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Project Information	
Project Acronym	SOCIAL-SW
Project Title	A Study on the Effective Use of Social Software by Further and Higher Education in the UK to Support Student Learning and Engagement
Start Date	14 July 2008	**End Date**	30 January 2009
Lead Institution	The Open University, UK
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Partner Institutions	—
Project Web URL	http://kn.open.ac.uk/public/workspace.cfm?wpid=8655U or http://tinyurl.com/5a8zu3
Programme Name (and number)	JISC Learning and Teaching Committee; The E-learning Programme; JISC website link: http://www.jisc.ac.uk/whatwedo/projects/socialsoftware08.aspx
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Document Name	
Document Title	Effective Use of Social Software in UK Further and Higher Education: Case Studies
Reporting Period	—
Author(s) and project role	Dr Shailey Minocha, Principal Investigator
Date	30 January 2009
Filename	Effective-use-of-Social-Software-in-Education-CaseStudies.pdf Associated document (JISC Final Report): Effective-use-of-Social-Software-in-Education-FinalReport.pdf
URL	http://tinyurl.com/5a8zu3
Access	✓ Project and JISC internal	✓ General dissemination

Document History		
Version	**Date**	**Comments**
1	30 January 09	Submitted to JISC at the end of the project

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Effective Use of Social Software in UK Further and Higher Education: Case Studies

Acronym: SOCIAL-SW

January 2009

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Introduction

In the JISC-funded study, Effective use of Social Software in Further and Higher Education in the UK to support student learning and engagement (see http://www.jisc.ac.uk/whatwedo/projects/socialsoftware08.aspx), we have examined the use of social software in the UK further and higher education sectors. In this study, data from 26 initiatives, where social software tools have been employed, has been collected, analysed and synthesised. A case study methodology was followed and both educators and students were interviewed, and focus groups were conducted with them to find out what they had done, how well it had worked, and what they had learned from the experiences.

Although the primary focus of the study was on publicly available tools (eg Flickr, Facebook), situations where private alternatives have been developed or deployed (e.g. OpenStudio, similar to Flickr), or where tools (eg wikis, blogs) of the institution's (closed) Virtual Learning Environment (VLE) have been used, were also examined. This permitted us to evaluate the benefits of using publicly available tools such as low cost, quick setup, and a chance to benefit from the experiences of the external community, against the benefits of private, in-house equivalents, such as greater control over the administration of the service, and better tailoring of the services to meet each project's needs.

The 26 initiatives or case studies investigated in this study cover a broad range of social software tools such as discussion forums, wikis, blogs, podcasts, micro-blogging or Twitter, photo-sharing (Flickr), Google Earth, 3-D virtual worlds, web conferencing, social networking sites such as Facebook, and others based on Elgg and Ning. The case studies are from a wide range of disciplines, at different levels of study (undergraduate, post-graduate, vocational courses) in part-time and full-time courses in further and higher education. The mode of delivery is diverse: face-to-face, blended learning (face-to-face and online learning), and distance-education.

Twenty of the 26 initiatives are 'main' case studies. These are initiatives that have been running for some time (more than one semester), generally involved more than one social software tool, include a reasonable number of students and where there is empirical evidence, through formal evaluations via surveys, or questionnaires with educators and students, or reflective journals, to demonstrate the value, or otherwise of using social software tools. The six mini case studies are initiatives which relate to one specific tool (eg Facebook, Twitter, GoogleEarth, Delicious, discussions forums, Skype), and capture the views of the educator who led the initiative.

Guide for readers of the case studies

Each case study discusses the background, context and rationale of the initiative; the social software tools that have been used, the benefits that learners and educators have perceived with the usage of the tool(s), the challenges the educators faced and their experiences with the initiative. Each case study also captures the lessons learned and describes the way forward that is planned.

If you would like to know more about any of the case studies, our suggestion would be to seek advice from the primary contact person in each of the case studies. We are certain that they would be willing to elaborate on any issue and share their experiences.

Reading the case studies in conjunction with the report

The report of the study (http://tinyurl.com/5a8zu3) discusses the aims and objectives of the study, the case study methodology, and the outcomes of our investigations. We have suggested some possible scenarios that might help you to selectively read the report and the appendices (which contain background information):

- If you would like to know about the study and what it set out to achieve and what it has achieved, then we suggest that you read Sections 2, 3 and then the conclusions in Section 7

- If you would like to know about the background research in social software and social networking, then we suggest that you have a look at Appendix 1 (Background Reading), Appendix 2 (Glossary) and Appendix 3 (Literature Review)

- If you would like to know about the case study methodology then you might like to read Section 4, and refer to Appendix 4 where we have included the case study research materials

- If you are interested in looking at the key contributions of our study, they are outlined in Section 7

- If you would like to know about the implications of the study for the educational community, the study's limitations, ideas for further work, then you might like to look at Section 8

- If you are interested in incorporating social software in education, we have listed some generic recommendations in Section 9 which might be helpful.

Case Studies

In this section we provide a brief description of the cases studies we have investigated in this project (see Tables 1 and 2). Brief overviews/explanations of various social software tools are included in Appendix 2 (Glossary) of the report.

In Tables 1 and 2, each institution is identified by a code – for example, [LU] is for Lancaster University. These codes are used in the report during analysis and synthesis of data from various case studies to indicate which case study contains the evidence that substantiates the point that is being made.

Table 1   Institution, tools employed, titles and short descriptions of the main case studies

No.	Institution	*Case study title* and social software tools: primary tool(s) followed by the secondary tool(s)	Summary of the case study	Code
1.	Anglia Ruskin University	*Computer Gaming and Video Capture in Second Life* 3-D MUVE (Second Life), Blog (WordPress, Blogger), and University's VLE (Moodle)	Students are required to create an animated film inside the Second Life virtual world to learn about filming and post-production. Students reflect in their blogs.	[ARU]
2.	Birmingham City University	*Using Wikis to Support Small Group work* Wiki (PBwiki) and the University's VLE (Moodle)	Wikis are being used to support group activities during seminars. Students in small groups discuss and record their thoughts and ideas in the wiki and also link related resources from the web.	[BCU1]
3.	Birmingham City University	*Facebook as a Pre-induction Support Tool* Social networking (Facebook)	A group on the social networking site, Facebook, was set up for pre-induction of the students on the first year of the BA English Programme.	[BCU2]
4.	Brighton University	*Community@Brighton: Social Networking at University of Brighton* Social networking (Elgg) integrated with the university's VLE (Blackboard)	This initiative established a user driven, online community at the university. It is used for induction, social and educational purposes. It complements the University's VLE.	[BU]
5.	Coleg Llandrillo Cymru	*Using Web 2.0 in Further Education Library Services* Blog (WordPress), social bookmarking (Delicious) and wiki (PBwiki)	A library blog has improved upon the library newsletter. Course and subject related bookmarks are provided using Delicious website. The 'How to' guides are written in a wiki (PBwiki).	[CL]
6.	London South Bank University	*Photo Publishing with Lulu* Photo publishing website with blogs and forums (lulu.com), social networking (Facebook), blog (WordPress, used in 2006 only)	Print on demand (POD) technology was adopted via Lulu.com for students on the digital photography degree. Students developed their own personal learning environments for social networking, blogging and cataloguing via one portal.	[LSBU]
7.	Lancaster University	*Social Networking through Ning on a Distance-learning Programme* Social networking (Ning)	A social network has been used to provide an online community area in which the students on a part-time structured doctoral programme can interact.	[LU]
8.	Northumberland College	*Using a Wiki for Developing a Portfolio and for Communication*	Students develop an e-portfolio in a wiki on a work-based learning course (hair salon	[NC]

		Wiki (PBwiki) and the university's VLE (Blackboard)	services)	
9.	Nottingham Trent University	*A Blogging Support System for Trainee Teachers* Blogging (Livejournal)	Blogging was initially introduced to enable trainee teachers to support one another. It has subsequently been used to encourage socialisation before the course starts and to support the development of reflective reporting.	[NTU]
10.	Open University	*OpenStudio: An Online Community for Digital Photography Students* Photo-sharing site (OpenStudio, similar to Flickr)	Students share photographs with fellow students and educators on a digital photography course and comment on fellow students' photographs.	[OU1]
11.	Open University	*Collaborative Learning in a Wiki on a Software Engineering course* Wiki (Moodle's wiki)	Students conduct collaborative authoring activities in a wiki on a post-graduate software engineering distance-learning course.	[OU2]
12.	Open University	*Using Wikis and Video Conferencing on Team Engineering course* Wiki (Moodle's wiki) and video-conferencing tool (Flashmeeting)	Students work in groups and use wikis and video conferencing to support their project work on a distance-learning engineering course.	[OU3]
13.	Sheffield University	*Blogs and Social Bookmarking for Exploration of Historical Courses* Social bookmarking (Delicious), blog (WordPress)	The tutor plans a face-to-face tutorial after assessing the bookmarks and questions posted by students during their research on the social bookmarking site and blogs, respectively.	[SU]
14.	Stockport College	*Photo-sharing on Flickr* Photo-sharing site (Flickr)	Students share their photographs in a Flickr group on the City and Guilds Photography course.	[SC]
15.	University of Bradford	*Develop Me! Social Networking at University of Bradford* Social networking site (Ning)	An online space has been set up where staff, students and potential students interact to support students' transition into university.	[UB]
16.	University of Hertfordshire	*Using podcasting to Develop Oral Skills for Physiotherapy Practice* Podcasts and wiki (as a part of StudyNet, MLE)	Students create a description of a particular pathology of the lumbar spine using a wiki. They then record a podcast, role playing the presentation of the condition to a patient.	[UH]
17.	University of Leeds	*Blogs, Wikis and Social Bookmarking to Support Web-based Research* Social bookmarking (Bibsonomy), blog (Elgg), wiki (LeedsWiki based on MediaWiki)	Students use blogs for self-reflection and for set tasks; they develop and present a project using wikis; and use social bookmarking to store and share web-based resources.	[UL]
18.	University of Manchester	*Social Networking and Community-building in Dentistry Courses* Blog (Edublogs), social networking (Facebook), podcasts	Blogs, social networking and podcasts are used to supplement traditional communication methods, such as the university VLE, website and email.	[UM]
19.	University of Salford	*Digital Identity, Communication and Collaboration through Web 2.0* Blog (Wordpress, Edublogs, Blogger), wiki (Wikispaces, Wetpaint, PBWiki), social bookmarking (Delicious), photo-sharing (Flickr), video-sharing (YouTube)	Students use a number of social software tools and the objective is to examine how these tools impact on professionals in the broadcast industries.	[US]
20.	University of	*Social Networking: Connect-ing*	A social networking site was set up for staff	[UW]

	Westminster	*Students and Staff* Social networking (Elgg)	and students to investigate role of an in-house social networking site in community building and for informal learning.	

Table 2   Institution, tools employed, titles and short descriptions of the mini-case studies

No	Institution	*Case study title* and social software tools: primary tool(s) followed by the secondary tool(s)	Summary of the case study	Code
21.	Nottingham University	*Google Earth: Practical Exercises in Geographic Information Science* GoogleEarth	Students undertake a practical lab exercise using Google Earth. The aim of the exercise is to encourage students to think about the implications of the source and quality of the underlying data (some of the data is user-generated and some has no known source.	[NU]
22.	Open University	*Using Social Bookmarking: Tools for Finding Things Again* Social bookmarking (Delicious, Furl and Simpy)	Students are exposed to a variety of social bookmarking and tagging tools on a course about finding and organising information.	[OU4]
23.	Open University	*Student Engagement: Discussion Forums and Web Conferencing* Discussion forums (FirstClass conferencing) and web conferencing (Elluminate)	Forums and web-conferencing provide a means for students and staff to interact remotely in a distance-learning environment.	[OU5]
24.	Open University	*Supporting a Group of Distance-learning Students on Skypecast* Voice over Internet Protocol (Skype) and Skypecast	The 'virtual class' enables students to see the results and problems of specific network configurations in a distance-learning course.	[OU6]
25.	Portsmouth University	*Using Twitter to Support Students and their Projects* Micro-blogging (Twitter)	Students have used Twitter to help them work more closely with their supervisor and with each other while undertaking project work.	[PU]
26.	Royal Holloway, University of London	*Using Facebook to Obtain Student Feedback* Social networkine (Facebook)	Facebook was used to gather student opinion on a library refurbishment project.	[RH]

1 Computer Gaming and Video Capture in Second Life

1.1 Fact box

Computer gaming and video capture in Second Life

In the Computer Gaming and Animation Technology (C GAT) course, students are required to create an animated film inside the Second Life virtual world using FRAPS software to capture and edit real-time video footage. The learning tasks are filming and post-production. Students must select appropriate tools or formats for electronic content tasks.

Tools	Second Life, a multi-user virtual environment (MUVE), a virtual world. Blogger and WordPress for reflective blogging Moodle, the university's VLE, and FRAPS
Institution	Anglia Ruskin University (ARU), Cambridge Campus
Contact	Dr. Mike Hobbs, mike.hobbs@anglia.ac.uk
Initiative	BSc (Hons) Computer Gaming and Animation Technology, Level 1: Introduction to electronic content origination
Delivery	Face-to-face tuition and problem-based learning; online components taught in the classroom
Duration	From 2007 to 2008
Participants	30 full-time students aged 18 to 21

1.2 Social software tools

Second Life (http://secondlife.com) is a multi-user virtual environment or virtual world which has been and continues to be created by its registered users (Residents). Residents navigate their way and engage in activities in the virtual world through the use of an avatar (animated representation) which is fully customisable by the user. Text and voice communications are possible in-world as well as integration with many other software packages (such as PowerPoint for slide presentations). Residents retain intellectual property rights in their digital creations, allowing them to buy, sell and trade with other Residents. Accounts are free, but the world does operate its own currency, the Linden^{TM} dollar, which is currently valued at around L$260 per US$1.00. Anglia Ruskin University has purchased rights to operate its own island (Anglia Ruskin Island) within Second Life although it maintains an open environment which is accessible to non-university visitors.

WordPress (http://wordpress.com) and Blogger (http://blogger.com) are blogging websites where users can create and manage their online blogs. Blogs allow a user to post text, images, audio and video content on any subject and comments from readers can be controlled via moderation or disallowed. A variety of templates (themes and designs) are provided for layouts. WordPress provides detailed statistics of visitors to the blog. Accounts on both sites are free.

Moodle (http://moodle.org) is an open source content management system designed to help educators create effective online learning communities.

1.3   Background and rationale

Within the context of the Computer Gaming and Animation Technology degree course there was a desire to exploit the richness of Second Life as a learning environment. It was seen as enabling peer-to-peer learning. Students could engage in other course or module tutorials and bring skills back to this module. Students were able to 'obtain' artefacts in other areas of Second Life with which to construct their film sets.

Members of staff at the university had used it before on a learning and teaching project looking at using Second Life to support group work, and it was successful.

A major advantage is the ability to build user-created content. In other environments you have to use what's there. The Residents of Second Life are creating Second Life, and there is a diverse range of resources available.

'It's more like the real world than a lot of classes because you've got more choices. It's up to you what you do' (Mike Hobbs, tutor).

Blogging for reflective writing was mandated by the University. A colleague at the Chelmsford campus of Anglia Ruskin University developed a teaching and assessment pattern which is used within the department.

A significant motivation for using Second Life is that users can register free and can operate within the virtual world at no cost. Complex artefacts already created or designed by other Residents can be purchased using the in-world currency and the university gives an allowance to each student on the course for purchases connected with their study.

Overall the university aimed to use freely available software tools to avoid licensing complications.

1.4   The initiative

Second Life is the film set, the environment used for filming. It enables filming (via screen capture using Fraps software for real-time video capture) from different angles using the perspective or viewpoint of different avatars. FRAPS is a real-time video capture application (http://www.fraps.com/)

It was felt that it would have been too much of a step to ask the students to find the environment so the faculty staff chose that. They did ask the students to find their own blogs, although directed them towards one of WordPress, Blogger, or a WordPress installation within the University's own environment. A couple of students had their own websites and they used those. Staff felt it was not acceptable to have to log in to Facebook, for example, to read blogs. 'One advantage of the blogs is that if people outside do see [the blogs] and comment on them you've got that input and interaction as well' (Marie Gordon, Module Leader).

Students have to sign a user agreement acknowledging they are still bound by the JANET regulations for educational internet use.

Anglia Ruskin University has set up own island in Second Life (Anglia Ruskin Island) as a convenience for students but have not modelled the whole university.
A 'building sandbox' is available where items are automatically returned every three

to six hours. Students are not constrained to working on the university's own island: 'Students have shot footage in all sorts of other places. They have been out 'on location' in Second Life' (Marie Gordon, Module Leader).

Students are encouraged to go through the online 'orientation' procedures to learn the basics of Second Life. A guide, 'Getting started in Second Life', is made available online and staff also run a 'building tutorial' to demonstrate key tools and skills.

No training is given for blogging but students are requested to place an entry on a course Moodle blog with their blog URL so that there is one resource with links to each student's blog. 'Given that the blogs are meant to be used by the general public then students are not expected to have problems' (Mike Hobbs, tutor).

Students were each given an allocation of L$50 for purchasing images within Second Life to assist their work.

Ground rules were set out early on. The final film simulation produced by students is to be rated 'PG'.

The island is open to the general public. Blogging is open to external viewing. Students are not currently encouraged to interact with people outside the course. The university does not currently advise students on how long to spend in-world, but could incorporate that into Health and Safety advice in future (eg implications of VDU use).

1.5   Benefits

From the outset it was anticipated that students would find using Second Life 'different', 'exciting', 'novel', and 'interesting'. This has turned out to be the case, although cohorts of students do vary. Things have improved as the graphical environment has improved.

Students completed a perception questionnaire and students felt overall that they had gained 'self-directed learning skills' and were more comfortable with group work. Student feedback is contained in the paper 'Secret learning in Second Life: an approach to problem-based learning with transferable skills'. This feedback also cites 'inclusivity' and the 'richer learning environment'. Students feel more able to express themselves than in face-to-face environments.

'I thought it was awesome. Especially as we were given a free rein to do what you want. It was so much fun doing it. It was literally just 'Make a video'. The capability of Second Life is limitless' (Andy Cox, student).

'It's probably my favourite module. It was the first time we were working in groups and that helped a lot as well' (Edgar Nightingale, student).

Involvement in this project has kept the university at the forefront of learning technology. It believes it has higher visibility and an enhanced reputation.

Students have brought in learning from other modules such as storyboarding and design, and computer simulation. One group used it for distance learning as one of their group was ill and therefore absent from the class.

'There is evidence of their engagement outside class time' (Elaine Brown, researcher).

Student attitudes to blogging were 'matter of fact':

'It's just like common sense really' (Taku Hakata, student).

'It's all very easily accessible' (Andy Cox, student).

'You don't need to be a genius to go on there and set up a blog' (Andrew Pullman, student).

1.6   Issues

One member admits to being a 'Second Life addict' and has become a valuable resource to the university and other staff. She spends a lot of time in Second Life and skills learned there and contacts made 'in-world' have been used to create the island environment.

'I say to my students, "Be careful how you operate in Second Life, because everybody you meet is a real person". Quite a lot of the "things" are too. Sometimes it's not easy to decide whether something's an automated piece of software or actually a slightly disinterested avatar' (Mike Hobbs, tutor).

There have been no real privacy problems but there was one occasion where someone not involved with the university was found on the island: 'There is one person, not related to the university, who has adopted our sandbox because nobody else goes there. He gets three hours of peace and quiet, and nobody else running around with guns and tanks and attack helicopters. He found it completely by accident. Whatever he was doing, it crashed, and when he logged back in it was to a random place which was our island' (Marie Gordon, Module Leader).

One student changed courses and had to be banned from the Second Life island because he was upsetting other students. Management of these issues is achieved through one member of staff having estates management privileges.

Students do access Second Life from home and are advised they need a good internet connection. One of the course staff members once used a dial-up connection from home and his avatar got stuck in bush for a month!

As the island 'exists' on a server not hosted by the University, the technical back-up is not the university's problem. Linden Labs (owners of Second Life) keep updating the software and now only the computers in the computer labs at the university are suitable for accessing Second Life.

There have been occasional problems with passwords and general internet issues but not related to the use of Second Life. Fraps video capture is resource intensive and can slow down the performance of all the university's computers.

Accessibility has not yet proved to be a problem.

1.7   Key lessons learned and the way forward

The university aims to continue running the module. Staff propose to do more teaching inside Second Life and to engage in some trickier 3D modelling. As Second Life develops then they will seek to exploit any new features or resources that are developed.

Staff at Anglia Ruskin University are keen to try some interactions or exchanges with other academic institutions around the globe, perhaps in the form of joint projects. The University would also like to use Second Life for a 'virtual gallery' for its Art

Department, but staff need to spend time becoming comfortable with the environment.

There is a need to acknowledge the volatility of applications on the web. If Linden Labs were to crash then Second Life would be lost, but the use of other tools could continue.

Staff and students at ARU say they have gained more from the project than just the achievement of learning outcomes – transferable skills in particular. 'After the module finished I'm still using it. I've started creating objects for sale on Second Life – for the fun of it' (Andrew Bullman, student).

Students felt it was interesting to see how people interacted differently with different types of avatar. Owing to the names used, people do not know who they are interacting with. Students stated that they felt they were interacting with the avatars they meet in-world, not with the people who are controlling the avatars.

1.8   Further resources

Hobbs, M. and Gordon, M. 'Secret learning in Second Life: an approach to problem-based learning with transferable skills' [online], http://www.jemmtech.co.uk/research/SecretLearningDraft.pdf (Accessed 29 December 2008)

Hobbs, M., Gordon, M. and Brown, A. Virtual World Environment for Group Work, E. [online], http://www.jemmtech.co.uk/research/VirtualWorldsGroupWork.pdf (Accessed 29 December 2008)

'Getting started in Second Life' [online] http://www.jemmtech.co.uk/research/IECO_SL_intro.pdf . (Accessed 29 December 2008)

Anglia Ruskin University, Anglia Gaming (blog) http://angliagaming.wordpress.com/ (Accessed 29 December 2008)

Computer Gaming and Animation Technology BSc (Hons) prospectus [online], http://www.anglia.ac.uk/ruskin/en/home/prospectus/ugft2009/computer_gaming_and _animation_technology_.html (Accessed 29 December 2008)

Second Life activities poster: http://www.jemmtech.co.uk/research/SL_activities_poster.pdf (Accessed 29 December 2008)

Virtual Worlds Learning Environment wiki: http://mojo.csd.anglia.ac.uk/wiki/index.php/Main_Page(Accessed 29 December 2008)

2   Using Wikis to Support Small Group Work

2.1   Fact box

Using wikis to support small group work

Wikis are being used on a number of courses in the Department of English at Birmingham City University (BCU) to support group activities during seminars. Students in small groups discuss and record their thoughts and ideas in the wiki and also link related resources from the web.

