, September). A journey in innovation,. ALT-C 2009, University of Manchester, Manchester, UK: http://www.youtube.com/watch?v=HJSRkhx4T3k (accessed 13 September 2011).

Article received 2 August 2011; revised 11 September 2011; accepted 12 September 2011; published November 2011

■ **James F Clay**
ILT & Learning Resources Manager
Gloucestershire College
Gloucester Campus, Llanthony Road, Gloucester
GL2 5JQ, UK
Tel: +44 (0)1452 563244
E-mail: james.clay@gloscol.ac.uk

The DOI for this article is 10.1629/24S7. Click here to access via DOI:
http://dx.doi.org/10.1629/24S7

For a link to the table of contents for the *Serials* mobile technology supplement in which this article first appeared, click here:
http://serials.uksg.org/openurl.asp?genre=issue&issn=0953-0460&volume=24&issue=3&supp=1

For a link to the table of contents for the main issue of *Serials*, click here:
http://serials.uksg.org/openurl.asp?genre=issue&issn=0953-0460&volume=24&issue=3