# Putting research into practice: mobile technologies in libraries



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This article describes how Library and Learning Resources at Birmingham City University has been using mobile technologies, and how the information from the JISC (Joint Information Systems Committee) m-library community support project has informed their practice.

Our aim with this example is to demonstrate how research can be utilised in practice, and to encourage other researchers and practitioners to work more closely together to help drive forward developments in the library and information sector.

# RESEARCH

In 2011, JISC invested in a programme of work supporting the development of a mobile infrastructure for libraries (JISC, 2013). The five institutional innovation projects covered resource discovery, bibliographic management, accessing special collections from mobile devices, news dissemination via mobile devices and mobile learning. In addition, the programme included an m-library community support project (Alcock,2011) with the aim of sharinge best practice from both within and outside the programme and to build a self-sustaining community (Alcock 2011). The m-library community support project ran from November 2011 until September 2012 and was managed by Evidence Base at Birmingham City University in collaboration with Owen

Stephens Consulting. The two main strands to the m-library community support project were evidence gathering and community building.

The evidence -gathering strand of the project included discovering examples of best practice through web and literature searches, via fact-finding surveys, mailing lists, social media and events. A project blog (Alcock,2013) was used to bring together these resources and share them with others (Alcock 2013).

The community building strand of the project focused on encouraging sharing of best practice via events, mailing lists, and social media and an information-sharing event.

At the end of the project, both strands of the project were brought together as a series of guides under the umbrella of 'Pathways to best practice' (Alcock, 2012a).

The following key strategic areas were covered:

- Introducing users to the library
- Helping on-site users roving support
- Helping users within the library guides and signage
- Providing access to resources via mobile devices
- Developing a mobile strategy for the library
- Managing borrower accounts
- Bibliographic management
- Loaning mobile devices
- Supporting learning, teaching and research
- Collection management

Allof the guides were made available on the project blog to support libraries in their implementation of mobile technologies.

# PRACTICE

In recent years Library and Learning Resources at Birmingham City University have been investigating the development of library services for mobile devices.

Factors such as the increase of students learning from a distance and the emergence of new technologies have impelled Library and Learning Resources to investigate new services which that reach beyond the realms of the physical library.

The use of SMS notifications for loan reminders (Langham, 2012), the launch of an online chat service and the ever-growing collection of electronic

resources were the library's first steps towards realising the benefits of mobile technologies and to providing remote access to library services.

The loan of laptops from the libraries was therefore introduced, although it quickly became apparent that in many cases users had their own mobile devices, which have quickly morphed from laptops to tablets and smartphones.

The use of QR codes for library resources and services was then investigated. Initially they were added to any publicity where a web link was used. They were also displayed in specific areas of the library building, including the catalogue area and near the self-service machines, in order to provide instructions

This also raised the idea of library staff also being at the point of need. Many liaison librarians have now been equipped with iPads for the purpose of supporting learning and teaching sessions and also to develop a library outreach programme. This means that librarians are no longer confined to the enquiry desk or to allotted gaps in the curriculum timetable; they can now venture out into the faculties, social learning zones, and cafés so as to be available for on-the-spot enquiries and tutorials.

# MOBILE TECHNOLOGIES WORKING GROUP

In 2012, a mobile technologies working group was formed as a working group in Library and Learning Resources to explore avenues of mobile technologies that could be utilised to support and enhance existing library services. After initial discussions and some experimentation with augmented reality technologies (Humphries, 2012), it was decided that three sub-groups would be formed to investigate three different projects, as detailed below.

# Project 1: The development of library functionality on the Birmingham City University App (iBCU)

Rather than look at developing a separate app specific to the library, it was decided that this project group would look to investigate ways the library can add functionality within the existing institutional app. The project team contacted libraries through the JISC m-library community support project to gain an understanding of what libraries were currently doing with mobile apps, promoting a short survey and sharing findings with the community. Following recommended best practice, library users were polled; surveys

were promoted through university social media channels to gain an understanding of what users would find particularly useful from the library in a mobile app.



These findings (Lee, 2013) helped to prioritise areas to focus on for integratingng into the mobile app and work with developers is now being planned with the aim of integrating account functionality (renewing, reserving), access to the discovery service, access to online help, and information about library opening hours into the mobile app.

# Project 2: The use of mobile technologies to create an interactive library induction

Previous library inductions at Birmingham City University have tended to rely on traditional guided tours and accompanying presentations in classroom settings. During our investigations of options to improve induction sessions using the JISC m-library community support project's pathway to best practice on introducing users to the library (Alcock, 2012b), examples of engaging activities such as QR code treasure hunts and quizzes / treks facilitated by mobile apps were found, along with case studies from libraries that have already used these. Options are now being investigated for facilitating induction quizzes delivered via mobile apps at Birmingham City University libraries.

# Project 3: Sharing mobile app versions of databases with users

A number of electronic resources are accessible through mobile devices, though this sometimes requires downloading an app or accessing through a specific mobile website.

A project was established to explore different ways of providing information to users about these options. Existing information from the m-libraries page on the Library Success wiki, (Anon., 2013) was utilised, and will be added to if additional providers are discovered. The project group is also working with others within the m-libraries community to share best practice for sharing this information with users. A recent event was hosted by JISC Collections to bring together libraries to discuss this.

### HOW RESEARCH INFORMED PRACTICE

The information from research in m-libraries has been of great benefit to the work undertaken at Birmingham City University. All of the projects have utilised information from other libraries doing similar work, primarily accessed through the JISC m-library community support project. They have also benefitted from the community, which has grown thanks to the research project, in terms of both seeking and sharing information. The group plan to share their own experiences to help further the knowledge base, and to ensure the recommendations for best practice are kept up-to-date for other libraries that are hoping to implement similar projects in future.

# **B**ENEFITS OF COLLABORATION

Our experiences with the JISC m-library community support project and with the mobile technologies working group at Birmingham City University Library and Learning Resources have highlighted how beneficial it can be to work collaboratively to deliver enhancements to the library / information service. By working together in the m-libraries area, both researchers and practitioners have learnt during the two-way process:- research informed by practice, and practice informed by research. We plan to continue to work together in this way to help improve future practice and research.

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