Tool	PBwiki
Institution	Birmingham City University, Birmingham
Contacts	Dr. Ruth Page, ruth.page@bcu.ac.uk; Dr. Derek Littlewood, derek.littlewood@bcu.ac.uk; Dr. Sarah Wood, sarah.wood@bcu.ac.uk , Department of English
Initiative	Various courses on the BA and MA English Programme
Delivery	Blended learning; face-to-face, Moodle (VLE) and the wiki
Duration	2007/2008 (and ongoing)
Participants	About 100 undergraduate and postgraduate students

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2.2   Social software tools

A wiki is a page or collection of web pages designed to enable anyone who accesses it to contribute or modify content. They are often used to create collaborative websites. The wiki software enables you to set up a wiki and allows users freely to create and edit web page content using any web browser. Wiki supports hyperlinks and has simple text syntax for creating new pages and cross-links between internal pages.

There are a number of wiki software packages; Pbwiki, which stands for Peanut Butter wiki, http://pbwiki.com is the wiki software used in this initiative.

2.3   Background and rationale

Wikis have been introduced on undergraduate and postgraduate English courses to support collaborative discussion and writing during small group activities in groups of two to five students during face-to-face seminars. Working in small groups is a typical activity for many students in English Studies. Final year undergraduate students at Birmingham City University recognised that working in groups was an important way of gaining 'feedback and input' from their peers. However, gathering feedback in plenary sessions is not without its pitfalls. Typically in English studies, individual reporters take it in turns to summarise the outcome of their group activity, usually verbally, to the rest of the class who would listen, take notes and then ask questions. The students pointed out the obvious disadvantages of this practice: 'no permanent record for the whole class, people don't always take in what is said' and 'not everyone gets to speak, you don't get to say everything'.

Therefore, wikis have been introduced in class time (on university-provided laptops) to summarise small group discussions on a variety of courses. Wikis enable students to create a record of their discussions in the wiki during seminars. Students are encouraged to add to the wiki outside class and also to read other groups' pages and comment on them. This initiative integrates e-learning with face-to-face teaching and most course materials including handouts are provided on the VLE as well as in hard copy. This facilitates connections between the learning that takes place in the classroom and in group-activities with independent learning at home.

2.4   The initiative

Although BCU uses the Moodle VLE, the wiki within Moodle was not considered as flexible and feature rich as the wiki software available in the public domain. PBwiki was chosen for its simplicity.

The use of a wiki alongside class discussion was first embedded in the Narrative Analysis module, a final year class that blends both literary and linguistic approaches for teaching narrative theory. Typically, the module is taught as a workshop session, with a mini-lecture followed by a variety of small group tasks where students apply their knowledge to a range of texts. Using a wiki in class time enabled online resources to be linked so that the students could use them alongside more conventional forms of printed materials in their group activities, rather than waiting until they were outside class on their own to do so.

The students used laptops to record their discussions, so that the dynamics of group discussion were minimally disrupted. Students usually took it in turns to be 'notetaker', while others contributed their opinions during the various group activities. A summary of their discussions, as an image, diagram, list of bullet points or a summarising paragraph could be recorded and then projected for the whole group to see on the main screen during the plenary feedback at the end of the session.

The means of summarising the group activities varied week by week, and included writing paragraphs, producing PowerPoint slides, presenting analysis in tables, producing mind maps, which were then photographed and added to the wiki. Both verbal and visual styles of learning were accommodated, and students were made more conscious of the different ways in which information might be presented. The multimodal nature of the wiki appealed to students who began to use colour to code their analysis, or inserted images or video to supplement the text-based emphasis of the course.

One of the advantages of preserving the class discussions in the wiki was that it enabled students to return to their work afterwards, in the time between classes, or in later class discussions. The students used the commenting facility within wikis to evaluate the pages other students had written. By the end of the module, the group wiki acted as a large portfolio of many different kinds of summaries, created by the students, which represented their group work over the course of a semester.

Wikis have also been introduced on the Postwar Fiction and Film and the Fiction and Study Speak Write courses. Dr Wood describes the use of a wiki as 'a formal space for the students to write their thoughts in a concrete manner which they can extend after the class – a place where they can share their learning with one another'. Dr Page has now included wikis on a postgraduate course called Transforming Narratives in which the students develop their own individual portfolios in the wiki and which are assessed.

2.5 Benefits

Dr Wood described the main benefit to her as a tutor: 'When you are teaching groups of 20 or more, you can't get around every student for every single activity – but with a wiki I can; I can comment on their work …; if I haven't been able to get around to every group during the seminar; I read their contributions on the wiki after the seminar and send them comments.'

The permanent but editable record of the discussions enables the tutor to engage with more students and in greater depth than face-to-face interaction in the seminars alone allowed. The tutor is able to check the students' understanding and suggest strategies to them for improving their writing as the course progresses, not just in relation to a final assignment.

Dr Littlewood observed that students who were generally quiet in seminars were very engaged with the wiki.

The students described a sense of increased social cohesion: 'It has pulled us more together' which led to better understanding of the challenging technical concepts they were interrogating: 'Wiki meant more group work, so topics became better understood.'

They also said that working in a wiki enhanced their socialisation and communication with fellow students during and after the seminar: 'Working together …, commenting on each other's work outside the lesson helped in communication; you may not have known these people well otherwise.'

The students' contributions to the wiki also led them to become much more reflective in their learning. A student stated that the wiki gave 'a chance to review my own and other's ideas from our class work that we tend to forget sometimes'. It also encouraged a personally reflective stance: 'It makes me go away after class and still think about the topic we did because I was using the wiki to type my ideas up.' This was coupled with the opportunity for students to see how other students tackled the same problems but in different ways: 'I have gained better understanding of the models covered in class and know how to apply these to texts.'

Students appreciated that they could access their discussions at any point, and as often as they wanted to, 'work saved and always accessible to refresh knowledge on a certain area'. This promoted a more holistic learning experience. For example, within later classes, students could return to their work on earlier topics and formulate a comparative analysis or later critique. The links between conceptualising and applying knowledge were strengthened, particularly through reflection and giving comments to each other's work: 'The wiki helped to keep ideas in my mind'; I could refer back to our discussions.' The students felt that their analytical skills improved: 'We were able to read each other's work and analyse different views.'

One of the students said: 'Wiki mirrors the way I think; it [wiki] helps to structure the content; … it [the wiki] makes me think of the process of learning and how the music clips and movie clips, photographs and hyperlinks can be connected; wiki has interconnectivity just like brain cells are connected to one another; … wiki mirrors the way the brain works; this leads to a much richer experience.'

The students found the multimodal capabilities of the wiki very useful for adding audio- and video-clips to other web resources to make the content richer. A student

said: 'You just can't do this in a "normal" text file; … integrating visual means along with text – just gives a better meaning to what you want to convey.'

2.6 Issues

In the first initiative in 2007, there were only five computers for a group of 30 students. In 2008, ten new wireless-enabled computers were obtained; they are kept charged at all times and receive software updates from the internal university network. The students can now work in much smaller groups. However, some students have struggled with the track-pads and others have experienced some difficulties in logging in to the wireless network but, over time, the log-in problems have been resolved. Access to the wiki is provided as a link from the Moodle site of the course – so the logging in requires two steps but with the latest version of the PBwiki, the students are able to directly access the wiki.

The participation in the wiki by individual groups is variable: some groups tend to write everything that was discussed in the wiki; there is some perception that some students 'hold back' their ideas and do not put everything on the wiki. Other students mentioned that collaboration on the wiki beyond the seminar was rather limited with only one or two students per group contributing to the wiki after it was over. Some of the students expressed sense of discomfort about unequal participation by some students and groups: 'Not everybody contributes – it wasn't fair; … some people write in their notebooks – they don't like to type on a website, wiki may not be for everybody.'

Writing in a wiki was not easy to start with but over a period of time, students felt that they were able to move from bullet points to small essays as the course progressed. The students felt that while they were working on the wiki and accessing online resources to support their group discussions, they sometimes drifted away by clicking through the pages and moved away from the topic under consideration. Further, the students felt that they were sometimes easily distracted while they were online during the seminar, and started accessing Facebook or Yahoo Messenger.

2.7 Key lessons learned and the way forward

The simplicity and usability of the PBwiki has played a key role in the positive experiences of students and tutors. Dr Page acted as a champion in this initiative; she shared her experiences and insights with colleagues, created training materials and provided training, which encouraged her colleagues to adopt wikis on their courses. The wiki activities have been designed in such a way that they are supplementary to the printed materials and books, and visits to the physical library, and in no way undermine the reading of (physical) books.

The rationale for adopting the wiki was shared with the students when the wiki was introduced on a course, so that the students did not perceive that the technology was overshadowing their English course, but promoted as a technology which will support their learning. There is no assessment of the use of the wiki on undergraduate courses. On the postgraduate course, students are assessed on their individual portfolios in the wiki, but this is a recent development.

There are workload implications as effort and time are required in the initial stages to set up the wiki (the tutors in this initiative set up the wikis and students' accounts on their own without technical support). Setting up the wiki activities has not been too onerous and students have been pointed to resources on the VLE.

Although the wikis are not in the public domain, the students tend to record their discussions more diligently and carefully because they are aware that peers and the tutor would read the wiki. Wiki activities have enabled the tutors to introduce students to relevant resources on the web and in the digital library of BCU.

There are plans to introduce wikis and blogs on other courses in the Department of English.

2.8   Further resources

Using wikis to support small group work, http://tinyurl.com/ayw7fv (Accessed 24 December 2008)

Course description on Narrative Analysis:
http://www.lhds.bcu.ac.uk/english/narrative-analysis (Accessed 24 December 2008).

Course description on Transforming Narratives:
http://www.lhds.bcu.ac.uk/english/narrative-analysis (Accessed 24 December 2008).

Course description on Fiction and Study Speak Write:
http://www.lhds.bcu.ac.uk/english/study-speak-write (Accessed 24 December 2008).

Course description on Postwar Fiction and Film:
http://www.lhds.bcu.ac.uk/english/postwar-fiction-film (Accessed 24 December 2008)

3 Facebook as a Pre-induction Support Tool

3.1 Fact box

Facebook as a pre-induction support tool

A group on the social networking site, Facebook, was set up in September 2008 for pre-induction of the students on the first year of the BA English Programme. The information about the group was sent in an induction (joining instructions) letter to the students, and was advertised on the university web pages.

Tool	Facebook, a social networking site
Institution	Birmingham City University, Birmingham
Contact	Dr. Ruth Page, ruth.page@bcu.ac.uk
Initiative	BA English Programme
Delivery	Online
Duration	Summer 2008
Participants	120 students

3.2 Social software tools

Facebook (www.facebook.com) is a social networking site where users interact through a constantly evolving set of networks based on college or university, friendships, interest groups, favourite movies, and other criteria. The site allows its users to create a profile page and forge online links with friends and acquaintances. Many use it as a way to stay in touch after finishing school, and as a way to share their life publicly. There is some anecdotal evidence to suggest that students are setting up their own discussion spaces in Facebook (or similar) rather than using those that exist in the university's VLE. Facebook has also been used for formal learning with academics setting up groups for classroom practices.

3.3 Background and rationale

The School of English at Birmingham City University used the social networking site Facebook to set up a pre-induction group for incoming students to the BA English programme. The purpose of the group was to improve transition into higher education and to enhance social cohesion between students. The project responded directly to the JISC report 'Great expectations of ICT' which indicated that 73% of first year undergraduates made use of social networking sites, and draws on the assumption that enhancing social integration can be one element that benefits students entering higher education.

Dr. Ruth Page, Course Director of this programme, had already been doing research on self-disclosure in Facebook. She had been analysing what people were writing in Facebook and she found that students (especially in the age group from 18 to 20) were writing about their studies: current tasks they are involved with; how well their essay writing was going on; and so on. In addition to participating in the formal discussion forums on the university's VLE, they were discussing their progress and

problems informally with their peers on Facebook. Therefore, she thought of tapping into a software which the students were already using with the motivation that interactions on Facebook before the start of the programme could prime social cohesion between new students with the aim of improving student progression and retention.

3.4   The initiative

The group was set up on an 'open' basis so that anyone could add themselves, but was moderated by the course director. In order to offset the presence of a course tutor and to encourage a sense of student ownership, the student mentors employed during the induction period were also invited to join the group. Information about the group was sent out with joining instructions to prospective students, links to the group were also provided on the Birmingham City University homepages. The students were informed that the group was 'official' and had been set up by the English department and the purpose of the group was made clear: it was a platform for them to ask questions and to get to know one another. The group had links to the web pages of the university and to the department.

By the start of Induction, 60 of the 120 students who joined the undergraduate programme had joined the Facebook group. By the end of the Induction week, 80 of the 120 students had joined the group (67% take up). The students posted messages on the group 'wall', started discussion threads and emailed each other and the course director in the period preceding induction. The take-up for the group is in line with one of the two other pre-induction groups trialled in the previous year in Birmingham Institute of Art and Design where 120 of 210 students joined the Visual Communication group (57% take up) but only 30 of 130 students joined the Media Communication group (23% take up).

The wall posts and discussion threads are a good indication of how the group was used by the students. In total 125 wall posts were made, and 4 discussion threads were started (which contained in total 28 posts). In both cases, the prospective students started wall posts and discussion threads and the tutor only joined in once specific requests for information were made. Participation in the wall posts showed that of the 80 student participants who joined the group, 39 of them (just under 50%) wrote on the wall. Of those 39 students, the pattern of participation is as follows: 59% wrote one post only; 31% wrote 5 or fewer wall posts; 8% wrote 10 or fewer wall posts; and 2% wrote more than 10 wall posts.

The course director contributed an additional 26 wall posts, 15 more posts than the most frequent student contributor to the wall.

The discussion threads showed a fairly similar distribution of participation. Sixteen students contributed, and all of them also wrote on the wall. Of those students, 10 of them (62%) wrote one post only, 5 of them (31%) wrote two posts and one student wrote seven posts.

The topics of the wall posts and discussion threads also indicate what the group was deemed to be 'good for'. The topics of the wall posts covered a range of areas relating to induction matters, the most prominent of which related to the reading students were asked to prepare prior to beginning the course, introducing themselves to each other and finding out where other students were living. This reflects both the specific nature of this group (pre-induction preparation) and the general social interactions afforded by sites like Facebook.

Two of the discussion threads were focused on the course reading materials; one focused on a student mentor's offer to provide help; and the last thread (which had only one post) was a request for information about student identification numbers. The emphasis on the literature they were reading in preparation for the course is perhaps surprising, given that existing research indicates that Facebook is often perceived to be best kept as a social environment rather than focused on course content.

3.5 Benefits

Data about students' experiences has been collected through a questionnaire and a focus group. From the feedback in the questionnaires, the most frequently identified benefit was social cohesion, 'Meeting people before enrolment' (51% of responses). In the focus group, one student said, 'I could relate people to faces on the first day and say – yes, I know – you had posted about xxx'. The second most frequently identified benefit was sharing information or views about the literature they would be reading (24% of responses). In the focus group, one student noted 'which books we were supposed to read and where we could buy the books was more useful than just introductions'. Other responses included getting information about timetables, induction and getting quick responses to questions. In the focus group, students noted: 'Even planning the bus routes and trains to the university on the first day can be complicated' and 'It became clear what you do on the first day and where you come on the first day.'

In the focus group, students discussed the advantages of the pre-induction support; and one commented: 'I was relieved to see that I wasn't the only one who was struggling and not understanding something.' Another student said: "When I asked am I the only one confused, 50 others replied to say that that I wasn't the only one … you felt that you were on the same boat.' Students felt that they were being introduced to the university, higher education and the next phase in their lives; one student in the focus group said: "Talking to people makes it more real … makes you feel settled … it helped in building up rather than suddenly being an adult.'

As a new course director, Dr. Ruth Page mentioned the following benefits for staff: being able to identify and correct initial problems with induction material before induction actually started; being able to contact the majority of students in advance of the course beginning to answer questions and provide reassurance; improving social cohesion between staff and students.

She said, 'I felt as if I knew some of them before they arrived and could recognise them quickly on the first day of induction'.

3.6 Issues

Some students did not join the group and when asked they mentioned that they either did not use Facebook, or were just 'anti-Facebook' and preferred MySpace (another social networking site), or were just not bothered.

Disadvantages raised by the students included having the group privacy setting as 'open'. Other reservations raised by staff about the group were that the 'open' status would leave the group vulnerable to targeting by those marketing other courses (for example at postgraduate level).

The role of the tutor as moderator is one requiring fine balance. The presence of the course director in the group was necessary both in order to monitor content and to respond to specific enquiries promptly. However, the tone taken was always 'bright and friendly' rather than authoritarian. The group was monitored twice a day for brief periods between the confirmation of places after A-level results and the start of induction. Some staff might find this time consuming, but the benefits outweigh the effort involved.

The question of whether staff and students wish their profiles on Facebook to be known to each other is a contentious issue. It should be noted that belonging to a group does not mean that you need to become 'friends' and therefore disclose access to personal information without your personal consent.

3.7 Key lessons learned and the way forward

Facebook is an excellent tool for improving social cohesion. It is readily accessible and harnessed the online social behaviour of prospective students in a positive way. Although the students in this case study did use the group to begin discussing their opinions of material they would later study, this was not found to be so in the groups run the previous year in Birmingham Institute of Art and Design at Birmingham City University. It may well be the case that this feature was specific to this cohort of students.

Although there is qualitative evidence that the Facebook group improved social cohesion and helped ease the initial transition into higher education from a social perspective, there is no evidence that the use of pre-induction social groups causally influence retention rates. The issues that underpin retention are too complex to be related simplistically to a single factor.

The pre-induction Facebook group ceased to be used regularly after the end of the induction week. This suggests that the group served a specific purpose in relation to a specific event: preparing students to meet each other at Induction. The reasons for the decline in use are not clear. Perhaps it is that the 'social glue' initially provided by the group was no longer needed that the students were meeting regularly in face-to-face classroom contexts. Alternatively, it might be that smaller friendship networks were now established through individual 'friend' links: the 'social glue' had been taken out of the pot of the 'group' and was spread out through diffuse and personalised networks. However, the course director still continues to send messages to the group, as an additional channel of communication; for example, if she wants to reach the students to announce any changes in schedule or announce a big event.

Dr Page is planning to use Facebook again for pre-induction next year but will keep an eye on any other emerging trends of social networking sites which students adopt in the next year. She plans to add some more details when she sets up the group and, in fact, these are some of the information needs which students have expressed that they would have liked: timetables; maps, photographs of where they would be coming to; and the like.

Dr Page does not see Facebook as an academic space: 'It is a social space and the students have strong ideas about whether the university should intervene in their social spaces; it is good for certain tasks such as supporting individual students who have proposed Facebook as a tool for keeping in touch and for receiving support; or for pre-induction support as in this initiative.' She further added that Facebook may

not be suitable in the context of a course and for academic content but is an excellent platform for informal discussions, 'like a coffee place area', where students can 'socially' support one another and talk about their studies.

3.8   Further resources

'Great expectations of ICT: how higher education institutions are measuring up', [online] http://www.jisc.ac.uk/publications/publications/greatexpectations (Accessed 7 December 2008).

Digital narratives, http://www.digitalnarratives.blogspot.com/, blog of Dr Ruth Page, Director BA Programme and Acting Joint Head of School, Department of English, Birmingham City University (Accessed 28 December 2008).

4 Community@Brighton: Social Networking at University of Brighton

4.1 Fact box

Community@Brighton: social networking at University of Brighton	
This initiative uses the Elgg social networking software package to establish a user driven, online community at the University of Brighton. It is used for induction, social and educational purposes. Community@Brighton is available to all students and staff on an equal basis. It was established three years ago to complement the more academically driven Virtual Learning Environment, Blackboard, which is still in use**.**	
Tools	Elgg
Institution	Learning Technologies Group, University of Brighton
Contact	Dr. Katie Piatt, k.piatt@brighton.ac.uk
Initiative	Community@Brighton is available to all students and staff on an equal basis. It aims to complement the more academically driven Virtual Learning Environment, Blackboard, which is still in use
Delivery	Within the teaching context it is used primarily in blended mode with some purely distance and online use. It is also used with classes in face-to-face sessions.
Duration	Since 2006 (about to enter the third year of active usage)
Participants	All staff and registered students (30,000+)

4.2 Social software tools

Elgg (http://elgg.org) is a prominent open source social network engine. When integrated into a web application it allows users to create and manage social communities in an easy and straightforward manner. It works in a similar fashion to the more prominent Facebook social networking site but Elgg, being open source, can be customised.

The basic idea is to allow users to create shared web space areas termed communities which enable personal weblogs, file repository, an e-profile and RSS reader for news aggregation. Most commercial software in this domain emphasises the openness of the communities but Elgg has a fine graduation of restricted access and control ranging from full public access to access by a specified individual only. This allows communities to be managed from above, as in the traditional teacher-student relationship, or to be self managing.

The community allows members to form discussion groups, create media galleries and write personal blogs. Using a tagging system, communities can advertise themselves to attract new members with common interests.

4.3 Background and rationale

The institution had been using Blackboard VLE, a commercial virtual learning environment, for some time before this initiative began. They had augmented

Blackboard using building blocks to provide a blog tool and a wiki tool that were integrated into the VLE but it was felt this was still a controlled learning environment that lacked flexibility. With the rise in popularity of social networking applications on the internet and the ease with which they allowed people to share media convinced staff that these applications had potential in the learning environment. Blackboard VLE had not developed over the last five years and it seemed to be ignoring these new Web 2.0 technologies.

The Community@Brighton initiative began as an experiment to investigate the use of social networking software in higher education but it also had the rationale of reducing the lock-in to a commercial product that seemed to be stagnating.

4.4   The initiative

The social networking initiative was seen as an extension to the more traditional Blackboard VLE that already existed at Brighton. It was therefore essential that the new software could be fully integrated within this environment but integration was not the only deciding factor when Elgg was chosen. Initially a checklist was used to look for required features in a blogging tool: authentication against LDAP, the same data feeds as Blackboard, ability to run on the same hardware; scaleability. Elgg met these criteria. It is also higher education orientated, open source and has an excellent developer community. 'Easy of customisation was far greater than other packages and it is open source so we were allowed to do so.'

Elgg operates at individual and group level and gives shared facilities which were not looked for at the time but seen as a big bonus later.

'One reason for Elgg is its fine grained level of access control.'

Communities have been set up for a large variety of purposes but the learning-related communities include: photo-blogs, accessing old films and reflective blogging. A photo-blog was an essential part of one of the university's photographic courses and Elgg was used to support the sharing and feedback from other students on the course. Old films (outside their copyright) were loaded onto Elgg where they were accessed by students, edited and returned. Feedback on their work was then solicited. On some courses students have used Community@Brighton to blog reflectively about their study modules.

