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Mobile Digiquest: Developing rich media reflective practitioners

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Mobile Digiquest: Developing rich media reflective practitioners

Keren Mills and Rhodri Thomas, The Open University, UK, October 2008

Mobile technologies, well-established as business tools, have now become ever more educationally-appropriate through integration of improved multimedia functionality.

User-generated-content and related activities have encouraged a transition from academic content creation to greater student collaboration across a range of platforms, which are increasingly mobile.

Context:
Currently, The Open University (OU) is implementing change management in e-learning and activity-based course models. In particular, a Broadcasting Strategy Review has highlighted the need to provide blended learning and mixed-media in a more consolidated way online. More than just providing another mode of content delivery, mobile user-generated-content technologies allow for extended student collaboration, especially in the practice-based, fieldwork and residential aspects of our courses.

With a greater awareness of 'citizen journalism' approaches, our students are becoming more familiar with using mobile technology in recounting their experiences. Our own staff surveys have indicated that these techniques are not commonplace internally, and while the greater majority of staff use their camera phones, few feel confident in transferring their rich media elsewhere. As such there is a disconnect between the student and staff levels of experience.
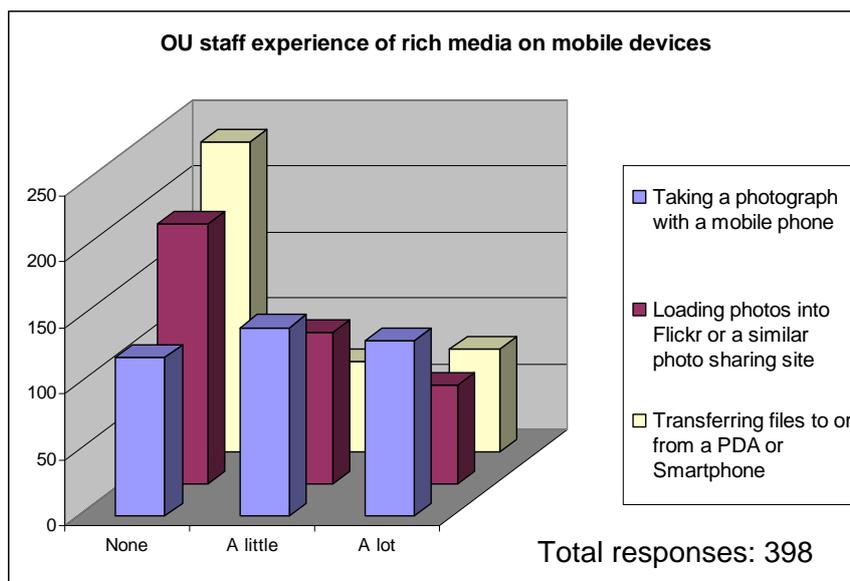
This data is presented at a time in which early adopters in the University are spearheading greater and more varied use of audiovisual media, as part of an Educational Podcasting review[1] and many different research projects evaluating how mobile or 'handy' learning enhances the student experience. The OU has invested considerably in open source VLE tools and methods, open content repositories such as OpenLearn and not least by providing a new way of accessing our audiovisual content through being one of the first European institutions on Apple iTunes U[2].