No additional tools are provided by the university but some academics do use YouTube and Flicker as resources. Students use Facebook for their private lives but they keep Community and Facebook as separate activities.

'I would like to spend more time on Community than Facebook … Facebook diverts me away from the academic and uni stuff and then I end up spending far too much time,' commented a student.

Considerable interest has been shown from the Arts Faculty staff. Their models of teaching are more student participative and do not fit well with the traditional VLE: the Arts tutors are not advocates of Blackboard: 'Arts Faculty traditionally resisted the use of Blackboard because they saw it as inflexible.'

The student participation aspect of Elgg has appealed to them since it has significantly increased the ability of students to share media and offer feedback to each other.

Some course assessment does make use of Community@Brighton activities, including the assessment of student videos and some blogs.

4.5   Benefits

The project has been a great success although a formal qualitative evaluation has not been conducted. Usage statistics have been monitored and the staff are very pleased with the take up of the system: so far 29,000 blogs have been written, 10,000 comments made, 6,000 files have been uploaded including 2,200 photographs and 220 videos, and 467 communities have been created.

The social usage has been very good and academic usage shows increased collaboration between students.

'Benefits from an educational point of view were in providing an alternative model (to Blackboard VLE) for online learning and teaching'

The new student's area, which allows the new intake to contact each other and other students before the term starts, has been a great success. Student support has also been an unexpected benefit. Several students have blogged about their concerns and worries and have received support from the rest of the student community. It also alerted the formal student support services and they were seen to be taking action by the student community. This was a positive advertisement for student services.

The communities where smoking policy and carbon footprint discussions took place were the first time staff and students have had a combined online voice that influenced policy.

The introduction of Community@Brighton has not increased student workload since it is a replacement for other methods but it is an engaging environment and it is easy to spend time there.

'Read it all and participate in everything … you can't – you have to learn how to manage that … build social network skills.'

Quite a lot of tutor time is spent at the beginning of a new course but this is similar to Blackboard VLE or even traditional offline methods. The staff in the Learning and Technologies group works with academic staff beforehand to help them make appropriate choices of what technology to use. 'If you let people know what is possible they are better able to make use of it.'

4.6   Issues

There have been very few issues with this initiative. The technical problems that all such projects generate were quickly solved using the Elgg developers. 'We were delighted to work with them (Elgg developers) … who did customisations for us. So it meant that we could provided exactly what we wanted to provide.'

Elgg needed to be integrated into the existing studentcentral (student portal) and work with Blackboard and the student records system so some customisation was required. The single start point for students was studentcentral and this had to be maintained: 'particularly single sign on … we do not want students to have multiple accounts all over the place and the integration with the VLE so that it presents under the same umbrella'.

Integration with the student record system meant that there was no need to add students to modules, as they are already there, so it made setting up communities easy. Staff were keen to avoid any manual processes since the initial release was to 20,000 students.

Every student gets an account automatically at registration so a conscious decision was made to default everyone's profile to 'logged in only' but this can be altered to private or public. 'Basi**c**ally, we are giving every student effectively a public blog and they can say what they like … and that was cleared at committee level here because of the fact that any student that has got an account at Brighton has agreed to our terms of usage.' The normal terms of their system usage covers blogs.

Sometimes tutors do not realise that the technology requires more initial work to get going but then it runs itself. Critical mass is important and Gilly Salmon's 5-step model of discussion boards is relevant here. 'They (tutors) blame the technology quite often ... or they give up because they think it is too much effort to post several times and encourage students to comment upon student work … it is more work.'

With a potentially public-facing system such as Community, the staff did anticipate some issues of inappropriate use but there have been fewer than expected. The main issue has been with commercial use: company advertising, but this has only involved five postings. Elgg has a flag for identifying offensive material and the Community has become self policing.

4.7   Key lessons learned and the way forward

An aim was 'to provide tools of relevance to students' and the staff members see the future with Web 2.0 social software rather than the controlled VLE platform. It is easier to build things like Test Tools into the Web 2.0 paradigm than build Web 2.0 facilities into existing VLEs.

Sharing learning beyond course constraints and beyond institutional constraints is a good thing and these technologies can enable that.

Students have embraced Community@Brighton more so than the Blackboard VLE which they see as 'stale, dry and academic'. However, when they launched the initiative, it was marketed as 'Community – something new', and this resulted in Community not being seen as a learning tool despite its being part of studentcentral which includes the VLE. 'People often don't see it (Community) as a learning tool. We still have this issue of it being social and not learning'

The staff members believe that social networking tools do have a valid place in higher education both socially and academically.

4.8   Further resources

Community@Brighton can be found at http://community.brighton.ac.uk (Accessed 3 January 2009)

Gilly Salmon's 5-step model can be found at http://www.atimod.com/e-tivities/5stage.shtml (Accessed 28 January 2009)

Studentcentral can be found at http://studentcentral.brighton.ac.uk (Accessed 3 January 2009)

5 Using Web 2.0 in Further Education Library Services

5.1 Fact box

> **Using Web 2.0 in further education library services**
>
> A library blog on WordPress is better than the library newsletter and provides articles of interest, news items related to the library and its resources, and book reviews. Course and subject related bookmarks are provided on the Delicious social bookmarking site. The 'How to' guides are written in a wiki (PBwiki).
>
> | | |
> |---|---|
> | Tools | Blog (WordPress), Social bookmarking (Delicious), and wiki (PBwiki). |
> | Institution | Coleg Llandrillo Cymru, North Wales |
> | Contact | Andrew Eynon, a.eynon@llandrillo.ac.uk |
> | Initiative | Library services for all students and staff |
> | Duration | 2007 onwards |
> | Participants | About 20,000 students and staff |

5.2 Social software tools

WordPress (www.wordpress.com) is a website that provides a public blogging service. Users can sign up for an account and create their own blog. The user then adds posts to the blog for others to read. Blogs can be created to have multiple authors, and any one of them can post. WordPress automatically generates tags which allow other users to find blogs via a series of keywords. Other users can then read the blogs and subscribe to any that they wish to monitor. They can add comments on the posts in a blog. The owner of a blog is provided with usage statistics so that they can monitor the usage of their site.

Delicious is a social bookmarking web site (www.delicious.com) which allows users to submit bookmarks. Bookmarks are tagged with keywords and small descriptions about the bookmarks can be added.

PBwiki, Peanut Butter wiki, (http://www.pbwiki.com) is a public website, which allows users to collaboratively edit documents. The documents are edited and presented as web page(s). Each document can be either public or limited to a group of users for reading and/or writing.

5.3 Background and rationale

The initiative was set up to see how Web 2.0 or social software tools could be used for library services. The overall goal of this initiative is to raise the awareness of the library services in the college: what is being offered and how can these services support students and staff? The objective was not to replace an existing service but to use the technologies in a complementary manner.

The initiative is related to the concept of Library 2.0, ie setting up services, which are more engaging for the users of the library, and 'taking the library resources to the students and making them interactive'. Another aim of this initiative is to enable the

educators in the college to incorporate social software tools in learning and teaching. Therefore, training educators is an integral part of this initiative. The third aspect of this initiative is in developing curriculum in the area of social software tools: therefore, whatever is being learned on this initiative is being transferred on to a course in the college where students are learning about Web 2.0 technologies.

A further aim, related to the social bookmarking part of this initiative, is to enable students to access relevant and course-related web and library resources online, and to enable students and the educators on these courses to contribute to and build these resources over a period of time.

5.4   The initiative

The main blog is called LibeRaCe (http://liberace.wordpress.com); its aim is to inform readers about all that is new in the library, events around the college, and as a forum for readers to comment on how the library is doing, and what they would like to see on the blog. The library staff creates the blog posts and also ratifies the comments on the posts. Sometimes, these blog posts are motivated by the questions that are asked at the library's enquiry desk. The project team also monitors the statistics from the blog to understand the usage of the service and the kinds of search terms the readers are using, so that they an improve the tags on the blog posts. In addition to the regular updates to the blog, there are pages on the blog which provide services such as: users can ask a librarian a question; make book requests and suggestions; and find the library opening hours. The aim is to make the blog interactive and to involve the students and educators.

The project leader of this initiative (who is the library manager) also maintains a blog (http://andrewey.wordpress.com) for discussing this initiative; its background and news about what is going on; reporting visits to conferences; as a storage space for documents to share them with project partners; and for disseminating the project outputs to encourage feedback while the initiative is being run.

Another part of this initiative is to develop a collection of course-related resources (from the web and the library, including e-books) on the social bookmarking site, Delicious. So if the students are, say, working on an essay on a particular topic, they will be able to access the resources from the selected bookmarks that they are provided in Delicious. As of now, the library staff is working with course teams to develop the resource list by conducting research on the web and selecting the most useful resources. However, it is envisaged that in future both students and course teams will be encouraged to contribute to the repository of resources.

Wiki pages hosted on PBwiki inform the use of Web 2.0 technologies in library services and to provide staff training materials on Web 2.0 technologies. For example, one of the wikis gives examples of the use of Web 2.0 technologies by further education library services. Another gives examples of the use of Web 2.0 technologies in different library sectors in Wales. A third wiki has a tutorial on the use of Web 2.0 technologies in the library. These wikis are in the public domain.

Word-of-mouth recommendations and personal experiences of one of the library staff influenced their choice of WordPress, Delicious, and PBwiki. The tools have been robust and reliable.

5.5 Benefits

The blog was designed to improve upon the library's newsletter: 'We have a printed library newsletter; but the blog offered certain advantages ... mainly the ease of updating it for news and events, as compared with the college website.'

The library staff who maintain the blog are keen to direct students to high quality online resources so that the students learn to assess the quality of online resources. Also, the blog, through its careful selection of links and resources, has helped to steer users towards the best resources online, and help users avoid getting poor quality information from web searches. 'The [library] staff, who have such a wide knowledge of such a broad area ... can make their favourites available to everyone.' The blog was perceived as an awareness-raising initiative, as well as for marketing the library services, but it has become a discussion forum. For example, a useful debate was triggered across different institutions when a librarian from another college posted a web link to an article on the usefulness of Wikipedia for students on the blog.

The library manager receives pointers to various resources related to information literacy from colleagues in US, Canada and around the globe in response to his blog posts, which he feels, that he would not have found on his own.

With regards to collection of resources on Delicious: the perceived benefits are that students can access them from anywhere: 'There are a lot of students ... who have got very full timetables ... they can only work during the evenings. ... We can give those people the tools to do the work when it suits them, not us.' Further, this selected list of resources is expected to reduce student workload and 'to make their lives easier; and to steer people away from Wikipedia and to point them to quality resources; this will improve the quality of student's course work'.

5.6 Issues

Conducting research and creating posts that are useful to students and staff can sometimes be time consuming. However, it was felt that as more staff (educators and the library staff) start posting, the blog would be kept 'alive'. The number of comments received on the blog posts is fewer than the team's expectations. The team feels that although it is not difficult for students and educators to use the technology, they need to gain more confidence to give comments. The team wondered if this is 'a "British thing" – a reluctance to speak out in public'.

For the social bookmarking initiative, the team feels that formal hands-on training will help the educators, and workshops are being planned. So far, the team have handled queries one-to-one, or in small groups.

There is concern about accessibility, ie students who do not the economic means to have computers at home may feel left out. There are also concerns about quality if the students were allowed to contribute to the resources in Delicious. As of now, the students can suggest resources to the library staff who run a quality check before the resource is bookmarked on the course space. Also, when the tools are extended to teaching and learning, there are concerns about the educators being overwhelmed with the tools and how they could be supported to make the choices. The role of one of the wikis (http://librarywebquest.pbwiki.com) is to enable educators to learn about the tools and chose those that meet their course requirements.

A side effect of the using tools in the public domain is that it has now become difficult to monitor what is going on in the IT Workshop (the computer bank associated with the library). Staff cannot ask a user to leave just because they are using a social software tool – this may now be a legitimate activity.

5.7   Key lessons learned and the way forward

The team feels that this initiative has raised the profile of the library services within and outside the college: 'It [the blog] has been fairly good at showing what is that we [library services] do.' In addition, it has made the educators aware of the social software tools and their potential.

 As the project progresses and a new academic year starts the team are hoping to target students more, eg by including information about the blog and social bookmarking on the courses in the induction so that this initiative becomes an integral part of their student life. The team has not yet made formal assessments of the initiative with the staff and students (as of November 2008). Student-surveys are planned in the near future.

The planned way forward is to train the educators and to integrate these tools in teaching and learning. However, some questions are being raised and discussed: whether the use of publicly available tools will discourage the use of the institutional Virtual Learning Environment (Moodle)? Whether an integrated environment (such as a VLE) is more beneficial for students and staff than a number of diverse tools? Should an institution be promoting tools that it cannot support?

As far the current initiative is concerned, the team is keen to make the best use of the emerging technologies for the library services, and the external funding for this ongoing initiative (which is provisionally funded for two years, 2007 to 2009) has bought some dedicated staff time for this initiative. The team is convinced that 'new technology can free staff to work more effectively; we want to spend more time directly supporting staff and students' learning rather than cataloguing which we might have spent a lot of time on in the past'.

The team would like to encourage others to start similar initiatives. 'You can engage with these technologies without a huge amount of staff time, cost or expertise.' A blog should be within the scope of even a small college. 'Give it a go!'

5.8   Further resources

Collections of bookmarks in Delicious available at http://delicious.com/Llandrillo_Library (Accessed 1 January 2009).

Library guides available at http://felibrary2.pbwiki.com/, http://welshlibraries2.pbwiki.com and http://librarywebquest.pbwiki.com (Accessed 1 January 2009).

Library manager's blog available at http://andrewey.wordpress.com (Accessed 1 January 2009).

Library services blog available at http://liberace.wordpress.com (Accessed 1 January 2009).

6 Photo Publishing with Lulu

6.1 Fact box

Photo publishing with Lulu

To exploit the potential of Web 2.0 LSBU adopted the use of print on demand (POD) technology via a website called Lulu.com for students of their BA (Hons) Digital Photography degree. The site allowed students to develop their own personal learning environments for social networking, blogging and cataloguing via one portal.

Tools	Lulu.com photo publishing website with blogging and forums. Facebook for course management, linked to university's VLE. WordPress blog used in 2006 only
Institution	London South Bank University (LSBU)
Contact:	Paula Roush, roushp@lsbu.ac.uk
Initiative	BA (Hons) Digital Photography Level 2: Photographic Cultures Level 3: Brief-led Project
Delivery	Face-to-face tuition and meetings in media labs at LSBU, with weekly computer based e-tivities
Duration	From 2006 to 2007 (and ongoing)
Participants	27 full-time students (aged 20 to 37) at Level 2, 11 full-time students (aged 24 to 44) at Level 3.

6.2 Social software tools

Lulu (www.lulu.com) is a photo publishing website with blogging and forums. The process makes a PDF version of the student's work available for free (or paid) download online, but professionally printed copies can be ordered at a specified cost. The site effectively allows the creation of print-on-demand books using the student's own photos and written contributions. Sign-up is free and each user gets a storefront and book pages to advertise their work. A social networking community is developed and encouraged via blogs and forums provided on the site.

Facebook (www.facebook.com) is the most popular social networking website in use by students in the UK. An account is free and allows the user to create their own personal web space and share content with designated 'friends' to create that user's social network.

WordPress (http://wordpress.com) is a blogging website at which a user can create and manage their online blogs. Blogs allow a user to post text, images, audio and video content on any subject and comments from readers can be controlled via moderation or disallowed. A variety of templates (themes and designs) are provided for layouts. Accounts are free.

6.3 Background and rationale

There was a desire to develop the university's use of social networking tools in teaching and learning. An early student questionnaire to a population of 1000 students brought a 12% response which indicated that the student population was already highly active in their use of social software.

Initially (autumn 2006) the university used Lulu.com for photo publishing and WordPress for student blogging. In autumn 2007 the blogging and forum elements of the Lulu.com website were adopted in place of WordPress.

Lulu.com is used as a personal learning environment (PLE), for blogging, social networking, and cataloguing tool via one portal. The use of the print on demand (POD) concept through Lulu.com photo publishing was intended to give the students experience of producing a professional publication via the online medium, and experience of the whole process from concept to publication.

Photo publishing allows students to create professional looking publications through an online website and buy or sell copies at agreed prices through the website. The university purchases two copies of each publication created by the students, one for the library and one for the department.

Lulu.com in particular was chosen as the teaching staff were familiar with its use and content and it is free for students to use. It has the added benefit of allowing students to use other image manipulation tools to edit their images before publication.

6.4 The initiative

Opportunities for self-publishing of photography online are varied and the students already use Flickr, DeviantArt and other photo-sharing sites to share their photos. LSBU feels that for their students these courses represent the next step in their development, from the completion of a photographic brief to thinking in terms of editing the work towards publication.

The use of the print on demand concept via Lulu.com photo publishing was intended to give the students experience of producing a professional publication via the online medium, and experience of the whole process from concept to publication. Print on demand is considered to be new media and an additional benefit is that there is no need to train students in traditional printing techniques.

'LSBU did not have a background of traditional photography and considers itself to have been 'born digital' and students are already web-aware' (Andrew Dewdney, Head of Arts, Media and English).

The Lulu.com templates took a lot of the design decision making away from students so the university directed them to develop their own since use of the provided templates would not allow free thinking by the students.

Adobe Creative Suite 3 is used for image editing and photo manipulation. This is the most popular image editing package and already in use at the university.

Lulu.com gives good quality printed material and with print on demand there is no wastage so it is ecologically friendly. Students become multi-skilled in all areas of production.

'In spite of the current interest for e-books, digital books and readers, smart books, the challenge for this unit is to combine the best of digital technologies and paper-based media' (Paula Roush, Senior Lecturer).

In Autumn 2006, students on the Brief-led Project (Level 3 module) were required to create and publish a book with the emphasis on being an editor, working with someone else's photography. For this project, 50% of the assessment was for the project output and 50% for critical reflection in WordPress blog.

In Autumn 2007, students on Photographic Cultures (Level 2 module) were required to create and publish a book of their own photographic work (25%), collaborate in creating a magazine based on photographic material sourced from a social network (25%), and post critical reflection to their Lulu.com blog (50%). E-tivities (in the style recommended by Gilly Salmon) were introduced as weekly tasks posted on the unit's blog at Lulu.com.

Feedback from Carpe Diem workshop at the University of Leicester suggested that too many e-tivities were being posted so these were reduced from 11 to 4 and the group project was dropped. Assessment is now 50% on book production, and 50% on e-tivities (25% for production analysis and 25% for critical reflection via e-tivities in the Lulu blog).

6.5 Benefits

The course achieved its aims of developing independent publishing control by the students and an understanding of the whole process of photo publishing.

'With the availability of self-publishing technologies and the widespread opportunities for online publication, creating a photobook still implies thinking beyond the screen and placing the photographic work within the wider context of digital publishing' (Paula Roush, Senior Lecturer).

The use of Facebook brought unexpected benefits: 'As students had indicated they were already using Facebook this was intended to get them to be more aware of the required course activities (e-tivities) and as a result students are now tending to post their work on time' (Paula Roush, Senior Lecturer).

Students indicated they were happy to check Facebook regularly (daily) for course related information, but not their Lulu blogs.

Staff were pleased to be able to reduce some of their own input when they discovered they could reduce the amount of e-tivities and achieve the same course outcomes.

Overall it is felt that the project has been good for the teaching staff: 'It makes teaching more exciting. It's more exciting for both the teacher and the students' (Andrew Dewdney, Head of Arts, Media and English).

Students enjoyed the publishing aspect of the course and the fact that there was an end product you could hold in your hand. They also enjoyed using the online media for looking at other people's work. 'I learned a lot more about concepts, for example the power of placing images next to each other' (Lee Slaymaker, student).

Students continue to consider creating photobooks for other coursework, and one student has used print on demand to create a catalogue for their end of year graduate shows.

'I enjoyed the whole process [of blogging]. Maybe the platform wasn't right for the time. Sometimes the feedback is honest' (Aaron Madiot, student).

6.6   Issues

Lulu blogging software has suffered from bugs and there have been RSS feed issues. Lulu.com has been slow about responding to complaints. 'It has been unreliable on occasions. It is getting better but there are still some problems' (Paula Roush, Senior Lecturer).

'The interface was very unfriendly when compared to other social network sites' (Karel Polt, student).

Students were concerned at the poor level of interaction with their colleagues in the blogs. They tended to comment on those blogs with better initial entries. They also found that they tended to comment on same blog throughout the course. Some students felt at times that there was no point in making entries since no one would read it. 'I only commented on people who I liked. It was so forced because we had to comment on people's work, I felt I was constantly struggling to write something about somebody's work' (Lee Slaymaker, student).

'Students have said that they have no problem with me seeing all their Facebook stuff and as a result I am flooded with information about their private lives. It has increased the level of friendship with the students. The relationship is more informal' (Paula Roush, Senior Lecturer).

In relation to Facebook, there is a need to keep personal work separate from academic work. Facebook can terminate accounts at any time at their own discretion. 'We have one student who, because they posted an image considered objectionable by Facebook, had their account terminated and lost all her material. Facebook will not enter into dialogue on the issue and they have the absolute final say. It was devastating for the student' (Paula Roush, Senior Lecturer).

6.7   Key lessons learned and the way forward

LSBU is hoping to develop further use of Facebook for course management, using a feature called 'Courses' to enable better group management, similar to the Blackboard VLE.

'We have considered creating a student module based on social networking self-publishing and censorship. Everyone is still very naive when it comes to the use of Facebook' (Paula Roush, Senior Lecturer).

The university is starting to use Second Life for a Digital Photography unit in 2008. It is done in a face to face environment. 'It is a completely different experience being able to see students through their avatars rather than through their Facebook profiles' (Paula Roush, Senior Lecturer). 'Need to encourage academics to have these "adventures". Almost need to give virtual secondments or study leave in Second Life. For mid-career academics they need an "internet gap year"'(Andrew Dewdney, Head of Arts, Media and English).

The university is considering a move to a different print on demand website Lightning Source (http://lightningsource.com) to replace Lulu.com although they do not provide users' own online stores. The university would consider creating its own photo publishing and multimedia environment and then using Lightning Source for printing.

Too many online e-tivities can be a burden for both students and tutors. Online socialisation as an activity may not always be necessary if other avenues already exist for this to occur naturally.

Universities should be aware that using commercial websites may imply that they are endorsing them.

6.8   Further resources

Course blog (started Autumn 2006) http://wepod.wordpress.com (Accessed 4 January 2009)

E-ctivities, http://www.atimod.com/e-tivities/intro.shtml Accessed 28 January 2009)

Photographic Cultures – Level 2 module (store front for course started Autumn 2007 and ongoing) details available at: http://stores.lulu.com/photocultures (Accessed 29 December 2008)

Photobook Project – Level 3 brief-led project (store front for course started Autumn 2007) details available at http://stores.lulu.com/briefledproject (Accessed 29 December 2008)

Example blogs [online] of Digital Photography students:

Karel Polt	http://people.lulu.com/blogs/view.php?user_id=1336063
Jessica Kril	http://people.lulu.com/blogs/view.php?user_id=1336066
Lee Slaymaker	http://people.lulu.com/blogs/view.php?user_id=1336090
Sindy Pussa	http://people.lulu.com/blogs/view.php?user_id=1336077
Aaron Madiot	http://people.lulu.com/blogs/view.php?user_id=1335759
Aviv Ron	http://people.lulu.com/blogs/view.php?blog_id=1150279
Patrick Tubridy	http://people.lulu.com/blogs/view.php?user_id=1335751

(All accessed 29 December 2008)

Online prospectus for Digital Photography BA (Hons) available at: http://prospectus.lsbu.ac.uk/courses/course.php?UCASCode=W640 (Accessed 29 December 2008)

7 Social Networking through Ning on a Distance-learning Programme

7.1 Fact box

Social networking through Ning on a distance-learning programme

The Centre for Studies in Advanced Learning Technology, within the Department of Educational Research at Lancaster University, runs a part-time structured doctoral programme, which is delivered by a combination of annual residential sessions and online learning activities. Since the programme began in January 2008, a social network has been used to provide an online community area in which the participants can interact. It is used alongside the Virtual Learning Environment (VLE), and provides a space which the participants control.

Tools	Ning, Moodle VLE
Institution	Lancaster University
Contact	Steve Wright, s.t.wright@lancaster.ac.uk
Initiative	PhD in e-Research and Technology Enhanced Learning (part-time over 4 years)
Delivery	Online with a compulsory annual 3-day residential school in years 1 and 2
Duration	From January 2008
Participants	13

7.2 Social software tools

A social networking website provides an online area where participants can interact with each other and form an online community based around a particular topic. Users register with a social network and create a profile, which contains information about themselves (such as their location, age, interests and a photo). Users can then form relationships with other people, and communicate using built-in tools like email and instant messaging. They can share media such as sound, videos and photographs, and comment on and rate these resources. Online collaboration can be facilitated by the use of integrated discussion forums and wikis. A wide variety of types of network exist: some exist primarily for social entertainment, some are networks of professional individuals, and others are based around a project or event.

Ning (www.ning.com) is one online social networking website which facilitates the creation of private networks and groups. It is free to join and to set up a network and the appearance of the website can be completely customised and branded. For a payment, advertisements can be removed. Ning provides the functionality for users to add media, create blogs, chat, add events and other features.

7.3 Background and rationale

The professional doctorate is designed specifically for people who wish to study to an advanced level and carry out a piece of research of the highest possible standard

in an aspect of their professional practice related to technology-enhanced learning. Students taking this programme are highly motivated, self-managing individuals who work in positions of influence.

There is a lot of interest in social networking in education, and indeed the area is studied as part of the technology-enhanced learning programme content. Lancaster University is committed to introducing innovative methods of teaching and supporting students, and the introduction of social networking in this programme was one feature that allowed the programme to demonstrate its dedication to innovation.

Use of innovative technologies does involve some sense of exploration, and staff were aware that introducing this new tool would help to develop their own understanding of the potential of the tool, and would help them to reflect on their own development as reflective practitioners.

A social networking area on Ning was created to complement the virtual learning environment.

7.4   The initiative

The idea of building a learning community is a fundamental part of the doctoral study programme. As one educator described: 'It is a fundamental guiding reason behind the design of it at every level. It goes from collaborative projects through to collaborative assessment. Social networking is another way of supporting and building a learning community.' Social networking was a supporting technology for the learning community that was being created through the virtual learning environment.

Institutional web-based systems tend to be orientated more towards face-to-face programmes studied by on-campus undergraduate students than to participants in a professional development programme. In particular, central university systems have a high level of structured control.

In contrast to the institutional VLE, control was devolved to the participants in the social network, although staff did observe the interactions. Participants were encouraged to experiment with the social network and customise it. 'It's about allowing people to literally make something of their own,' said one staff member.

While the institutional VLE is based on Lotus Domino, Moodle (http://moodle.org) is used for the delivery of the structured doctoral programme. One staff member explained: 'Considering the subject area, we needed something that had a lot of contemporary features such as the ability to bring in and send out RSS feeds, integrated content, easy integration of web content, built-in wikis and so on.' Cost was an influence in choosing Moodle, as was educators' familiarity with the tool. Adoption by the Open University brings a security that Moodle is 'university level' and will not go away imminently.

There is some integration between the social network and the VLE. There is a login on the Moodle course page, which allows participants to log on to the Ning network, and an RSS feed displays news about the current module on the social networking site.

The course team was keen not to be prescriptive about what the social networking space should or should not be used for, and instead allowed the space to evolve and develop according to students' needs and wishes.

Use of the social networking space was optional, though all programme participants have used it at least once: 'We try and keep a division; you are invited to the social network, you are not enrolled in it.' About half the student participants are regularly (almost daily) active in the network and all have customised and personalised their own profiles. They share information, resources and exchange messages, as well as taking part in discussions around their study materials. Some participants have created their compulsory programme blogs in the network, choosing the Ning blog over the Moodle VLE blog. Participants vary in their use of the network; some are not interested and others use it a lot. Interestingly, usage of the social networking website increases during gaps between programme modules.

7.5   Benefits

The social network helped participants to overcome the isolation of a distance learning course. Social networking worked as a platform for bringing people together to discuss aspects of their participation in the course, personal experiences and any topics which they felt would enhance their social cohesion.

Social networking was also an easy way to introduce the sharing of Web 2.0 resources such as video, images and sound. It offered a more modern look and feel than Moodle.

'I think the social network has helped enhance the programme because it does bring in something very contemporary. It is a fundamental part of what is going on with education. If it wasn't there, this programme would be different.'

Students have set up their own networks using Ning to support professional projects, which is an indication that they found the tool valuable.

7.6   Issues

One key issue was that access to the social network was initially not available to all international programme participants. Social networks are regarded with fear and suspicion by the governments and ISPs of some countries. This restricted the possibility of using the social space as a part of the taught element of the programme, as not all participants could access the full content of the website. The sharing of media was a particular problem as embedded media on social networks is often hosted on another website.

Lancaster University has a social networking and blogging tool, which is used for personal development and reflection by on campus undergraduate students. A similar tool is also available for doctoral research students for assessing personal development record needs and for recording tutorial meetings. These tools will be developed further in the future to meet the needs of online taught doctoral programmes. Currently however, the systems do not support Web 2.0 technologies, and so were not appropriate for the purposes of this particular programme.

The separate identity management within Ning makes institutional adoption problematic. Elgg http://www.elgg.org would be likely to be preferable by comparison, as an open source social network to be hosted and maintained internally.

Security and privacy were carefully considered – care was taken to ensure that privacy was genuinely private. This was not the case with some alternative network hosts, which the course team considered, where potential copyright issues were

identified. 'There are a lot of social networks out there. The two that seem to have really taken off with educators are Ning and Elgg. Of the two, Ning was very easy to set up, theme, customise, make it have the features we wanted, do what we want – cheaply. Critically its terms of use and service were acceptable.'

Facebook was considered as a possible network host: 'You could create a group, you don't create a network – the network is so much bigger. We wanted to kind of create something for this programme that was ring fenced and was not set up as part of something a lot bigger.'

Ning were contacted about the accessibility of their system and checks were made that the software was reasonable accessible. The small number of students on the programme meant that the course team would know well in advance if they needed to make any adaptations.

No training was needed for Ning by either staff or students. 'That's one of its enormous strengths – it is very intuitive. There are good help guides online.'

7.7   Key lessons learned and the way forward

'Has it helped build community? I think it has helped to facilitate a different kind of interaction.'

If you are running distance learning programmes, it is wise to experiment with the technology before you make it core.

The lack of international access to the social networking website has limited what could be done with the tool.

Consider the long term – once the social network becomes a mix of years, it will become more interesting, and cross-year interest groups may be created.

7.8   Further resources

PhD/Doctoral Programme in e-Research and Technology Enhanced Learning, http://csalt.lancs.ac.uk/csalt/tel_docprog.htm (Accessed 24 December 2008)

8 Using a Wiki for Developing a Portfolio and for Communication

8.1 Fact box

Using a wiki for developing a portfolio and for communication

Using a wiki for developing a portfolio involved students (mostly girls aged 14 to 16 years) who, while studying towards their GCSEs at a local school, spend a day a week at Northumberland College for two years to learn about Hair Salon Services on a Level 1 Certificate course.

Tool	Wiki (PBwiki) and the college's virtual learning environment (VLE)
Institution	Northumberland College; Northumberland College is a further education college, which also works in collaboration with Sunderland University and other universities to deliver higher education courses
Contact:	Theresa Thornton, theresa.thornton@northland.ac.uk
	Course Team Leader in Education and e-learning Champion
Initiative	Level 1 Certificate in Salon Services
Delivery	Blended (face-to-face and also online through the college's VLE)
Duration	From 2007
Participants	15 students on a part-time course

8.2 Social software tools

A wiki is a page or collection of web pages designed to enable anyone who access it to contribute or modify content. Wikis are often used to create collaborative websites (Wikipedia is one of the best-known wikis.)

Wikis are used in business to set up intranets and knowledge management systems. The wiki software enables you to set up a wiki and allows users to freely create and edit web content using any browser. Wiki supports hyperlinks and has simple text syntax for creating new pages and crosslinks between internal pages.

There are a number of wiki software packages, for example:

Media wiki (www.mediawiki.org/wiki/MediaWiki); this wiki software is free and was originally written for Wikipedia but is now being used by various projects all over the world.

PBwiki (Peanut Butter wiki at http://pbwiki.com); this wiki software is being used in business and academia and it has been used in this initiative.

8.3 Background and rationale

Theresa Thornton has recently joined the Education Department of the college a Course Team Leader in Education. She is also one of the college's e-Learning champions; she was previously an instructor on the Level 1 Certificate in Salon Services. The students (14 to 16 years old) spend a day per week at the college for two years on this course. The day at the college involves two hours in the classroom – 90 minutes on hairdressing theory and 30 minutes on independent study in which

they create parts of an assignment in the wiki. The students have practical sessions for the rest of the day in an on-campus hair salon on the campus. Over the two years of this course, the students are expected to complete seven assignments and to develop a portfolio of these assignments. The assignments involve developing PowerPoint presentations, including web links, and developing some content around the web links. The end-of-course assessment involves an online examination

Although these students are from the same local school, they are generally in different classes and, therefore, all their interactions (related to the Level 1 course) occur the one day a week when they are in the college. Their youth and the fact that they come to the college only once a week meant that their output (portfolios) was not as good as it could be. Sometimes they lost their work, or forgot it, or left it on school or home computers, or brought it as hard copies so that they could not update it or improve it when given the tutor's inputs

They could store documents on the college's server-spaces but these server-spaces are deleted at the end of the academic year for security reasons

There was thus an incentive to provide the students with a tool, which would give them the flexibility to work at a distance and to be able to access the materials from wherever they were (home, school or at the college). Further, the tutor could not keep a regular track of students' progress when they were in school or at home. Ms Thornton came across the use of wikis in the college's newsletter and discussed the idea of using the wiki on her course(s) with the e-Learning Manager of her college who encouraged her to use the tool.

8.4   The initiative

PBwiki was adopted in 2007 to enable students to develop their portfolios on hairdressing on the wiki. For students, specifically this age (14 to 16 years old) and who only come to the college once a week, it was imperative that the software was easy to use. PBwiki was chosen for its ease of use, ease of registration; and its ability to upload documents and images. All the students had their individual user names but the same password. At this age, the students can usually forget – so they were encouraged to store the password for the wiki on their mobile phones.

The weekly backup from the wiki is on the college's servers so that the students do not lose their work. Whenever the wiki is edited, the tutor, all the students and some nominated teachers receive an email alert. Ms Thornton's PowerPoint presentations for the theory class and other course materials are on the college's VLE (earlier Learnwise and now replaced by Blackboard).

There was one introductory session to explain the role of the wiki to the students and how they would use it. Each student was given a home page and one page on the wiki and they were given the flexibility to add their own pages if they wanted to. Students are able to see each other's work (pages) on the wiki and, in fact, they are encouraged to do so. Ms Thornton added her brief profile to the wiki: 'then they [the students] can see the human side of you'. The students were also asked to add their profiles on their individual web pages but were advised against adding too many personal details. A student's profile typically included the first name, hair colour, height, and colour of the eyes.

Students were encouraged to comment on each other's work and many students encouraged one another through comments such as: 'Well done'; 'It's a mint page'.

The students were asked whether they used other communication media such as texting by mobile phone for discussing their assignments. The students strongly expressed that the mobile phone was for social purposes and they used the wiki to leave comments for one another.

Students also post their queries for the tutor on the wiki. When asked why they did not use email for contacting their tutor, they replied that it was good to have it all in one place and as it was the tutor would receive an email alert when they posted something on the wiki. Ms Thornton said: 'They won't like emails from me at this age; so I post my comments on the wiki; … they like speed at this age and it is easier for them to leave comments rather than using discussion forums or email.'

8.5   Benefits

There was very positive feedback about the flexibility of using the wiki anywhere and at any time. Comments included: 'It is very easy to use [the wiki]'; 'I have it all in one place now'; 'I can show it to my Mum when I am at home instead of having a lot of paper to show… and she can see what I am up to'.

One of the students who was known for forgetting to complete her assignments said: 'I can't make excuses any more; I can't say I have left it at home; … my teacher can see the history in the wiki and find out what I have been doing.'

Ms Thornton commented: 'The standard of their work has really gone through the roof as they are using a technology that they really enjoy – there is increased retention and improved success rates.' There was a PC in the salon and she utilised the time during the practical to give one-to-one support to the students by opening up their wiki page(s).

Some students have used it for peer support when working in pairs – one student has helped another by showing her her [the first student's] own work on the wiki and explaining it to her. This peer support has actually extended to them supporting one another in the salon during practical lessons where the same pairs are now helping each other in the salon too.

One of the students said that she felt safe using the wiki. She said: 'I know I can't lose my work now … it is all there; nobody can remove my work … we receive an email when somebody modifies the wiki – so the whole group gets to know if somebody edits on the wiki.'

The students have personalised their web pages. Some students have gone beyond the requirements of their assignments by collecting web links to hairstyles and related articles and creating additional pages on the wiki to collect resources related to the course. They sometimes use their mobile (camera) phones to take pictures of the hairstyles and other activities in the practical lessons and then upload these pictures on the wiki.

It was noticed that, although these students were very young, they behaved very responsibly: it was clear that they respected each other's work; they did not copy from one another but only looked at somebody else's work to see the other person's progress and get some ideas, and to see how other people's queries had been answered. The tutor noted that looking at each other's work sometimes puts them under pressure to complete their own work.

The students no longer have to (physically) carry their portfolio with them any more –

their work is all in one place. They can also use this portfolio to demonstrate their work when they approach the hair salons for placement at the end of this course.

The tutor feels that she is able to track the progress of the students and is able to respond to their queries sooner than before. She said: 'Now it looks like as if they have had support all week – it brings them close to us – it removes the barriers between us [teachers] and the students.'

Although the wiki was perceived as a portfolio or repository of students' assignments, the unexpected benefits which have emerged were: students creating their own pages and collecting course-related resources from the Web; commenting on each other's work and helping one another; the response rate of the teacher and students in handling queries has become higher than before; and they are enjoying the wiki as a 'partnership' between them and the tutor, and having an ownership of its content and maintenance.

8.6 Issues

The students felt that the wiki was complicated to start with but they slowly found their way around while using it every week. There were times at the end of the class when they were all ready to upload the files at the same time. This resulted in the 'hanging up' of the wiki software and, therefore, they had to stagger the uploading of the documents on to the wiki. Initially, they sometimes had problems uploading documents on the wiki from home or school, but in the last few months, these problems have become rare. Uploading pictures and placing them on the page to have a desired layout can be onerous at times but the students had not been put off by these difficulties.

The students are in the second year now and with a different instructor. They continue to use the wiki but time will tell whether they will use with the same enthusiasm and regularity. There was one occasion when the college firewall blocked PBwiki but it was resolved very quickly.

8.7 Key lessons learned and the way forward

Ms Thornton felt that for the uptake and success of this initiative, it would be important to give a 'sense of ownership' to the students – that it was 'their wiki'. After some preliminary advice early on about the educational purpose of the tool and that it was not for discussing social activities and boyfriends, she gave the girls the task of developing the code of conduct. The girls developed the code of conduct on the wiki themselves and this made them conscious that they had to respect one another, value each other's contributions, and that it was an educational tool and not a social tool.

When asked if they would use wiki in future, the students were positive that they would set up a wiki and use it as a place to keep all their resources when they move to another institution. Ms Thornton feels that the skills learned in using the wiki such as managing resources, working collaboratively online, communicating online, searching for resources and categorising them, setting up web pages and designing them, will stand them in good stead for other courses and contexts in the future.

Wikis have been used on other courses and initiatives at Northumberland College, eg in the 12-week Foundation Degree in Hairdressing and Salon Management for mature learners.

Wiki has become the main platform for collaboration and communication for the various initiatives that Ms Thornton is leading or championing at Northumberland College in collaboration with Derby University, Sunderland University and other local and national bodies.

8.8   Further resources

Wikis in plain English, a YouTube video on: http://tinyurl.com/5vpwga (Accessed 8 December 2008).

9   A Blogging Support System for Trainee Teachers

9.1   Fact box

A Blogging Support system for trainee teachers

Trainee teachers undertaking teaching practice in schools could feel very isolated from their peer group leading to withdrawals. Blogging was initially introduced to reduce isolation and improve retention, primarily by getting the trainee teachers to support one another in a social context. It has subsequently been used to encourage socialisation before the course starts and to support the development of reflective reporting.

Tool	A closed blog on the LiveJournal website to which all the students had access via individual logins
Institution	Nottingham Trent University, School of Education
Contact	Helen Bolton, helen.boulton@ntu.ac.uk
Initiative	Postgraduate Certificate in Education students
Delivery	Networked support
Duration	From October 2006 to date
Participants	80 Postgraduate Certificate in Education students (60 ICT teachers, 20 English teachers) aged from 21 to 55

9.2   Social software tools

The only tool in use for this initiative is a closed (login needed to gain access) **blog** on the LiveJournal website (http://www.livejournal.com). A blog on the LiveJournal site is owned by its creator and allows the creator, and other people who have been explicitly permitted by the creator to do so, to post entries (also referred to as a blog; the act of posting is called blogging). On the LiveJournal site the creator of the blog is informed by email whenever a new entry is made to the blog.

The blog was chosen because it could be accessed easily, was easy to use and provided facilities for linking a photograph of the person posting the blog entry with each of their blog entries plus the ability to post multimedia files (eg photographs, pictures, audio) as well as text.

One key decision which had to be made was whether the blog should be 'open' (readable by everyone who can access the web) or 'closed' (only accessible by people who have been given explicit permission). Once closed was chosen, it was necessary to decide who had permission to add members and how this should be done (for this initiative the member of staff running the initiative got the students to register on the LiveJournal site and then send her the login id which she linked to the blog, giving them permission to access it for reading and writing).

9.3   Background and rationale

Students come to Nottingham Trent University to study for the Postgraduate Certificate in Education from a wide area. They mostly do not know anyone else on

the programme when they arrive and are only on site together for a short while before they go on their first teaching practice. Frequently, the students do not know anyone at the school and they are located a significant distance from anyone else, so regular social contact is impractical. This can lead to feelings of isolation which get worse when the students encounter problems. In the past, this has led to students deciding that they were not cut out to be teachers and withdrawing from the course. Typically, the first thing that their subject leader would hear about this was a message from the school reporting that the trainee teacher had left.

An online environment was needed which would allow the students to share experiences and would provide a supportive virtual community which would reduce the sense of isolation. A blog was chosen because it allowed the students to take control, posting when they wanted to, but still allowed the coordinator to watch what was happening (and offer assistance if required) while not having to lead.

9.4   The initiative

There were no learning objectives initially associated with the initiative. This was because what was wanted was the creation of a virtual support community to reduce the feeling of isolation among the students and thus reduce the number of students dropping out.

The Learning and Teaching Coordinator had already had significant involvement with e-learning and was familiar with a range of social software tools. The requirements for a blog were well understood (accessible by named individuals; photographs of the individuals associated with individual postings to increase the feeling of social contact; ability to post multimedia content as well as text; easily accessible via the internet; free; and accessible only by members of the group) so the selection of a suitable tool was very quick (three people, in cooperation, identified different blog sites to review). LiveJournal was chosen because it met the requirements and has been used to support the initiative since 2006.

There was no requirement to use other software tools and none of the students highlighted the use of any specific software tools in their feedback.

All students on placement have used the blog to post messages about their experiences and to offer support and encouragement to their fellows. Most students used the blog as a virtual diary. All of the students appeared to read the blog on a regular basis and there were messages of support and encouragement whenever anyone reported problems. The use of the blog was not assessed in any way.

In the second and third years of the initiative the blog was used to encourage the students to introduce themselves (virtually) to the other members of their cohort before the programme actually started (ie before any of the students came on campus in September). The students were encouraged to post photographs of themselves and some text. Several of them reported that this made forming friendships much easier when the course started. Another use for the blog was to encourage and support students when they needed to write reflectively about their experiences, a requirement for the award of a postgraduate qualification. (The students were required to produce a separate report for assessment but the blog allowed them to experiment with reflective writing and get feedback.) In the third year (from October 2008) some of the students from the previous year, by then working as newly qualified teachers (NQTs), agreed to act as mentors for the current cohort and were quickly, and easily, able to do this via the blog. In addition, one NQT has

made his reflective writing available for the current cohort to see so that they can share his experiences of his NQT year.

9.5 Benefits

The initiative has been an unqualified success. Some comments are given below.

'I hadn't used it [blogs] before but it was dead easy to use. The younger people – I'm nearly 40 – use the social networking sites all the time they won't find it difficult to use' (student).

'I have not had one drop out since I started [using the blog with the students]' (strand leader).

'LiveJournal is really good … you can set it up to send you an email when anyone blogs – so you can see immediately what they are doing wrong or if there are problems – what they are worrying about. I had one email [telling me that] a student had blogged on Monday morning'. She thought she had failed her assignment, which she hadn't, she didn't like the school and she thought she wasn't coping so she was going to walk [leave], there and then. … I had three other students email me about the posting in case I hadn't seen it. … I was able to phone her right away to talk about the issues ... and arrange additional support from her subject tutor … she didn't leave … she passed the course. … She rang me in June when the course finished to say could she stay another three weeks because she was enjoying it so much' (tutor).