Coordination of the various mobile-related projects and activities is seen to be an important aspect of our teaching and learning innovation, and as such a strategic project was established to inject appropriate strands into institutional provision for teaching and learning. The following model outlines the differing strands considered by the stakeholders involved:
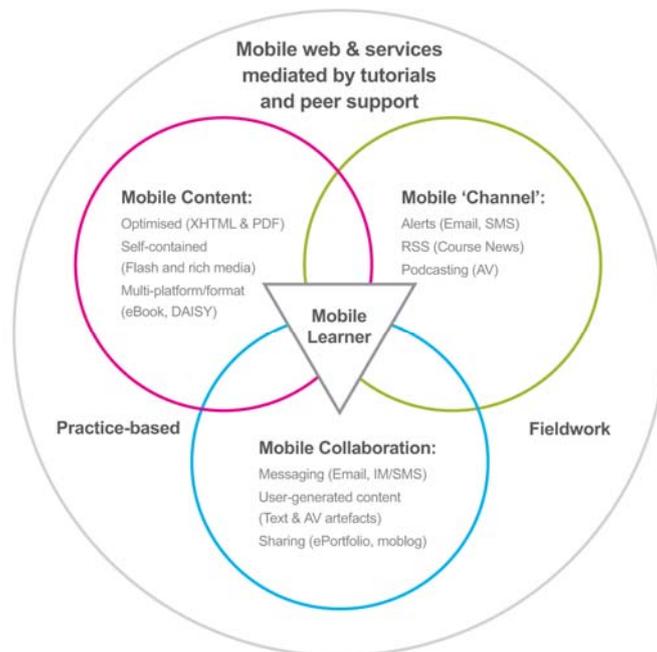
Particular emphasis has been placed on specific affordances to be gained in practice-based and fieldwork areas – enabling students and tutors to have a richer dialogue exemplified by real-world situations as well as case study scenarios. Underpinning all activities has been an understanding that real impact can take place when mediated by face to face contact – with our tutors and peer learning as a firm foundation in our supported open learning model.

In addition, being able to more flexibly deliver our substantial existing body of content is also important in recognition of the fact that our students are already using our material in ways more flexible to their own learning environment. Taking advantage of travel or 'dead' time is seen to be an area in which smaller, appropriate packages of content can be picked up more informally[3], with opportunities for formative self-assessment.

With the intention to provide reinforcing mixed-modes of delivery, a project originally intended for our disabled student group – the Digital Audio Project[4] shows potential benefits for the mainstream in providing digital talking book versions of our content. In this way our existing structured content can be delivered for a variety of platforms.

To enable the University to be better equipped to take many of these project strands forward as an institution, staff development for central, regional and tutoring staff is key.

Digilab provision:
Initially with an aim to provide a creative play-space for OU staff to explore and gain experience more about new technologies and learning opportunities, the Digilab[5] was established as an informal drop-in space within the openly-accessible areas of the OU Library and Learning Resources Centre at the main site in Milton Keynes. A related aim of the Digilab was to showcase relevant ongoing research being undertaken by colleagues that could inform future planning and investigation, such as DEEP[6], RoboFesta[7] and SchomePark[8].

As the number of technologies available in the Digilab has grown, the room has been split into zones to make it easier for users to find their way to the area where they can access Second Life and other synchronous or asynchronous collaboration tools, or the area where they can explore mobile learning or games in learning. All zones include examples, where possible, of the use of these technologies in an educational context and literature detailing research and case studies.

The "Mobile Zone" includes examples of learning objects created as part of OU courses, mobile learning objects by the RLO CETL and mobile self-assessment tools, such as uHavePassed by Luzia Research. Despite the popularity of PDAs in the business and school sector, we have concentrated on pre-installing resources on basic camera phones or smartphones as they offer greater flexibility for educational purposes. Our aim is to reflect the types of devices that might be commonly owned by our students.

Within a wider framework of institutional knowledge-sharing, the Digilab and related educational professional development have included opportunities to explore m-learning further. Supported by device loans and emulation tools, the Digilab has provided a range of self-exploratory facilities which have been leveraged by increasing numbers of guided sessions and activities.

The Digilab offers a range of workshops ranging from an hour (Digibytes) to half a day or a full day (Digiquests). The aim is for participants to get hands-on with the technologies, take account of real-life scenarios and explore their potential in a student-focussed context. However, the workshops have been popular with both academic and non-academic staff.

Experiences gained from early adopters of m-learning approaches are defining training opportunities for the mainstream. Other project work in the University has explored capturing local environments and language in residential schools[9], and a framework for remote fieldwork, through the Enabling Remote Activity (ERA)[10] project.