'Last year I sent the students a letter before they started telling them how to join the blog … I put the first blog up … then they started to blog – that completely changed and enriched the induction … my ICT students when they came in were able to link with other ICT students because they had seen the photos and read about them … they headed to people that they liked the sound of … they reported back at the end of that year that they had made friends from that pre-course introduction use of the blog that lasted throughout the course and those were the friends that they saw as continuing to support them through the NQT year and onwards' (tutor).

The students do feel a sense of community and a sense of responsibility for one another and 'two of them [last year's students] are already up there on the blog, they've introduced themselves and are offering help [mentoring]' (tutor).

Some of the students did use the blog to practise their reflective writing and get feedback on it before having to produce a reflective report for assessment. One of these students has made his reflective blog available for the following cohort and is planning the use of a blog with his own pupils.

Reading the blog can be done quickly by the staff member involved by linking through from the emails that are sent to them whenever a new entry is made. The big advantage is that problems are detected early so can usually be resolved much quicker.

Some of the students did use the blog to practise their reflective writing and get feedback on it before having to produce a reflective report for assessment. One of these students has made his reflective blog available for the following cohort and is planning the use of a blog with his own pupils.

9.6 Issues

The following comments highlight some issues.

'There are advertisements on it [the LiveJournal site] and, initially you just feel "ugh" but once you get started you don't see them [you screen them out]' (student).

'When we piloted the VLE [the university's Virtual Learning Environment] it did not have adverts but when we finished the students all said, "Use LiveJournal; it's much better"' (tutor).

'The students put their photos in their home area and each time they blog their image comes up which makes the blog more "social". I had one or two [who were] resistant to that and used images instead of a photo but the feedback from the group was that it wasn't as effective' (tutor).

'I always say to the students that they shouldn't use pupils' names or mentors' names but they do so it [the blog] did need to be private … and they will name the schools so it did need to be protected. Also, if they are going to take it into their schools and set up blogs for their pupils it [privacy and security] is important' (tutor).

There has been some pressure from the university to switch from using LiveJournal to using the blog which is available on the newly installed virtual learning environment (VLE). However, it would not be possible for students to use the VLE prior to induction or after they complete the course so the advantages of pre-course introductions and post-course mentoring would be lost.

No problems, technological issues or skill deficiencies were reported, although some students initially lacked confidence or interest:

'I was never really into that [using social software], it wasn't something I thought of doing ... because I thought it wasn't for me ... but then, over time, as I did it and got to understand why I did it, it became quite addictive and I wanted to carry it on into the future and pass on the idea to the people I would be teaching so that they would use blogs and reflective diaries' (student).

'I was very reluctant to use it [the blog] but I had to and, after a while, I started to like it because I could talk to the others even though I was on placement and couldn't meet them' (student).

'I didn't put my photo up on LiveJournal but I regretted not doing it because it's a lot better if you do have the photo up, it makes you feel as if you are talking to that person. I did put my photo up on the VLE' (student).

9.7 Key lessons learned and the way forward

Creating a virtual support community proved to be a really quick and easy way of engaging students. Students were able to give peer support using a social networking site that they love. Having a photograph of the person alongside each entry on the blog makes it feel more like a personal conversation.

The tutor comments below give a flavour of how the initiative went.

'They [other people] are going down exactly the same route for work-based learning … because it works.'

'I wish I had introduced the pre-course blog earlier because that has been so successful.'

'I would have shared [my experiences] more widely earlier too but I didn't realise how well it was going until the review at the end [of the year] ... but I have done a lot of sharing since and lots of staff are now using it.'

'It's early days yet but I'm sure it [the mentoring of this year's students by last year's via the blog] will work really well.'

'[There were] no differences [in the usage of the blog] between the genders or for different ages – my youngest student was 21 … my oldest ... was 55 but the usage did seem to match with their learning styles.'

'We are currently working with last years students and seeing if and how they are using in their NQT year and what are the barriers, if there are any, for using it [blogs] in their teaching and for self-reflection.'

Generally, it seems advantageous to start the blog as early as possible and to share experiences of what works well.

9.8 Further resources

No additional material is published on the web but a conference paper describing the research and a video made by some students are available from the research team via the primary contact person of this case study.

10 OpenStudio: An Online Community for Digital Photography Students

10.1 Fact box

OpenStudio: An online community for digital photography students

The Open University's T189 Digital Photography: creating and sharing better images course teaches students how to create and share digital photographs. A core element of the course is the OpenStudio website that allows students to manage their photos and to comment on each other's work. In addition to underpinning teaching objectives, OpenStudio has succeeded in increasing student participation to significantly higher levels than for traditional online forums.

Tool	OpenStudio community website developed for in-house use on the course.
	First Class conference forums supporting a threaded discussion format.
	Course website with learning materials and some additional social elements.
Institution	The Open University, Milton Keynes
Contact:	Stephen Peake, s.r.peake@open.ac.uk
Initiative	Digital photography at Level 1, a short, part-time course
Delivery	Online. No face-to-face contact. No tutor-groups
Duration	First presented in May 2007. Two presentations per year. Each course lasts 100 hours over 10 weeks
Participants	1200–1400 students per presentation; open to all ages. Most likely age profile 30–40

10.2 Social software tools

OpenStudio is a website developed from scratch by the Open University to support students on the T189 Digital Photography course. Like the popular Flickr website, OpenStudio allows students to upload and share their photographs and to comment on each other's photos. However, unlike Flickr, which is open to anyone, access to OpenStudio is restricted to T189 students and course team members.

Each student has a personal space in OpenStudio where they can complete a personal profile, upload and manage their own photos, navigate to the personal pages of other students, create links to their 'favourite' fellow-student photographers, and see a list of students who have favourited them.

The site is also organised into 10 weekly slots – one for each week of the course. Each week students are set an optional photographic assignment requiring them to upload some number of photos to OpenStudio to show how they are progressing. Students can also upload other photos unconnected to the weekly assignment if they

so wish. Students who are ahead or behind with the course can also navigate to the appropriate week and upload their photos accordingly.

Other capabilities provided by OpenStudio include tagging photos with keywords and searching for photos by keyword and book-marking photos and pages.

10.3 Background and rationale

The objective of T189 is to teach students how to create and share digital photographs. 'The thrust of the course is that the way to develop as a photographer is by engaging with other people who are photographers, both by commenting on other people's – you develop your own skill level – and, by receiving comments, you discover what other people think.*''*

Students should develop their own 'seeing eye', partly by being exposed to lots of photos and partly by becoming more self-aware of what a good photograph is – by commenting, and so making explicit what a good photo is in their view. By having their photos critiqued by their peers and by critiquing the photos of their peers the student's photographic skills and photographic appreciation skills should improve as the course progresses.

So key requirements, when it came to designing the course, were to provide support for students to share and to comment on each other's work. Although The Open University has an agenda to use social software more, the use of social software in T189 stemmed from it being an obvious step as far as the course team was concerned. Social software was simply felt from the outset to be the best way of supporting sharing and commenting for the course's distributed student community.

The course as a whole, and OpenStudio in particular, has been designed to engage students, to encourage comments and to build a community in furtherance of its teaching objective.

10.4 The initiative

The course team's original plan was to use Flickr as the social platform, but this idea was abandoned for several reasons including complexity of Flickr's user interface (UI) and doubts about whether access to student photos could be restricted to just students and the course team – it was felt to be risky to expose students to people outside this group.

The next idea was to use Flickr as the underlying platform but overlay a custom-built, simpler UI onto Flickr. However, there proved to be technical issues with this approach and in any case 'the university was a little bit nervous about using … [Flickr] because it would be dependent upon their servers and so on'.

Given this, the team decided to develop a bespoke solution in the form of OpenStudio. The whole course was created in about a year and a 'fair bit of effort' was spent discussing the social software aspects of it. Over a 6-month period there were many iterations in the design for the OpenStudio UI although programming effort for OpenStudio was comparatively small.

Students are asked each week of the course to use OpenStudio to share a selection of their own photographs and to comment on a selection of photographs submitted by their fellow students along a common theme.

To make this manageable, students are randomly assigned to small groups within the larger community, with this 'you kind of felt as if you weren't such a small fish in such a large pond'. Grouping students also increases the chances of personal interaction and so leads to more community. 'If I comment on your photos there's a good chance you'll comment on mine so you get some interaction there.' Groups are changed each week and this exposes students to a wider range of others than if the groups stayed fixed. The course team has reduced the size of student groups from 20 to eight over successive presentations in the light of experience and student feedback.

The course also includes a more 'traditional' website with course materials and also a set of forums. The website also has some facilities to increase student engagement, for example a voting component where students are polled on questions such as 'What is the device you most use for viewing photos?' Forums are aimed at longer discussions, eg exploring technical questions.

In addition to OU-provided resources some students have also set up Flickr groups both during and after the course has run. In this respect, 'it has been a course which has engendered a sense of community which has lasted outside the course, which is unusual in the OU'.

At the end of the course students are assessed based on a portfolio of photos and a short essay critiquing these photos. Use of OpenStudio is not mandatory and is not assessed. However, the use of OpenStudio helps students develop their skills and feedback from other students helps them choose and refine the photos they will submit for assessment.

Since it was first developed OpenStudio has had a number of releases. Initial work concentrated on fixing performance problems that had led to some negative student feedback. Later releases have concentrated on improvements to further encourage student engagement.

10.5 Benefits

From the perspective of the course team and many students the course has been hugely successful. 'Photography is often thought of … as an apprenticeship subject that you learn at the feet of the master and to say that you can teach it online, at a distance at scale without personal tutors was really a big claim but I think we've done it and I think it's done pretty well,' says one course team member.

This is borne out by the very high level of engagement among students. In forums on other OU courses around 10% of people are active contributors but almost everyone contributed to OpenStudio. 'There was always a slight concern in what would get the commenting going. But once images go up people do want to engage with it and actually it's a lot easier in some ways than a forum … because when you're talking about something you can build up a relationship with people.' If the subject matter is right and there are strong reasons, support and encouragement then group collaboration can be very successful.

End of course surveys have shown that the vast majority of students have appreciated the peer-reviewing process and getting comments could be very satisfying. 'When someone said to me "nice depth of field" I had a warm glow for the whole day,' said one. Another noted: 'My confidence grew over the weeks especially as I started to build relationships with the people in my little group over the time, and

once you've exchanged a few emails about their images then that relationship kind of lasts.' Even one student who had not spent much time with OpenStudio noted: 'OpenStudio helped my learning immensely. Helped me to become more critical of my own photographs, to think about different things to look for within them.'

In some ways more has been achieved than was expected. Where students have really engaged with the course and committed to using OpenStudio they've got an awful lot out of it and have really enjoyed the whole experience while helping to develop their understanding of photography.

OpenStudio provides a safe environment in which students can gain the expertise and confidence to go into the wider world. Here, one indicator of success is perhaps the level of participation in course-related Flickr groups long after the course has finished.

10.6 Issues

Despite the positive views above reliance on peer commenting was a frustration for some people. A lack of expert input – 'wasn't quite the blind leading the blind' – but students were dependent on finding people who were willing and able to help them and this could be a bit 'hit and miss'. The course team has attempted to address this problem partly through providing more directive activities, more encouragement and more incentives for students to engage with the community and partly by providing additional feedback to students in the end-of-course assessment.

There was also the occasional negative comment on a photo. 'There was one person where I thought the comments weren't constructive … I said this but he didn't get back to me.' Another problem was that some people were also 'commenting on large numbers of photos but didn't follow-up comments and so didn't engage in a dialogue'. 'Also, even if you commented on a photo, eg to ask how a photo effect was achieved, you wouldn't necessarily get an answer, which could be frustrating.' Teaching students how to effectively and positively critique others work is part of the course objective and students have always had guidance on how to do this. But in the light of experience the course team has developed this aspect further and brought it into the course earlier.

If you did not have time or were feeling less confident or were less able, then you were less likely to become part of the community. As one student observed: 'You got out of it [OpenStudio] what you put in.' Other people felt left out of the community. 'I think the community aspect works for people who are extrovert enough to know how to engage with that and make it their own, but the other people, the quieter people, get left behind.'

10.7 Key lessons learned and the way forward

This was the first time an OU course team had made a tool like this a central part of a course. The biggest question they faced was whether to use external tools or develop something in-house. Key issues for others considering this type of approach are whether they can address the concerns and overcome any technical challenges of using public social software, and whether they have the in-house resources and skills to develop and support their own solution if they cannot.

The team also notes that it is important to keep up a dialogue with students about the way they are using things and to develop guidelines and support materials

conveying best practice. '[Thinking] about using this kind of a tool as a way of sparking some enthusiasm and helping your students to develop their own communities' is a guiding principle here. The course team also advises: 'Some people needed guidance about how to get the most out of using a tool like … [OpenStudio] particularly if they haven't studied for a long time or if their experience has been a particularly directed one in the past. Sometimes finding yourself in this virtual open space and not knowing what to do can be a bit tricky.'

It has also been recognised that OpenStudio has potential for use in other areas. Modified and improved variants of the website are now being developed for other projects. For example, it will be used in one project as a public-facing Biodiversity Observatory – a place where people can upload images and observations of nature and share and discuss them.

10.8 Further resources

The T189 course description is available at http://tinyurl.com/2p28q9 (Accessed 27 December 2008)

Flickr photo sharing website http://www.flickr.com/ (Accessed 27 December 2008)

11 Collaborative Learning in a Wiki on a Software Engineering Course

11.1 Fact box

Collaborative learning in a wiki on a software engineering course

In a postgraduate software engineering course, wiki activities have been introduced on the course to provide the students with the opportunity to small group collaboration in a distance-learning environment and to emulate software engineering practice. Software development activities are increasingly being conducted collaboratively by using social software tools across multiple time zones.

Tools	Wiki in Open University's the Virtual Learning Environment (Moodle)
Institution	The Open University
Contact	Pete Thomas, p.g.thomas@open.ac.uk
	Arosha Bandara, a.k.bandara@open.ac.uk
	Shailey Minocha, s.minocha@open.ac.uk
Initiative	M883 Software requirements for business systems, a postgraduate part-time course in software engineering
Delivery	Distance learning supported by tutors, with each tutor having a group of 15 to 18 students; printed materials and Virtual Learning Environment
Duration	Since November 2006
Participants	About 500 students since the wiki was introduced in November 2006

11.2 Social software tools

Moodle (www.moodle.org) is an open source package for building course management systems (also referred to as Virtual Learning Environments – VLEs).The name is an abbreviation for modular object-oriented dynamic learning environment. Moodle has facilities for discussion forums, blogs, quizzes and wikis. Moodle can run as a single educator system or, on a server, it could be used for a community as large as 200,000 students. Moodle has been built with the contributions of an online community. The statistics of Moodle's usage are available at http://moodle.org/stats.

A wiki is a page or collection of web pages designed to enable anyone who can access it to contribute or modify content. Wikis are often used to create collaborative websites. (Wikipedia is one of the best known wikis.) There are a number of wiki software packages, eg Media wiki (www.mediawiki.org/wiki/MediaWiki) and PBwiki (Peanut Butter wiki at http://pbwiki.com). The initiative in this case study uses Moodle's wiki.

11.3 Background and rationale

Software engineering (SE) projects are conducted in teams. Working in a team requires negotiating, making compromises, accepting others' perspectives, and working towards a common goal of developing a software system that will meet the customers' requirements. The skills of communication and ability to work in a team are specifically important during requirements engineering (RE) where communication problems with stakeholders are a major source of requirements problems (eg missing, incomplete and misinterpreted requirements). Further, software development projects are increasingly being conducted collaboratively across multiple time zones and in multiple teams. In response to this trend of global SE practice, tools such as wikis, blogs, and groupware are being integrated in software development teams for team working. Therefore, it is important to impart skills of team working and communication to SE students, and to give them transferable skills of working with collaborative and communication tools.

The Open University (OU) post-graduate course, M883 Software requirements for business systems, involves teaching systematic elicitation, recording, analysis and communication of requirements of software systems. In software enterprises, software or requirements engineers are increasingly using wikis for collaboratively developing requirements specifications. In November 2006, wiki activities were introduced in the course to provide students with the opportunity to engage in small-group collaboration in order to emulate RE practice, thereby providing students with transferable skills for working with social software tools in the software industry. The course team hoped that the wiki activities would help to facilitate learning and the acquisition of various skills including: learning through discussion, disagreement, and consensus building; team working; and effective communication of ideas to others through networked environments.

11.4 The initiative

An example of an SE project is designing and developing a website for a dental practice. A group of requirements engineers collect requirements for the website from different stakeholders such as the dentists, practice manager, receptionist, and the nurses. The requirements engineers refine and negotiate these requirements among themselves and with the stakeholders to produce a requirements specification for the system (the system in this example is the website for dental practice).

The course team introduced collaborative activities in a wiki environment to emulate the experience of RE practice, by enabling a group of students to take the roles of requirements engineers in an SE project. The wiki activities involve a group of students contributing requirements to the group wiki for a particular SE project, discussing the requirements, identifying conflicts and ambiguities within the requirements, and resolving the conflicts through discussions from the perspectives of different stakeholders, to produce an unambiguous requirements specification. In the OU's distance-education model, each tutor supports a group of 15 to 18 students. To create the small-group dynamics found in RE practice, the course team split each tutor group into three subgroups, of around six students each, for the wiki activities.

The assessment on the course involves three tutor-marked assignments (TMAs) and an examination at the end of the five-month course. The TMAs are provided in an

assignment booklet which has details of the case study or the SE project for the collaborative wiki activities. In the first TMA, the students are asked to read a paper by J. Farrell (see in Further resources for details) to give them information about the usage of social software tools in SE practice. Students are provided with a technical user manual for the Moodle wiki. They are also provided with a document which outlines etiquette for group working, rules of collaboration on the course, wiki etiquette, the role of each student in a student group, and so on.

Students introduce themselves to one another in the group wiki as a part of the first TMA and arrange a schedule for the second TMA. The course team has included these introduction and scheduling activities in the first TMA as icebreakers, or for socialisation. The students also choose a stakeholder role from the list of stakeholders for the case study (the list is provided to the students in the wiki). Research in e-learning, and specifically collaborative learning, has shown that socialisation is an antecedent to group working. Therefore, the course team set up socialisation activities aimed at helping the students to become familiar with the wiki environment and with their group members. Since the course is conducted at a distance and the students do not meet face to face, these introductions in the wiki help the students to get to know one another. The collaborative wiki activities are conducted in the second and third TMAs and these are assessed. The wiki activities involve collaborative development of the requirements specification for the case study or SE project. Students contribute their individual requirements to the wiki from the perspective of the stakeholder that they choose in the first TMA, and then discuss the requirements within their group to arrive at an agreed set of consolidated requirements for the case study or SE project.

The marking is based on both the student's own contribution to the wiki activity as well as on the product of the activity. A significant advantage of the wiki is that it records each and every change to the document (through the History feature of the wiki), which means that there is evidence of each student's contribution. In the TMAs, students are asked to report on their individual contribution to the collaborative activity, quoting evidence from the wiki, which, of course, can be verified by the tutor. There is a sliding scale of marks given to an individual for the process and the product based on the level of their contribution supported by evidence from the wiki and the student's own account.

11.5 Benefits

In order to assess the effectiveness of the wiki activities in collaborative authoring of requirements and to elicit students' perceptions of their learning, the course team asked students to reflect (as a part of TMA questions) on their experiences before and after performing the collaborative activities in the wiki environment. Also, when the wiki was first introduced on the course, the course team collated and analysed discussions by students on the forum, direct emails from students discussing their wiki experiences, and emails from tutors discussing their perceptions of the wiki activities and their experiences with students in their tutor groups.

Students expressed a better understanding of the RE (course) concepts. Some typical comments are: 'By working [through] the activity it did improve my understanding of gathering and refining requirements'; 'A more comprehensive list of requirements was achieved in the group; I realised that I had not thought of a couple of requirements myself.' Students have mentioned about benefiting from the comments received from fellow students during the collaboration: 'It wasn't until I

received feedback that I realised that some of what I had written was open to misinterpretation.' Students mentioned how the peer-feedback helped them to clarify their understanding and to reflect on their individual contributions and learning. Some of the students appreciated the role of multiple viewpoints in the group activity, which had helped to clarify their understanding. Students also expressed how the wiki had enabled to bring together students from different parts of the country to work on the course activities, which otherwise they would do in isolation in a distance-education setting. One typical comment expressed these sentiments: 'The wiki is a good medium for collaborative work on an OU course as it provides a central point of access since the location of its members is spread far and wide across the country and even the world. The tool is accessible 24/7.'

11.6 Issues

Students had mixed perceptions about the collaborative activities: they were positive about the rationale for wiki activities and agreed that it is a way to bring together students involved in a distance-learning course, they found the collaborations onerous and not in line with the OU's philosophy of flexible and open learning, and learning in one's own time. The wiki activities require everybody to contribute well before the deadline to give sufficient time for discussion and negotiation of the requirements. Waiting for others to contribute has been one of the main obstacles in the positive experience of the students. There were issues of peer-reviewing and critiquing (as is common in group work). The course team received comments expressing this sentiment: 'Some students just weren't professional and felt that they had the right to criticise other student's work without being constructive.'

A small number of technical issues came to light during the course. The editing window in the wiki was small and did not provide enough context and content for the document being edited. Students had to scroll the content up and down while they were entering text in the wiki via this editing window. The wiki navigation was poor because the user always has to return to the root page before reviewing another branch. Users had to check the wiki on a regular basis to see whether there had been any contributions from other group members. Some other wiki tools have notification mechanisms to deal with this. Another obstacle was the absence of a locking mechanism on the wiki to avoid the problems of concurrent updates: ie if two people tried to edit the same wiki page at once, conflicts would occur regarding whose updates would be saved. At the course team's request, the software developers at the OU have modified the Moodle's wiki and now when one student is working on the wiki page, the page is locked and cannot be edited by others.

11.7 Key lessons learned and the way forward

The evaluations carried out by the course team have shown that wiki activities on the course facilitated collaborative learning of RE. Some students expressed reservations about the collaborative work in a distance-learning, part-time course and this is understandable, given the expectations of students to study in their own time, and any collaborative activity is considered to be a burden. The course team has been addressing this concern by emphasising the role of collaboration and social software tools in real-world SE or RE practice. This emphasis has been through introducing readings (papers) and resources (links to websites), which are on the use of wikis and other social software tools in software development.Further, the questions on reflection in the second and third TMAs, wherein the students

reflect on the role of wikis in collaborative requirements development, also give them an opportunity to reflect on the role of collaborative activities in their learning.

The students expressed problems in scheduling time for collaborative activities. The course team has suggested to the students to use a page on the wiki to record their availability – and hence arrive at a common time to collaborate. Students have expressed concerns about the wiki being asynchronous and the need for synchronous means for discussions during collaborative activities. The course team has, therefore, encouraged students to use instant messaging for synchronous discussions, especially close to the TMA deadlines when the students are involved in negotiating and finalising requirements in the wikis of their individual groups.

When the wiki activities were first introduced on the course, they were integrated in all the three assessed TMAs. However, based on students' and tutors' feedback, the collaborative component on the course was reduced. The wiki activities occurred primarily in the second TMA after some brief socialisation activities in the first TMA. There was no group work in the last TMA and close to the examination to reduce the pressure on the students. However, in the most recent presentation of the course, which is based on the second edition of the set book, some revision of the course content had to be made and the wiki activities have had to be extended to TMA03. This does not imply that the reasons for reducing the wiki activities have been ignored but there is a specific course concept (the construction of 'fit criteria'), which students find difficult and which experience in the previous edition of the course had shown that students can benefit by collaboratively performing an activity specifically involving fit criteria. This concept can only be covered around the TMA03 as per the time-line of the course.

However, the course team is continuing to monitor the student experience with the wiki and collaborative RE through the reflection aspects of the TMAs, student and tutor interviews, as well as formal university end-of-course surveys. The course team summarised the experiences as follows: 'The most important thing is to understand the way in which they [students] want to work. Give them the tools that support their way of working. Be prepared to learn as you go along. Be reflective in your teaching practice as you would expect your students to reflect on their learning...'

11.8 Further resources

Course description of M883 Software requirements for business systems available at http://www3.open.ac.uk/courses/bin/p12.dll?C01M883 (Accessed 14 January 2009).

Farrell, J. 2006. 'Wikis, blogs and other community tools in the enterprise' [online], http://www-128.ibm.com/developerworks/library/wa-wikiapps.html (Accessed 14 January 2009).

Minocha, S. and Thomas, P.G. (2007) 'Collaborative learning in a wiki environment: experiences from a software engineering course'course in the special issue 'Studying the users of digital education technologies: theories, methods and analytical approaches', *New Review of Hypermedia and Multimedia*, Taylor & Francis Group, vol. 13, no. 2, pp. 187–209.

12 Using Wikis and Video-conferencing on Team Engineering Course

12.1 Fact box

Using wikis and video-conferencing on Team engineering course	
Team engineering (first presented in Autumn 2006) (course code: T885) was the first course (module) at The Open University (OU) to use wikis and video conferencing to support the work of project teams. Teams of five students, working remotely from one another, work on an engineering project over 32 weeks.	
Tools	Wiki in Virtual Learning Environment (VLE) at the OU; video conferencing (using FlashMeeting, a lightweight video-conferencing system developed by the OU's Knowledge Media Institute
Institution	The Open University
Contact	Mark Endean, m.h.endean@open.ac.uk
Initiative	T885 Team engineering, a postgraduate course
Delivery	Distance education with two residential schools; printed materials and the course's VLE
Duration	Since October 2006
Participants	About 40 students

12.2 Social software tools

Moodle (www.moodle.org) is an open source package for building course management systems (also referred to as Virtual Learning Environments – VLEs). Moodle has facilities for discussion forums, blogs, quizzes and wikis.

A wiki is simply a web page that anyone can edit at any time. With the added capability of restricting access to a wiki to specified people, any group of co-workers can use a wiki to produce reports and other documents to which several people need to contribute. Wikipedia is one of the best known wikis. The initiative in this case study uses the wiki in the OU's VLE (Moodle).

FlashMeeting (http://flashmeeting.open.ac.uk/home.html) is a browser plug-in application that enables users to collaborate online using video and audio to hold meetings. These meetings can accommodate a number of participants with the main restriction that only one participant can speak at any one time. Meetings can be booked in advance, and booking a meeting creates a URL that the organiser can send to the meeting participants, which allows them to access the meeting. FlashMeeting is based on the Adobe Flash plug-in and Flash Media Server. FlashMeeting was created as part of a research project within the OU's Knowledge Media Institute and is available in the public domain.

12.3 Background and rationale

T885 Team engineering is the compulsory final course in programmes of study leading to the OU's Integrated Masters Degree in Engineering (MEng) and

Postgraduate Diploma in Engineering qualifications. This course was developed in order to give OU engineering students a formal opportunity to work with fellow students on engineering projects in groups. Teams of five students, working remotely from one another, work on an engineering project over 32 weeks. Each team is monitored and assessed by a tutor. The students are assessed on the overall team project, starting with a project outline and culminating in a full report to which the entire team contributes. The performance of the individual is assessed through their reflective account of the project. In each component of the assessment, the students are encouraged to reflect on their own contributions to the performance of the team and how they considered other team members were contributing to the overall team activity through a set of structured questions given in the assignment.

The students are not allocated to teams by the course team. During the first residential school on the course, students discuss their project ideas and allocate themselves to teams. Within a team, students are free to choose a role, or an area in which they will contribute towards the team project. For example, a student might choose to contribute towards the health and safety aspects of the group project because of expertise and experience in this area. However, some students are known to choose areas and roles that they are not familiar with, as the project would give them an opportunity to learn 'something new'.

The course team was keen to provide a cohesive environment to the students for group working. The course team recommended that the students use the video-conferencing system, FlashMeeting, to support synchronous communications. The course team felt that passing Word documents (related to the project report) around in a team would be 'messy'. The course team was keen to set up an online space for students where each student team could compile their work; a place where each of them could see what the others had been doing; and a space that was not tied to a particular computer or geographical location. Wiki seemed to be an 'obvious solution' to the course team. Mr. Endean remarked: 'Wikis are democratic; every member of the team works towards the final report; unlike a Word document where the team have to delegate the work of finalising and submitting the report to one person in the team.'

The course team allocated each of the teams a wiki to which all the members and their tutor have access. In addition, each student is given a wiki which can be accessed by the student and their tutor. The course team has access to all the wikis, so the students are aware that none of what they put in the wiki is entirely 'confidential'. However, the principle was established that each team's work was not to be seen by other teams and each student's personal wiki was not to be seen by other students. All of the wikis are initially free of content or structure.

12.4 The initiative

During the team project, students are encouraged to organise regular, formal and purposeful meetings with an agenda, minutes and action points. Students use FlashMeeting for conducting meetings. These meetings can be recorded and listened to later, and the text chat from the meeting is available as a page of 'minutes' in the FlashMeeting archive. The course team recommended that wikis should be used for collaborative writing of the project report. The teams have used their wikis for a range of different purposes, including: meeting agendas, meeting minutes, project planning, task allocations, assignments, assignment feedback (from the tutor), and project journals. Many of these tasks do not require the inputs of more

than one person, so it has been interesting for the course team to see how the teams quickly start using the wiki space as a simple shared document repository. Each team is provided with a discussion forum; however, the course team has noted that students tend to use the wiki for discussion too, and do not use the forums, thereby restricting their interactions to a small set of social software tools.

Students and tutors are not given any formal training for using the tools except for brief 15 minutes hands-on session in the first residential school.

12.5 Benefits

The aim was to create an environment for learning that was both cooperative and reflective, while at the same time providing a means of differentiating the level of achievement of one student from another. Both the wikis and FlashMeeting have made important contributions to these goals. Each student can contribute original material to the wiki and each can edit and comment on the work of all other members. FlashMeeting is a simple-to-use communication tool, but it has a highly sophisticated archiving facility. This feature enables students to reflect on the work of the team and to review the meetings. Typical comments which the course team has received from the students are: 'I've looked back at the recordings of meetings and thought I could have handled that better' and 'I must make more of an effort to join in the discussion.' Tutors, too, can use the records of the meetings and the wiki contributions to help in the process of supporting and assessing each team member's efforts.

Mr. Endean said: 'Being able to see each other in FlashMeeting reinforces their commitment to the team.' He added: 'There is generally a high failure rate in team working in distance education, we are conscious of this fact; but we have had 100% retention rate; this is the last course towards the qualification, so the students have a huge commitment towards completion which is on our side, and we provide tools to support them.'

12.6 Issues

In preparing longer documents, such as the team reports, the students have encountered some technical difficulties: the very crude wiki implementation in the earliest versions of the VLE; the incorporation of images into wiki pages; and the need to extract from the wiki the work that was to be submitted for assessment. Being mature engineers, Team engineering students are pragmatic people. They therefore have found ways round these problems. But their workarounds have sometimes reduced their reliance on the wiki and some of the teams have used it less than they would otherwise have done.

Some teams have used other synchronous communications tools and not FlashMeeting. For example, one of the students could not access FlashMeeting in one of the meetings as he was using a dial-up connection and instead of giving FlashMeeting another try at some other time, the team chose another tool for online meetings. The course team did not insist on students using a particular set of tools for synchronous communication or on the process used, and has been more concerned about the quality of the product (report) that the students collaboratively develop.

12.7 Key lessons learned and the way forward

The course has delivered a number of novel learning experiences, from FlashMeeting to wikis that have been enthusiastically adopted by the majority of participating students. It is clear from the evidence that the course team has collected that by using these tools the student project teams found that their physical separation did not present a barrier to effective team working and the interaction of students within teams resulted in a final project report that was far superior to that which five students working as individuals could have been expected to produce. The recording and analysis provision within the tools actively supports group and individual reflection on the processes of collaborative working. Having experienced the potential of wikis for collaborative working, some of the students are now using wikis in their workplaces.

Despite clear indications that the course is team based, some students remain dissatisfied with the element of group assessment, which is more a criticism of the course and not of the social software tools that have been used in this initiative. The assessment process takes into account individual contributions on the wikis and in FlashMeeting, and the individual reflective accounts in the reports. However, there is a still a general concern among some students that some contribute less than others to the team project.

In spite of the success of the current initiative, the course team feels that more needs to be done to ensure that the students are provided with useful tools that facilitate their work rather than adding an extra burden to it. One very important question that the course team feels needs to be investigated further is whether students who are not able to meet in person can nevertheless form strong working relationships with others through a combination of collaboration tools similar to those used by the students on this course.

In recognition of the contributions of this initiative to the field of distance education, the course team was awarded an Open University Teaching Award for 2008 - 2009.

12.8 Further resources

Course description of T885 Team engineering available at http://www3.open.ac.uk/courses/bin/p12.dll?C01T885 (Accessed 14 January 2009).

Endean, M., Weidmann, G., Armstrong, A., Moffatt, J., Nixon, T. and Reuben, B. (2008) 'Team project work for distance learners in engineering – challenges and benefits', *Engineering Education,* vol. 3, no. 2, pp. 11–20.

Knowledge Media Institute, The Open University, 'FM global impact' [online], http://fm.ea-tel.eu/impact (Accessed 14 January 2009).

13 Blogs and Social Bookmarking for Exploration of Historical Sources

13.1 Fact box

Blogs and social bookmarking for exploration of historical sources	
Encouraging first year students of history to use inquiry-based learning techniques and to identify relevant primary, secondary and other online sources in order to explore given topics. Supporting both the students and the tutor in preparing for tutorials and thereby making the tutorials more interesting, enjoyable and effective.	
Tool	Bookmarking/indexing software (Delicious**)** and a blog
Institution	CILASS (Centre for Inquiry-based Learning in the Arts and Social Sciences), Sheffield University
Contact	Dr Jamie Wood, jamie.wood@sheffield.ac.uk
Initiative	Support for the preparation of material for tutorials for students, and a tutor, of the Pagans Heretics and Christians module in the first year curriculum for undergraduates in the History department
Delivery	Blended (face-to-face and online learning)
Duration	Semester 2 in the 2007/08 academic year
Participants	22 students, mainly aged 18 to 20

13.2 Social software tools

The bookmarking/indexing software Delicious (http://www.delicious.com) (formerly del.icio.us) enabled every student to bookmark three online sources related to the topic of the next tutorial in preparation for the tutorial. The bookmark entry allows the reader to click through to see the source which has been bookmarked as well as seeing both the comments that the person making the entry has provided relating to the source and the rating (one to five stars) that they have given it. The site could be read by anyone but it was necessary to log in to make an entry (all students used the same login name and password so were asked to add their name to each entry they made).

An open blog on the WordPress site (http://wordpress.com) allowed each student to post a question related to the topic for the next tutorial. As with the Delicious site, the blog was readable by anyone but students needed to use a common login name and password in order to post an entry.

In both cases the particular tools were chosen because the staff member concerned had already used them and found them useful and easy to use.

In general, it is necessary to check that the tool provides the required features (eg is it possible to restrict access to named people for writing, reading or both? Are there restrictions on making entries?).

13.3 Background and rationale

The Pagans, Christians and Heretics module, given in the second semester of the first year undergraduate History degree, had a large number of students taking it. The lecturer was supported by a number of tutors, who were responsible for running one tutorial a week for a group of 10 to 12 students (the project leader for this initiative was one of the tutors and he supported two student groups). Each tutorial focused on a specified topic and students were expected to identify useful sources relating to the topic and to contribute to a discussion on the topic during the tutorial. The tutor led the tutorial and assessed the contribution each student made. The students produced two assessed reports during the semester, each one on the topic from a specified tutorial.

Many of the resources were available online and the initiative leader believed that appropriate social software tools would encourage students to use these resources effectively and responsibly, increase the effectiveness of the tutorials and increase the involvement of the students in the tutorials.

The rationale for the use of social software arose because the tutor had found the bookmarking tool useful in his own research work and worked in a centre promoting inquiry-based learning.

13.4 The initiative

The module itself had been presented for several years and the tutor concerned had tutored on a similar module previously, was familiar with the material, and believed that the students would find the use of the social software beneficial in all of the tasks associated with the tutorials. The availability, before the tutorial, of a list of sources that had been consulted and questions that the students wanted to obtain answers for, was also expected to be beneficial in enabling the tutorial to be planned effectively and appropriately.

The additional learning tasks for the students are reflection on the reading they are doing, bookmarking, commenting on, and rating, each source and posting a relevant question on the blog.

Each tutorial was a group activity and the entries on both sites (Delicious and the blog) were accessible to all of the students, but each student was expected to carry out the specified tasks as an individual. However, both the blog and the Delicious site were expected to be used as a resource when the students were planning their contribution to a tutorial and preparing their two assessed reports.

The specific tools to be used were chosen because they had already proved useful to the tutor but the choice was validated by discussion with a member of computing services staff who was familiar with a range of tools. In addition to the Delicious site and the blog, all the students were expected to use the university Virtual Learning Environment for their assessed reports.

The initiative only involved two out of twelve of the tutorial groups. It is likely that everyone in the chosen tutorial groups took part in the initiative: 80% of the students could definitely be identified as having participated and there were also some anonymous entries. The use of the social software did not form part of the assessment for the module.

The social software has only been used for one presentation of the module (in the second semester of the 2007/08 academic year) though it is expected to be used for the next presentation. No changes took place during the first presentation but some are planned (eg use of a different blog site; greater variety of tasks to help retain interest and generate enthusiasm).

13.5 Benefits

There were benefits for both students and tutors. The tutors thought that the students would benefit in the following ways.

'Asking questions … and getting answers … but with the whole group involved … [helping them to see] that what they did [online] made a difference [was used] in the tutorial.'

'Engagement and involvement with the topic and the social software – I had found it useful and was sure they would too.'

'Deepening their understanding … getting them to reflect on what [the sources] they found and ask questions."

The tutors felt that the initiative benefited them in the following ways.

'I was able to relax because I had the confidence that they had done some work in advance and I – sort of – knew what that was and once I realised that this [process] was engaging them I knew that the seminar was going to go pretty well'

'It helped me and it helped them so it was good'

'It was originally a personal development thing but then it had some good outcomes …. we've got the resource that they created with over 200 entries on a resource list that the students made themselves and it's there forever – it can be used in subsequent years for further activities … they've made a blog with questions on it that I'll be able to review, to see the types of questions that they were asking.'

'Some of them were thinking about how the whole thing worked, not just about themselves.'

Students made the following comments.

'The blog was useful because it meant that you could direct your reading by seeing what other people had asked and if you came up with questions yourself it confirmed that you had understood and engaged with the topic. The blog was also a good framework for seminar work.'

'I assume that this was quite helpful [for the tutor] to see what direction to lead the seminars in. Some weeks I found myself searching for a question to ask and other weeks I did put up genuine questions that I thought would be helpful for everyone … it was worthwhile and got you thinking about the topic before the seminar which would help you come along with clarified thoughts.'

13.6 Issues

The students were asked to annotate the Delicious entries with their names, which created a privacy issue since the site was visible to anyone, because of this some of the students were not willing to do it which meant that some entries were anonymous (though sometimes students identified an otherwise anonymous entry as their own during the seminars).

'One thing I did not realise at the start [was that] the box that allows you to make comments ... only allows a fixed number of characters and it doesn't tell you as you are writing so you can write quite a lot but when you click "Save" it just cuts it [the entry, losing the extra characters]'

The blog on the Wordpress site was quite difficult to use. It was more sophisticated than was necessary and had more features so it was not obvious to the students what they were expected to do.

'If I want to use the entries [on Delicious and the blog] during the tutorial I need a technology rich learning space which I have at CILASS – it would have been much more difficult to use the technology in a classroom without the technology in it … but the first class, where I was telling them what to do was just in a normal working space and they still managed to do it but it would have been easier [in CILASS].'

'Using one account was easier to administer but then there could have been issues with students sabotaging other people's work but that wasn't a problem because it [the work] wasn't assessed ... it could have been if the work had been assessed … you can delete a Delicious entry or change the tags … tag it as your own.'

'Can an institution ask a student to register for an external site that would then be mandatory to use for them to pass the course? … there could be issues with regulations if that was the case.'

13.7 Key lessons learned and the way forward

The following quotations detail the lessons learned and how social software tools may be used in future.

'You should not be afraid to use these things – the students are probably more open than we are to doing different kinds of things and they will engage with them provided you ask them to do things that they think are constructive.'

'Inquiry-based learning was useful in small group teaching.'

'I thought the blog would be easier [for the students to understand] but got more questions about that during the first few weeks ... so some explanation of what they [the students] should do is needed for that as well as for Delicious.'

'I think that one factor that may well have influenced it [the very successful outcome] is Jamie's enthusiasm.'

"It was really important to have someone who was more technologically aware to talk to [about what's happening] it sparks ideas … having someone to bounce ideas off is just so important"

'I'm going to do it again, but using Blogger [instead of Wordpress] because it's easier to use. I'm going to develop it … [I will] use Delicious, at the start, [but] using it throughout the course got quite repetitive, … I'm going to get them to do some exercises to see what is on there [the existing resource] … and not be so frightened of overloading them, so maybe use other things [social networking sites].'

13.8 Further resources

Pagans, Heretics and Christians Course Resources in Delicious, http://delicious.com/paganschristiansheretics (Accessed 24 December, 2008)

Pagans, Heretics and Christians Course Blog,
http://paganschristiansheretics.blogspot.com (Accessed 24 December, 2008)

Social bookmarking software helps students to generate resource lists (experiences in tutor's own words), http://tinyurl.com/7c2xvc (Accessed 24 December, 2008)

Hmmm, Delicious! Social bookmarking in teaching (October 02.08) (experiences in tutor's own words, http://tinyurl.com/9qbpfa (Accessed 24 December, 2008).

14 Photo-sharing on Flickr

14.1 Fact box

Photo-sharing on Flickr

In this case study, the students on the City and Guilds Photography course at Stockport College load their work on the photo-sharing site Flickr site. The photographs are placed in a group dedicated to the course.

Tool	Flickr photography sharing site
Institution	Stockport College, Stockport
Contact	Simon Trahar, simon.trahar@stockport.ac.uk
Initiative	City and Guilds Photography, Level 2 part-time course for adult learners
Delivery	Face-to-face weekly tuition
Duration	Since 2006
Participants	About 80 students over a year

14.2 Social software tools

Flickr is a public website (http://flickr.com) designed for sharing photographs. Users can create accounts and upload photographs (and video) onto their 'photostream'. Public photographs can be seen by anyone with internet access. Private photographs can be shared with other registered Flickr users. Once loaded on to Flickr the owner and any other registered users can add comments about a picture. They can mark a picture with tags, which can then be used to search the public photographs on Flickr. Users can create groups where they and other users can place photographs, which they want to share for any purpose. Groups can be public or private with membership either open to any registered user or by invitation only.

Flickr is owned by Yahoo; it provides both free and paid for accounts. Free account users are shown advertisements from time to time and have limits to the features they can use. Those with paid-for 'Pro' accounts do not have to view advertisements; they have more space and can use all the facilities.

14.3 Background and rationale

The photography courses at Stockport have been moving away from physical forms, using film and prints, to using digital methods. This change demands new ways of sharing materials. Students need a way to share photographs with peers and with the tutor as a part of this course. On the college computers students were allocated only 20MB of space, which will hold only a small number of photographs. Photographs could be passed around on media such as compact disks, but this is cumbersome and has imposed a heavy burden on tutors in the past. Photographs could be sent by email but these have been hard to manage when tutors may have to deal with many courses.

Flickr seemed like an ideal and obvious way to solve these problems. The tool was suggested by another staff member at the College. Flickr is allowed by the college's firewall.

14.4 The initiative

Each student on the course is asked to register for a Flickr user id. They are provided with some basic advice (and a handout) on how to get started and some simple rules on how they should use their account. For example, students are asked to have their surname as part of the account name so that they can be recognised by their tutor.

The tutor for each course creates a group for that presentation of the course. The group is visible to the public, but membership is restricted to students on that course. This means that anyone can see the photographs from any presentation (or group in previous years), but only (current) course members can add photographs to the group.

Students can load any of their work on to their Flickr account. They are free to use the other features of Flickr to share this work outside the course. For example, depending on the settings chosen by the student it is possible for any Flickr user to add comments on their photographs. They can also use the search features of Flickr to find other photographs, which might be related to their own. The tutor mentioned that it is important for students to learn about the decision-making process, which goes into selecting photographs for presentation. They become 'a bit more discerning about what goes to the group'. As they are putting their photographs into a public space it makes the students more careful about what they show: 'If it was a private [space], it could get too intense.' The tutor also remarked that the photographs of the students on the Flickr site serve as a 'white-board' to support discussion in the face-to-face sessions.

When a student wishes to share a photograph with their peers or the tutor they add them to the course group. Photographs can be added either to meet course needs (such as assignments), or just to share and request comments.

14.5 Benefits

Both students and staff consider this project to be a big success. It has met the needs for which it was introduced and provided some other benefits. One tutor said: 'I am quite surprised about how well it has been received. I was hoping at the beginning that it would be purely functional. But it has had a lot more benefits.'

For the tutor, it provides an easy way of looking at work related to a course: 'I can give very quick feedback [to students].' For adult learners, it can be very reassuring to get quick feedback from the tutor. The tutor also noted: 'Students have had access to other Flickr members [the public] who can help with [photographic] technique.' The group page provides a thumbnail view of all the photographs in the group/course. Each thumbnail is linked to the full-size version where students can comment on a picture. Each course is kept separate so there is no need to continually manage emails, prints or CDs. Staff can also use group features to limit the rate at which photographs are added – each student is only permitted to add 15 photographs per week.