Staff development activities:
Through offering sessions using commonly available technologies, including participants' camera phones, MMS and online mobile-blogging tools, our activities have demonstrated the ease with which rich media can enhance group work and reflection. An important aspect of the sessions was to give staff insight into existing student use of mobile technology, both documented and anecdotal.

Building on case studies from other institutions[11,12] and related research[13,14,15,16] in the field we have constructed two main themes, capturing rich media for reflection where appropriate:
- Location-based approach, making use of existing physical trails around the campus, integrating with GPS/geocaching activity
- Scenario-based approach, working within a teaching and learning context, capturing practice through use of participant role-play

Due to the nature of distance learning and the increasing ease of access to mobile internet connections, we are also introducing an element of mobile web browsing into our longer workshops, taking account of recent developments in browser zoom/scaling technology, such as mobile Safari© and Opera Mini™.

We have been able to support remote participation from our regional offices through a combination of webcasting, use of a visualiser and application sharing through the OU's adopted synchronous collaboration platform, Elluminate. We also feel strongly that workshops should be recorded if possible for later review and have used video capture and screencasting methods to achieve this, making use of device emulator and simulation tools.

Evaluation:
A number of considerations have arisen for further exploration. In creating the activities it was essential to take a more guided peer-learning approach, pairing, where possible, a more adept participant with novice users. The activity worked better when blended with a pedagogic purpose e.g. creating practice-based course activities.

Participants were able to reflect and extend their experiences after the face-to-face session through the mobile blog. Subsequent workshops included an intervening period between sessions to reinforce staff development objectives and embed concepts.

Relating the sessions to a larger programme and tying the objectives to development strands within existing communities of practice, such as our eLearning Community has proved particularly fruitful, and wider groups of staff become aware of these activities and their potential.

Feedback from participants has indicated that as a result of the sessions, staff confidence in using their own mobile devices has increased, in some cases revealing functionality they were not previously aware of. Since attending the sessions some participants have reported increasing use of more advanced mobile tools including installing and using browsers and are more open to experimenting further.

These initial sessions have helped to raise awareness of m-learning and have led to course team members considering integration of mobile learning opportunities. There remains a need for future staff development sessions to help with embedding mobile learner support into course design where appropriate. These could include developing a design for a mobile self-assessment, or rich media peer learning activity as an output.

Reflection:
In order to better engage participants in mobile learner support it is important to be able to show how technologies can be used in practice. Having a common technology platform supported by whole group demonstration using tools such as screen-mirroring, emulation and simulation reinforces the hands-on experience. To account for the wide variety of technologies publicly available, complementary stand-alone activities should be created to explore a common objective, e.g. understanding the usability and capabilities provided by mobile web-browsing.

We aim to draw on these proofs of concept to extend the University's ePortfolio to allow mobile upload and management of rich media, and provide our students with a way of sharing experience with peers, tutorials and course activities. We also aim to provide a more comprehensive regional programme of staff development opportunities, working with existing programmes to provide hands-on experiences where possible.

By trialling and identifying the component parts in a 'return path' for student contributions, we have submitted to the University that we can work in partnership with other providers, and where our existing technologies should be enhanced to allow for greater interaction and management of student media while mobile. Ultimately students can then share their content and embed this in other collaborative activities.

Technically, it is challenging to filter content and transcode/modify rich media sent by MMS so that all participants can access the same material. With this in mind, established external providers seemed to offer better supported methods. Originally we implemented Tribal/CTAD MediaBoards, but we are now evaluating group usage of moblog.net, particularly to provide the filtering service necessary to remove mobile operators' advertising and messages.

The University itself is in a process of further rationalising staff development, and we intend to ensure that greater emphasis is placed on mobile and social aspects of teaching and learning, reinforcing with active participation using current and upcoming technologies, where appropriate. The University is taking steps to support our mobile learners more actively; research and development is converting into practical applications for course delivery and student support. By working closely with our staff to gain a better understanding of student practices while mobile, we aim to provide for true teaching and learning, rich media, reflective practitioners.

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