Using Flickr is very popular with the students, both as a personal tool and for their course. One student said: 'As far as I'm concerned the more people that [see my work] the better'. Flickr gives students a way of exposing their work both to people within the college and to the world. It can provide a showcase for them to promote themselves and their work. For example, there are commercial photography companies that are seeking out work from good amateur photographers – via Flickr. They are sponsoring 'Pro' accounts. Students can learn about commercial processes through their interactions with Flickr.

Flickr also provides a place for looking at other's contributions: 'You can see all sorts of different photography, a treasure trove', as one student put it. Others commented: 'It gives me lot of inspiration'; 'The sort of thing you can aspire to'; 'Seeing a different picture taken in a different situation'; 'It is a really valid piece of software to use'; 'It helps with finding photographs for inspiration and what the rest of the class are doing. It gives you confidence'; 'You can judge yourself ... how well you are learning.'

For the course, Flickr has had many benefits. For example, photographs by other students can be viewed whenever a student chooses. They no longer have to take in prints and try to find time to share them during the lessons. The students can see how others have handled similar assignments. This is not dependent on the face-to-face sessions, but can begin as soon as any of the photographs are ready. The students have normally seen each other's work before they get to the college and get straight to discussing the relative merits of what they have each done. The tutor remarked that the initiative gets the students talking at the start of each class: 'Adults are more reluctant to discuss work ... when they come in they say "I saw your photographs on Flickr, they are really good"... they start discussing them right away.'

Having their work exposed to the public has other benefits too. Students are much more self-critical. They do not want to upload photographs, which they have not taken care in producing. They want all their work to demonstrate high quality.

14.6 Issues

So far Flickr has not been used as part of the formal assessment – partly because the City and Guilds course does not require this. However, the tutors are considering how to include assessment of Flickr contributions on other courses in the college. However, by using Flickr, the tutors miss some of the features, which are built into virtual learning environments (VLE) such as Moodle. For example, there is no feature to provide deadlines for the submission of work.

The tutor felt that there is a lot of trust involved. A student could do something in a public space that could potentially ruin the reputation of a college, a tutor or a student. It is not clear how college policy relates to things like this happening in a public space. The tutor queried: 'How do you moderate such behaviour? …some people might find this a bit dangerous … but I think that's the power of it [the technology] …, it is quite natural especially for Arts students … they might try things … but as yet we have had no one doing it … but as yet the college has been very good with all this kind of stuff and recognises the value of it – we are fully signed up us – it is a great facility but there are questions hanging over it.'

Another concern is that the courses are relying on a system the college does not control. Some other concerns of the tutors are: will the service always be there as 'that is the sole copy of the work'? What should be done about backup? How do we manage users who have forgotten their user id and password? In fact, some

students forgot their user ids and they had to recreate accounts. The tutor mentioned a potential problem for students who already have an identity on Flickr, and they might not want their personal life to be associated with their college work. The course is relying more on computers now and as more and more courses are adopting digital technologies on their courses, there is a strain on the resources in the college.

Students had some other concerns. One student mentioned: 'It was awkward to use at first. It was hard to learn about the group concept. But now I know, it [group concept] is not that difficult.' Others worried that their work was public having seen it linked into other web sites or blogs. But once they understood that it was linked back to their account they were somewhat happier. One student remarked: '[At first] I was not very comfortable about having my stuff "out there" ... not being able to control where my photographs were seen. I am still quite careful.' Another student expressed similar concern: 'Your photographs can appear in other places that you would not expect such as a blog about Stockport.' Another student said: 'I can get bogged down in the management of it [managing photographs on Flickr].'

14.7 Key lessons learned and the way forward

Overall Flickr has been considered 'a success all round' for both students and tutors. As one student said: 'It is a notice board of our work.' The tutor stated: 'It has given me more time. It has replaced image handling via email, which was very time consuming – I would get 30 images in an email. It has also avoided the need to print out images. The responsibility now lies with the student – they can no longer give the tutor a disk and ask the tutor to handle printing.'

All of the photography groups in the college will eventually adopt Flickr. The tutor feels that assessment should be done via Flickr in the future. However, he would like additional features such as setting deadlines for assignments and online questionnaires for assessment.

Based on experiences on the current initiative, staff intend to provide more detailed and clear instructions on how to set up accounts and rules for using the groups: 'You tend to take it for granted that they can understand this.'

The tutor summarised his experiences: 'I was sceptical ... but it has not taken a lot of experience to turn that scepticism around ... it is really useful. It keeps the students in this photography place. Students who are ahead in this class – I can send them to look at other photographs on Flickr. They don't wander off to YouTube or MySpace as it [Flickr] keeps their interest.'

14.8 Further resources

The group established on Flickr for the City and Guilds Photography course: http://flickr.com/groups/854833@N20, (Accessed 26 December, 2008)

Course details for the Photography course: http://www.stockport.ac.uk/course_search/list_course_detail.asp?course_header=1483 (Accessed 26 December 2008)

15 Develop Me! Social Networking at University of Bradford

15.1 Fact box

Develop Me! Social networking at University of Bradford	

The Learner Development Unit at the University of Bradford uses a social network to support students' transition to university. The project involved the creation of an online space where staff, students and potential students interact. The primary beneficiaries are students who have accepted a place at the university, but have not yet started their studies. This means that there is a broad range of student involvement, eg the location of participants is diverse, and there is also a mix of students who may have particular development or support needs such as mature students, part-time students and students with disabilities.

Tool	Ning – a social networking site
Institution	Bradford University
Contact:	Becka Currant, r.currant@bradford.ac.uk
Initiative	The project was devoted to supporting students' transition to university
Delivery	Online
Duration	Duration: 2007/2008 (over a year)
Participants	Participants: 700 registered users, with 500 regular users.

15.2 Social software tools

Social networking websites offer a virtual platform for communication between students, and between students and staff. Users register with a social networking website, and then create a profile which explains who they are. They then use online forums and chat facilities to communicate with each other.

Ning (http://www.ning.com) is one social networking website which allows users to create their own social websites and social networks. It allows institutions to have private areas which they can brand as they desire. They can also pay to have advertisments removed.

15.3 Background and rationale

The University of Bradford was keen to ensure that students were engaged as effectively as possible with the university. 'We care about our students so want to make sure they have the best experience possible,' said one staff member. Previous feedback from students had shown that they wanted more opportunities to meet other students informally. It was decided that a space where students could make links with each other, and with staff, before they came to university would help them to integrate more effectively on arrival – easing the transition to university. Social engagement was a key aim and so a social networking space seemed appropriate.

The Learner Development Unit at the university supports students in developing their academic and numeric skills. The unit chose to include social networking as part of a project called Develop Me! (www.brad.ac.uk/developme). Develop Me! also includes a series of workshops, self-assessment questionnaires and online study materials and resources.

Some subject areas also piloted the use of private subject groups within the social network to provide a space where timetables and programme information could be accessed. This was also a way for a subject area learning community to be formed, and this helped to prepare students for the learning environment.

15.4 The initiative

One project aim was to pilot the use of social networking in the institution. It aimed to get people thinking about different ways to use technology, and to assist in breaking down barriers between staff and students. Students were told about the social networking website (http://developme.ning.com) once they had been offered a place at the University of Bradford, and people began using it regularly during August and September.

Students used the social network to meet people on their course, people who would be living in the same halls of residence, and to meet students studying different disciplines. One educator explained: 'If you look at some of the literature to do with retention and transition, students are saying that "if only one person knew who I was, then I would have felt happier at the institution". So we are trying to deal with that more effectively, where people feel that they have a more personal relationship with people.' A student commented, 'I enjoyed finding people I'd be on the same course with, I guess it is something which helped me settle in'.

One group that the network aimed to support was national students. Local students tended to have a social peer group from before starting university, and special events were set up for mature students and international students. Social networking was a way to provide a social function that was available to everyone, but would be especially useful for national students and this would help improve retention.

Students interacted with other people by posting to discussions, writing on 'comment walls' and sending each other messages. They also used Develop Me! to raise individual queries, such as whether to buy books before they arrived and how to access other university services.

As well as providing benefits in terms of resource sharing and integration for the private subject group area, Develop Me! fits in with course philosophy. One educator explained: 'We do encourage a lot of collaborative learning on this course. This is a course where we want everyone to be successful to their full potential, and that involves working with each other and helping each other.' A student agreed: 'You work with people, especially as there have been a lot of seminars and group work – I think it has aided in that and made it go a little more smoothly.' Contributing to the culture of technology-enhanced learning was also a project goal.

15.5 Benefits

Having contact with the university and finding out about timetables before they actually started has helped those students who were able to participate in a subject area group. As one educator described: 'Many of the students are mature students

or part-time students and they have issues to do with things like childcare or work which they need to base their studies around. This has helped them deal with those problems at a much earlier stage than they have been able to do previously.' It has also 'made people feel more involved with the university, and that they are not the only people struggling with these issues or worrying about these things.'

It was the creation of personal connections that seemed to be most beneficial, with photos of participants being a key factor. As one student said: 'I just did the simplest thing and put on a photo so that people can see what I look like.' Once students started university, they felt the social network made people easier to talk to'. I knew their faces, so I was happy to approach them, and they recognised me as well.'
A staff member said: 'You've got his huge edifice which is a university, but what you need is a human face on it.' It is also a way for academic staff to get to know their students better before they come, so they have a name they can put a face to when they arrive.

Develop Me! provided a lot of information all in one place, which assisted in reducing the information overload students can experience at induction. 'By breaking it down and making it earlier it means they can pick and choose and access information on an "as needed" basis rather than all in one go.' Booking for support workshops has been much higher this year, and more people have accessed Learner Development Unit resources for significant periods of time.

Another benefit was environmental – the university's carbon footprint has been decreased by making things accessible online rather than distributing paper copies.

15.6 Issues

Develop Me! is used in both an open public environment and a closed one (subject groups areas are accessed by invitation only). Care was taken to make it clear to students that the University of Bradford did not own the servers on which Ning is hosted. On the social network login page there is a box about privacy and online safety which also explains to users that their use of Ning is bound by university regulations. 'People are using it sensibly. I think because it has been branded as a university network, there has been nothing dodgy or silly – it has all been really relevant.'

One student had a concern: 'When you post a chat, other people can read it … I would send a personal email to the individual, because that then is only going to be read by that individual. I suppose that is perhaps part of the era in which I grew up.'

No training was given to staff who were already competent IT users. Students did not have any training: 'I think because so many students are using Bebo, MySpace, Facebook, etc. they are used to the format of the social network.' However some students who had not used other social networking technologies before did not feel confident interacting with the technology, for instance one did not know how to put an image on their profile.

Some students may not have access to a computer or have a slow or unreliable internet connection and marginalising these students was an issue. In first week's activities, care was taken to mix students who had accessed the website with those who had not. One staff member noted: 'The ones who have accessed it already had those skills. I think the problem is the ones who haven't accessed it; we don't know if they haven't those skills or they just didn't feel the need.'

One student felt that lack of time was an issue: 'For myself as a mature student – not being in education for years – I don't feel at the moment I've got much time to chat. I think perhaps social networks are more a thing that a lot of younger people do.'

Access to the institutional virtual learning environment required internal usernames and passwords which students did not have before arrival. To get around this issue, the project was piloted using forums in Moodle, as students could self register. This had limited success and very few students participated. 'Moodle is not a social network, so it is very stilted. Having looked at how other people have used the Ning software in the university for supporting students, we thought we'd try it with Ning and it has been much more successful.'

15.7 Key lessons learned and the way forward

It was felt the technology has added value to existing activities and allowed access to people before they are physically here: 'I think it has been a phenomenal success. Technology can be used for engagement and can play a big role in helping students' transition from school and college to university. We can't roll out the nineteenth-century model of teaching with twenty-first-century technology. Students are not going to put up with it.'

It is quite easy to establish contact with students from the middle of August, to 'warm them up', make them less anxious and more ready to start their academic courses without teething problems. 'The students have engaged with each other, and we have been able to directly help them at a very early stage which we haven't been able to do before.'

Staff would like to see the project grow, for instance by involving students from other years, and creating more mentoring and buddying schemes. It would also be good to get more staff involved and to increase their sense of ownership of the process. It was felt that keeping staff enthusiastic and motivated about Ning may be a challenge.

Starting early is important. 'I think students always accept things much better in the first year and then grow with it. If you try to introduce something to the third years they say, "We don't need that, we've managed without it thanks".'

Another key point is that focusing on helping students is what really matters, and if you take a risk, you can learn from what goes wrong. There has not been any harassment, bullying or intimidation, and you need to trust people to engage with social networking in an effective way.

15.8 Further resources

Develop Me! project site, http://www.brad.ac.uk/developme (Accessed 27 December 2008)

Develop Me! social networking site, http://developme.ning.com (Accessed 27 December 2008)

ELP2 project, http://www.elp.ac.uk (Accessed 27 December 2008)

Ning, http://www.ning.com (Accessed 27 December 2008)

16 Using Podcasting to Develop Oral Skills for Physiotherapy Practice

16.1 Fact box

Using podcasting to develop oral skills for physiotherapy practice

Physiotherapists in professional practice are frequently required to give verbal advice to patients. In this initiative, the students on the physiotherapy programme created a podcast of patient advice on back pain management (in a role-play scenario), and collaboratively authored a 500-word piece on one of the pathologies in a supporting wiki.

Tools	Podcasting and a wiki in StudyNet, a Managed Learning Environment (MLE).
Institution	University of Hertfordshire
Contact	Anna Anders, a.anders@herts.ac.uk
	Heather A. Thornton, h.a.thornton@herts.ac.uk
Initiative	Level 1 Module on the BSc Physiotherapy Programme
Delivery	Blended learning (face-to-face and use of the MLE)
Duration	From 2007 onwards
Participants	78 students

16.2 Social software tools

The University of Hertfordshire has developed the university's Managed Learning Environment (MLE) known as StudyNet. StudyNet includes comprehensive features for course management including: news, discussions, blogs, learning resources, and module information.

StudyNet enables podcasting and wikis to be used both on the module site and within group sites. Group sites provide students with their own areas, which have access control, making them public or private as needed.

A wiki is a page or collection of web pages designed to enable anyone who accesses it to contribute or modify content. A wiki allows users to freely create and edit web page content using any web browser. Wiki supports hyperlinks and has simple text syntax for creating new pages and cross-links between internal pages.

Podcasts are audio recordings, usually in MP3 format, of talks, interviews and lectures, which can be played either on a desktop computer or on a wide range of handheld MP3 devices.

16.3 Background and rationale

There are three aims of formative assessment on the level 1 module of the undergraduate Physiotherapy programme: to develop knowledge and understanding of pathologies affecting the lumbar spine; to develop communication skills; and to develop group-working skills. Previously this formative assessment involved working

in a small group to produce a poster about a pathology affecting the lumbar spine. A tutor assessed the poster and gave feedback. Following a straw poll, 81% of the students felt they had only learned about the pathology they had conducted research on, but not the others. The tutors' reflections were that even within a group, the task flow was disjointed with limited use of their group pages on the StudyNet. It was the tutors' perception that more effort had been put into producing the poster and the students had not engaged in the intended deep learning. Further, it was felt that the poster did not prepare them for professional practice. Therefore a role-play element was incorporated in this initiative where a group of students produce a podcast by using the information on the pathology, collaboratively authored by their group on a wiki. This activity involving the wiki and podcasts has provided a 'fun' way to explore a potentially dull subject. More traditional role-playing was also considered but was deemed too challenging, as the students are only a few weeks into the course when this activity is carried out.

16.4 The initiative

The availability of StudyNet strongly influenced the design of the initiative. The technology was 'off the shelf' and 'the support mechanism for blended learning here is so strong ... it is quite easy to do it'. However, the focus was not on the capability of the technology, but on the learning process. 'The most arduous bit is thinking what you want the students to get out of this.'

The students were split into groups of four or five, and each group was given one of the five pathologies of the lumbar spine to research. As a group they had to produce a 500-word document detailing the pathology and this was done in the wiki on StudyNet. Each group was asked to record a five- to eight-minute podcast, which was a role-play scenario of a physiotherapist giving details to a patient on the lumbar spine pathology. In one of the lectures, the students were given some guidance on the breakdown of the assessment of this group activity involving a wiki and a podcast. The supporting documents, such as how to use a wiki or how to make a podcast, were made available on their group pages on StudyNet. The podcast was produced using a small hand-held digital voice recorder on which the students could record as many times as they wished, in privacy, until they had a final version. The course leader then uploaded the recordings of the various groups to StudyNet.

In a group tutorial, each of the podcasts was played. The students assessed each other's podcasts and self-assessed their podcasts using a paper-based assessment system based on the Likert scale. Students were asked to score against statements relating to whether the information in the podcast had appropriate terminology; whether the details were relevant and appropriate; and whether the information had been presented in a clear and logical format. By making a judgment on their peers and by evaluating their own performance, the students had an opportunity to reflect on their learning and experience. The tutors involved read the final versions of the wikis, and provided written feedback on the group's understanding, and the collated reference material. After the group tutorial, with permission from the students, the group pages were made open for the whole cohort to access the podcasts and wikis.

16.5 Benefits

The wiki allowed students to start to build and organise knowledge in an effective way, following on from their search and evaluation of information. The podcasting activity enabled students to develop self and peer assessment skills by being able to

listen repeatedly to the role-play (which would not have been feasible if the activity had been classroom based). This blend can support a higher level of interaction essential for collaborative learning than can be achieved through classroom-based activity alone. One of the students said: 'It got us all to work together.' As the students both wrote and spoke the information they felt that this reinforced the learning: 'We felt that we were learning more as we had to first write and then speak for the podcast, so it [information] was being reinforced.' Another student said: 'The wiki helped to see what other people were thinking; what their opinions were.' The group activity also helped the students to know one another better, enabling socialisation, which is a key requisite for collaborative learning online or otherwise: 'I felt that I knew other people more by doing this activity.' They also found it enjoyable 'it was more fun working ... more interactive', and it 'did not feel that much like work'.

Student feedback was obtained by using an anonymous questionnaire. Thematic analysis of questionnaire data highlighted that the students found the activity 'fun' and 'interesting', as it was 'interactive'. The students expressed how this formative task had enabled them to have a greater understanding of lumbar spine pathologies. They had learned about the pathology they were asked to investigate, but they had also gained some understanding of other pathologies from listening to the podcasts, and by having the opportunity to read the wikis of other groups.

The students found this to be a 'fun way' to learn what could be a dry subject. The students' appreciation of ways to make information accessible to patients came through role-playing and by listening to the podcasts and evaluating them. Further, listening to the podcasts and peer- and self-assessment facilitated in developing the reflective skills, which are critical to becoming a (reflective) practitioner.

StudyNet, through which this initiative was launched, is fully supported by the university; therefore, there were no issues about the access control and backup of the system. There were no technical problems with the podcasting or wiki.

16.6 Issues

Setting up the initiative was 'quite onerous' and it took a couple of weeks, to get the scaffolding and support in place. However, for the next year's cohort, things are already in place.

There were minor problems with the speakers for playing the podcasts in the lecture room. The module team had hoped to use an electronic voting system (EVS) for assessment in the tutorial but it did not operate correctly on this occasion. They hope to use the EVS next time to allow anonymous marking.

Students expressed some concerns about participation in the wiki and podcasting activities. These concerns are natural for any group activity and are not necessarily related to the tools that were used in this initiative. The students felt that everyone did not participate to the same degree. This was more evident in the wiki than in the podcast, although there were also arguments in some groups over who should speak on the podcast. Also, the students felt that the time allocated (an hour) to make the recording (podcast) was too short as some time was lost in finding a quiet place. Based on this feedback, the module team is working towards better access-management to the voice recorders.

Some students did not like listening to themselves (on the podcasts that they had created) as they found it embarrassing, but remarked that having the role-play

played back was easier than having to do it live in the class. Some students felt that it would be better to have the module team assess the activity rather than their peers, as they felt that were being 'nicer' to some than others and, also, while listening to the podcasts, they were sometimes biased towards the presentation style rather than the actual content of the podcast.

Some of the students felt that they had learned the pathology, which their group had worked on but not the others. Some of them did not appreciate that gaining communication skills was one of the aims of this activity, although some of them said in the questionnaire that they, through the podcasting activity, had identified the need to be able to use different terminology when communicating with a patient rather than a professional colleague, and the need to communicate in a clear and understandable way.

Some of the students felt that they required more guidance to exploit the potential a wiki can offer; for example, some of them only discovered later (on another module) that they could add hyperlinks in the wiki. However, the students understood the role of the wiki in collaborative authoring: 'Wiki was good as we could all update, making the group work easier.' Students felt the need for a synchronous medium (a wiki is asynchronous) at the end of the activity, as some of them met face to face to finalise the wiki activity and prepare a plan for the podcast recording.

16.7 Key lessons learned and the way forward

The tutor's role changed from an information provider into being a facilitator. An example of this is that in the tutorial the tutor did not assess the podcasts but facilitated the students to conduct the peer- and self-marking, fostering collaborative and reflective learning. In future presentations the team will use the EVS for peer assessment and also have students give more self-assessment: 'We are moving to more and more collaborative learning earlier in their course.'

Breaking the task down and using peer support through the group working enabled students to learn in depth and apply knowledge in producing the podcast. Having the podcasts available across the cohort also meant the students felt some connection to the learning community despite working in separate groups. The management of the time the students had to undertake the recordings will be improved, and quiet places to record will be provided. 'It was an organic project which developed as it went along. [We could] organise it more up-front.' Further, more guidance on using the wiki and for producing podcasts was suggested as an improvement for the future.

The module team feels that this had been a worthwhile initiative for student learning and engagement, and they are now using the same toolkit for the next cohort. They are keen to encourage other colleagues in the community to use new technology, and stated: 'You don't have to be a super techie to do this' and 'It is not that arduous to dramatically change practice.'

16.8 Further resources

Anders, A. and Thornton, H., 2008. 'Using podcasting to develop oral skills required for physiotherapy professional practice', Third International Blended Learning Conference, University of Hertfordshire, UK, June 18–19, 2008 [online] http://www.herts.ac.uk/fms/documents/teaching-and-

learning/blu/conference2008/Anna-Anders-&-Heather-Thornton-2008.pdf (Accessed January 3 2009).

17   Blogs, Wikis and Social Bookmarking to Support Web-based Research

17.1 Fact box

Blogs, wikis and social bookmarking to support web-based research	
Web Research for Historians is a new module taught by Dr Kevin Linch from the School of History at the University of Leeds. Throughout the module, students interact with each other and with staff using social software tools. Students use blogs for self-reflection and for set tasks; they develop and present a project using wikis, and use social bookmarking to store and share resource references.	
Tools	Blogs (Elgg), wikis (LeedsWiki) and social bookmarking (Bibsonomy)
Institution	University of Leeds
Contact	Dr. Kevin Linch, School of History; email: k.b.linch@leeds.ac.uk
Initiative	Web Research for Historians; Level 2 Undergraduate degree, Semester 2 Module (20 credits)
Delivery	Full-time programme; blended: online activities plus one 90-minute face-to-face workshop per week
Duration	From 2007
Participants	10 students, most are about 20 years old

17.2 Social software tools

Social bookmarking allows users to store and manage information about particular websites and resources. Users can group websites together, identify them using tags, and share their bookmarks with others.

Bibsonomy (www.bibsonomy.org) is a popular bookmark-sharing service. It is free to use and is run by an academic institution, The University of Kassel. One feature that makes is especially attractive is that it can be used for a variety of academic resources such as books and journals as well as for online materials.

Wikis are web pages that have functionality built in to them so that several people can edit them. Making changes to a wiki does not require specialist web skills. LeedsWiki (https://wiki.leeds.ac.uk) is a platform where staff and students can create Wikis. It is based on the well-developed free MediaWiki (www.mediawiki.org) software.

A blog is a frequently updated website which normally focuses on a particular topic or area, or acts an online diary. Elgg (http://elgg.org) provide a high quality free social networking platform, which can be downloaded, installed and customised. This platform is very popular in educational environments due the flexibility it offers. The University of Leeds uses Elgg as its platform for blogging.

17.3 Background and rationale

The module is based around a student project, where students conduct a piece of historical research and present their findings in a wiki. Students use social

bookmarking to store and share the resources they collect as part of the project, such as websites, articles and books. They reflect on their progress in a blog.

The project was partly experimental – there was a growing awareness that there are lots of new tools available in the public domain. This module was an opportunity for staff to explore what could be done with social software tools, and for students it provided a different and interesting way of studying history.

The switch from being an individual learner to being part of a learning community was important. History is normally assessed using essays and exams, which builds one-to-one relationships with tutors. This contrasts with the workplace, where people normally work in teams – and while they may do individual pieces of work, it is in the context of a wider project or a community. Social software was a way in which students could be encouraged to learn in a way that tied in better with working life.

17.4 The initiative

Beginning with the idea of a module based around a web-based research project, the course team looked at the types of social software that were available and then evaluated which were the most suitable. A student intern helped with the choice of tools and this student input was found to be very constructive. This planning phase was spread over a year or so. Next, there was a fairly concentrated period of about three weeks' work designing the learning materials and the tasks. 'It was quite resource intensive up front to do this, but then I probably didn't have to do as much during the term in terms of preparing,' said one course team member. The timing of the content-based workload was considered carefully to ensure that students were not overloaded.

Wikis were chosen for the final project presentation because they are a quick way to get text, links, videos and photos online. Wikis did not require students to be technical experts or to learn a complicated piece of software.

Blogs were used at key stages in the course, either to reflect on something they had read or to discuss an activity which the students had been asked to undertake, or to jot down their ideas and thoughts about what they might do in their project, or to raise questions. One student commented: 'It was a change of ideas, a tool outside the actual lesson. You could choose to put your ideas down or ask questions.'

Bibsonomy was used mainly as a tool for storing references and to enable students to become better judges of the quality of online resources. The social side of bookmarking was not incorporated into learning activities. Bibsonomy was chosen after a long period of evaluation, because it was easy to access and to use. It had browser integration, tags, groups could be set up, and it had an RSS feed, which meant monitoring was easier. Students found being able to save and tag websites and export resources especially useful.

The use of social software did form part of the assessment. The blog was assessed on two broad criteria. One was the quality of the posts in response to specific questions they were asked. The other was on the quality of responses to other people, engaging in discussion and making links. The bibliographic work contributed to part of a written project proposal, and the work presented in the wiki formed a significant proportion of the module marks.

17.5 Benefits

Students enjoyed the module, and felt the social software tools had helped their learning experience. The module did make them feel part of a community, one student liked 'that sense of being part of a group, and an exchange of information and ideas, and problems and solutions'.

As well as building an online learning community, it also fostered the sense of unity in the classroom setting. One student commented: 'It's a warmer feeling as well. We are so used to "lone wolfing" on everything we do, that being part of a community that takes on a virtual existence as well as the classroom existence – it all feeds into each other – you feel very much part of that group while you are doing it. That's really strong.' One staff member said 'I got to know a lot about them as people actually. You got a sense of what they were interested in history – getting to know what kind of things enthused them about the subject.'

Another benefit for the students was to have the experience of being able to use different tools, and to have the confidence to learn to work with new technologies. The students felt that they developed a number of transferable skills that could be added to a CV, and felt that the learning process would be invaluable if they wanted put work on the internet in the future.

The wiki also assisted some students in their academic writing. 'It forces you to think of the shape of the information, it's not linear like writing an essay. It forced you to be quite tight in the structure, everything has to hang together – the links have to be appropriate and the information has to be embedded in a useful way. I found that really really difficult and therefore very useful.'

For students, not having to carry around bags of books, flexible study hours and flexible location were additional benefits.

17.6 Issues

There were no training sessions for educators, though the teaching department ran sessions on how to use social software tools in an educational context, which were beneficial. The students had a face-to-face introductory session where they were shown the software and then given some time to experiment with it.

It took students some time to adjust to the new way of learning, but gradually 'it became a much more natural exchange of ideas, information and reflection'. Some students found that they had to make a significant mental adjustment when writing the blog: 'There's something quite unnerving about self-reflection, it's always slightly an artificial feeling. To write it down for a group of people who are then going to potentially comment on what you've written, and you then go off and comment on theirs – that's quite unnerving. I found that quite difficult, especially the first couple of weeks.'

While wikis do not require knowledge of programming languages, they do require users to learn some special mark-up to format content. Students initially found it difficult to write this mark-up. 'It was quite a big learning curve. I'm used to computers, but I'm not used to code in any way – and that was quite difficult.'

Learning about referencing was useful for some students. Others saw the copyright restrictions as more of a challenge. 'Because we were putting something into the

public domain, all of a sudden we had to deal with things like copyrights and intellectual property rights in a way we haven't.'

University time was more focused around giving people individual attention as needed, which was seen by students as a better use of resources and time than being talked to in a didactic fashion. For educators, teaching the module involved a different kind of work. 'So rather than looking over old notes about something and thinking about things to ask them – it was about looking at what they were coming up with, and reflecting on it, and then deciding what the class was going to be about. It was varied in that sense. You couldn't really predict what was going to happen from one week to the next sometimes. It did change the way I worked.'

LeedsWiki is public, and the students felt positive about having a piece of work available on the public web. Elgg and LeedsWiki both meet Leeds University accessibility standards. The accessibility of Bibsonomy was not considered; however as it is a project run by a university in Germany, staff thought it would be very likely to be accessible. No major technical problems were encountered throughout the project.

17.7 Key lessons learned and the way forward

It is important that the module is fluid and flexible, and develops over time. Students will develop more momentum with the tools, and hopefully more people will become involved. As technology becomes more integrated, there may be more options available for amending the module for delivery within a university Virtual Learning Environment.

Courses such as this one, where students do different things and are more experiential than academic, may be promoted more as part of their university experience.

One piece of advice is to give these things a try – and be open with the students about the fact that use of these tools is a new thing. One staff member said: 'That was the thing that was the biggest worry for me – that using all these new bits of kit that they wouldn't really feel comfortable with it, and that would impact on the way they engaged with the course. I think being prepared to give it a try is always worth it.'

You can get a lot of support and advice from other people who are interested in the technologies.

The course team's experiences with the technology will be disseminated across the department, the university and the academic community more broadly.

17.8 Further resources

Course website, http://tinyurl.com/7wsqv4 (Accessed 25 December 2008)

The course description of Web Research for Historians is at http://tinyurl.com/7jv2ra, (Accessed 25 December 2008)

The History Project, White Rose, CETL Enterprise, University of Leeds, http://www.leeds.ac.uk/wrcetle/funding.html (Accessed 2 January 2009)

18 Social Networking and Community-building in Dentistry Courses

18.1 Fact box

> **Social networking and community-building in dentistry courses**
>
> At the University of Manchester's School of Dentistry, the staff members have started using social software tools as an innovative way to communicate with dentistry students. They have uses blogs, social networking site (Facebook) and podcasts to supplement traditional communication methods such as the university's Virtual Learning Environment, website and email.
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> | | |
> |---|---|
> | Tools | Blogs, social networking site (Facebook) and podcasts |
> | Institution | University of Manchester |
> | Contact | Richard Oliver, richard.j.Oliver@manchester.ac.uk |
> | Initiative | Bachelor of Dental Surgery (BDS) or Bachelor of Science (BSc) in Oral Health Sciences. |
> | Delivery | Blended learning comprising face-to-face, Blackboard (VLE) and the social software tools |
> | Duration | From 2007 |
> | Participants | About 400 full time undergraduate students, aged between 18 and 30. The social networking part of the project also involves other staff members and recent graduates from the school, and people from external dentistry organisations also visit the blog |

18.2 Social software tools

A blog is a frequently updated website which normally focuses on a particular topic or area. Some blogs are like online diaries, and others more like online magazines. Stories, images and sound are posted to blogs, and blog visitors can often comment on what has been posted. Blogs normally contain links to other blogs, which cover similar topics, and so a community emerges.

EduBlogs (http://edublogs.org) provides free blogs for educational establishments, and is very popular with schools, colleges and universities. Once a blog has been set up, it is easy to customise the appearance, and there is a lot of online support and training available. Unlike some providers, a blog created on EduBlogs is free from adverts. Users tend to find it intuitive and easy to use.

A social networking website provides an online area where participants can interact with each other and form a community. Users register with the website and create a profile which contains information about themselves (such as their location, age, interests and a photo). Users can then view each other's profiles, and interact by sending emails and instant messages, sharing media like videos and photographs, and using discussion forums.

Facebook (http://facebook.com) is one of the best known social networking sites. It is used throughout the world, and offers a range of additional features such as quizzes, diaries and games.

18.3 Background and rationale

The School of Dentistry is committed to providing a positive student experience. Effective communication was identified as an area which contributed towards student satisfaction, and staff developed a number of new ways of sharing information, and finding out more about their students needs.

The size of the school posed a challenge for communication – with over 400 students, face-to-face meetings and networking were impractical. Online social software offered the opportunity to involve everybody, and offered a platform that could be fun and light-hearted as well as useful. Dentistry students already used various forms of social software for non-study purposes, and reaching students using technologies with which they were familiar seemed a sensible approach. One student confirmed that social networking is popular among their peer group: 'Pretty much all the students in Manchester are on Facebook and we are all friends with each other.'

A blog provided a forum to share information that was not directly relevant to the content of the degree programmes, but was important for the students to know about. 'Although we do get to lecture theatres once a week with each year, we don't talk about the social issues of the school and all the successes. It is not relevant in an environment like that,' said one staff member.

The social networking site Facebook provided a further space where successes could be shared, and discussions could take place. Staff and students could interact in a more informal way using through a social networking website.

18.4 The initiative

Blogs and social networking are used along with weekly email updates to improve communication between all staff and students.

The publicly accessible Dentistry@Manchester blog (http://dentistrymanchester.edublogs.org) created in EduBlogs has been running for a year. Two staff members post resources to help students explore and keep in touch with the wider dental community such as local and national dentistry news, national guidelines, and useful web and blog links. This is interspersed with material intended to entertain such as quizzes, competitions and local music news. 'I think the blog was more of a light-hearted way of letting people know what was going on in the school,' commented one staff member. The blog has been visited over 10,000 times.

The Dentistry@Machester initiative aims to develop and evolve over time, and the staff are keen to innovate and explore new uses for the tools. A recent development, for example, is the introduction of 'Ask a question' blogs, which will be used to answer clinically- related and course- related queries which students raise. This will assist students who are reluctant to ask questions in a face-to-face context, and will save staff time by not answering the same question multiple times. One student praised the project: 'I don't need to be afraid to ask anything. I think that's what they are going for, "don't be afraid to ask", and they are trying to be open and transparent which is great.'

Another recent feature is a publicly available podcast
http://www.cyberears.com/index.php/Show/audio/5394, in which interviews, news, and updates are presented in a friendly and entertaining way. Audacity http://audacity.sourceforge.net is used to create the podcasts.

Staff originally joined the social network Facebook to set up a group for recent graduates. 'We had a good success rate with the examination for the final year, which was 100%, and so we thought we'd set up a Class of 2008 to sort of celebrate that.' Initially the staff became 'friends' with each other, but then it expanded to students and Facebook usage within the school has 'just ballooned'.

Facebook is used for discussion forums, organising social events, and distribution of a weekly update, and to provide a platform for staff to answer any academic questions. 'They can ask you a question that they wouldn't normally ask … it makes you look more of a colleague than a teacher. That relationship, I feel has changed a lot.'

The University of Manchester central services provide support to students with disabilities, and they would provide any necessary services relating to the use of this new technology.

18.5 Benefits

The main benefit of the project has been an increase in collegiality within the school. There is more friendliness and banter, students felt that 'staff are much more approachable' and staff felt it was a 'nicer place to work'. One staff member said 'I think it gives them a chance to see that we are human'. A student commented: 'It's a really good thing; it brings everyone together. It's not formal so it doesn't delineate between anyone.'

A sense of inclusion and involvement was another benefit: 'I went to the blog when my picture was up there, and automatically went to it again. I really like it.' Students felt that they were part of a community.

Another benefit was providing a platform for students to hear about educational news and events in the profession that they would not otherwise hear about. 'As academics we automatically get to hear about things like that. A lot of the students wouldn't necessarily hear about things unless we told them.'

It was intended that students would have positive experiences using the technology, because of the combination of useful educational content with the fun and informal way in which information was presented. This seems to be the case – with students saying they find it interesting and helpful. In one student's words: 'It keeps it sort of real, it's such a stressful course, when he makes it so light-hearted it makes you feel involved'. 'I must confess, I love the blog, I look at it once or twice a day,' said one student and another commented, 'Sometimes it can be exceptionally useful'.

Other beneficiaries are the alumni, who use the technology to organise reunions and to maintain a feeling of involvement with the School of Dentistry. The wider dentistry community has also seen positive outcomes from the project. Easier recruitment of staff was an additional benefit, for instance it encourages past staff members to come back by keeping them informed.

One student said of the School of Dentistry staff: 'They are embracing technology here. We've got blogs, we've got webcasts, we've got podcasts, weekly updates,

regular emails – it's effective communication. It's proving more and more beneficial to all the students and everyone involved. I think it can only get better.'

While it cannot be proved that it is entirely the result of the Dentistry@Manchester initiative, student satisfaction ratings have gone up dramatically, and the School of Dentistry has moved from the bottom of the Dentistry School ratings, to the top (National Students Survey (http://www.thestudentsurvey.com). Students indicated that they would have liked to have had this kind of interaction, communication and relationships with staff earlier in their studies.

18.6 Issues

The two members of staff who instigated the Dentistry@Manchester project spend between three and five hours per week on the project, which includes email updates and podcast creation as well as social software usage.

None of the technologies were adapted in any way. The University of Manchester central services provide support to students with disabilities, and provide any necessary services relating to technology. Both staff and students found the tools easy to use, and did not need any training.

Both staff and students expressed some concerns about using Facebook to communicate. Some staff members were worried that the use of social networking might adversely affect the staff–student professional relationship, one staff member commented, 'I've got one eye looking over my shoulder'.

Students feared that staff would see something that had been posted in a social context and feel that they needed to respond to it or take action. 'Facebook for a lot of students is a purely social thing, and it's a place where your professionalism ends,' commented one student. Another said: 'If you become a friend of a tutor, they can look at everything on your profile. You can't keep something private then. That's where the border is indistinguishable between social and personal.' Another commented: 'I know friends who have shut down their Facebook sites because of it.'

Staff noted that no problems with the social network have occurred so far: 'It doesn't seem to be causing any difficulties with the professional staff student relationship which needs to remain professional.' Use of the social software is optional for all staff and students.

18.7 Key lessons learned and the way forward

While the results of the project were not unexpected, staff felt that the degree of benefit was far higher than anticipated – 'I hadn't envisioned it would be quite as good as that.' The project was felt to be a great success. It has made staff and students happier, and helped people to communicate more.

The move to using new technologies is felt to be an important one. 'Technology has moved on and I don't think teaching methods have.' One staff member encouraged: 'It's easier to do things than you think. Don't be scared of technology; it can be done, it's easy, with very little knowledge.'

Allowing the project to change over time is very important, and the changes must be student-led: 'It will evolve as the students want it to.' In the future staff would like to get more authors involved in contributing to the blog to further build the sense of community.

18.8 Further resources

Dentistry @ Manchester Blog, http://dentistrymanchester.edublogs.org (Accessed 31 December 2008).

Podcasts, news, views and education from the Dental School Manchester http://www.cyberears.com/index.php/Show/audio/5394(Accessed 31 December 2008)

19 Digital Identity, Communication and Collaboration through Web 2.0

19.1 Fact box

Digital identity, communication and collaboration through Web 2.0	
The Advanced Multimedia Module, a final-year module which forms part of a BSc (Hons) degree in Professional Sound and Video Technology, takes a learner-centred approach that focuses on the general principles of social software and how it impacts on professionals in the broadcast industries.	
Tools	WordPress, Edublogs, Blogger, Wikispaces, Wetpaint, PBWiki were the primary tools and Delicious, Flickr, YouTube the secondary ones
Institution	Computing, Acoustics and Future Media, University of Salford
Contact	Helen Keegan, h.keegan@salford.ac.uk
Initiative	Final-year undergraduate module, BSc (Hons) degree in Professional Sound and Video Technology
Delivery	Blended (lectures/tutorials/practicals/online)
Duration	September to December 2007and September to December 2008
Participants	60 (30 per cohort in 2007 and 2008)

19.2 Social software tools

Several Web 2.0 tools have been used. They fall into the following categories.

Blogging allows users to load various media to a website which is then either made public or restricted. Fellow users can leave comments on the website giving the original authors feedback on their work. Websites which offer this service are WordPress (http://wordpress.com), Edublogs (http://edublogs.org) and Blogger (https://www.blogger.com/start).

Social websites or wikis offer a similar function to blogs but also allow users to edit each other's work. Thus a collaborative website is produced. Such sites are offered by Wetpaint http://www.wetpaint.com, Wikispaces http://www.wikispaces.com and PBWiki http://www.pbwiki.com.

Social bookmarking websites allow users to share their internet bookmarks. Delicious http://delicious.com is such a site.

Media sharing websites allow users to load their media files to be shared with others. Flickr http://www.flickr.com allows the sharing of digital images and YouTube http://uk.youtube.com allows the sharing of videos. Access is user defined.

Web conferencing is communication via the internet that allows audio and video to be combined into a single application. It is often used for meetings, seminars or lectures. Well known applications in this area are Discovere http://www.compued.com.au/conference/tour and Elluminate http://www.elluminate.com

Podcasting is the creation and distribution, via syndication, of audio and video files. Podcasts can be accessed on small mobile devices such as iPods and mobile phones. A free open source audio editing program used to create audio files is Audacity (http://audacity.sourceforge.net).

Really Simple Syndication (RSS) is a method of retrieving internet published material via a subscription rather than a search. Web services that offer this ability are Feedburner http://www.feedburner.com/fb/a/home and Google Reader http://www.google.com/help/reader/tour.html

Content mash-ups originated in the online music industry. They are composite works created by combining tracks from different artists. This has now spread to included many forms of digital media notably video. Flickr http://www.flickr.com/servicesoffers an API (application programming language) to allow users to use the Flickr content in a creative way to generate mash-ups.

19.3 Background and rationale

The nature of delivery of content on the web has changed markedly since the shift towards Web 2.0. Since the evolution of what is often called the 'read/write' web there have been dramatic increases in online social networking and democratisation of the internet, as evidenced by artists on the social networking site MySpace (www.myspace.com). Some have achieved commercial success due to their self-authored sites enabling them to reach a global audience through online social networking. Web 2.0 platforms such as YouTube and iTunes are having a huge impact on the broadcast industry and the boundaries between producers and consumers of audio and video are becoming increasingly blurred. Social networking sites such as MySpace, Friendster and Facebook enable individuals to connect easily to one another and share their work (eg audio and video) with a global audience. It is important that students who will be working in the broadcast industries understand the implications of this technology. It is increasingly common for employers to 'Google' potential candidates, and therefore it is also important that students have the skills and understanding to enable them to manage their own digital identity.

19.4 The initiative

Many students had taken modules where they learned to produce basic websites and multimedia programs. During this time they often showed their tutor their work and she often noticed content that could be problematic, eg from an employer's perspective. She realised that it would be beneficial for the learners to gain a deeper understanding of the social nature of the internet and to manage their digital identity.

This module was conceived to provide this understanding. It has a professional orientation: developing the learner's knowledge and understanding of multimedia in the age of Web 2.0 and bridging their sense of the divide between producers and consumers. The module covers a range of online multimedia collaboration tools, preparing the students for work in high tech environments where the ability to communicate and collaborate using new internet technologies is essential. The module is divided into two phases: digital identity and group research.

The first half of the module is largely blog-based. The students develop online CVs and work showcase sites, complete with matching business cards. Through the hands-on elements they explore issues of digital identity and the presentation of the

self online. Issues of copyright and licensing are covered with an emphasis on the Creative Commons (COMMONS, 2008).

In the second half of the module the students undertake wiki-based research projects on subjects that they choose themselves. They present these to one another from different labs using conferencing technology. After some initial reluctance towards web conferencing the students really began to enjoy being able to communicate with one another in this way.

In the case of both blogs and wikis students were given a brief introduction describing the use of each tool and then were asked to find three examples (relevant to their personal interests) of that tool in use. Various platforms were analysed through class discussion, identifying strengths and limitations. Students were then free to choose the blog and wiki platforms which they would work on.

Assessment is based on the blogs and the wikis produced.

19.5 Benefits

The module explores a range of technologies, preparing the students for work in environments where the ability to communicate and collaborate online is essential. By the end of the module they have developed their own digital presence (online CVs and work showcase) and have refined their skills in online communication and collaboration using blogs, wikis, podcasts and web conferencing. 'I thought the module was exciting, new and real-world,' said one student. Another commented: 'This module has inspired me to develop the blog and has made me look at the web in a different light in terms of creativity and gaining a foothold in the professional world.'

Evaluative feedback (JISC, 2007) from questionnaires, focus groups and interviews has been extremely positive, indicating that the students appreciate having autonomy and ownership of their work. They were free to choose their own platforms and to suggest content that was relevant to them as future professionals.

Students commented on the benefits of the blended approach, eg being able to participate remotely (via web conference) and asynchronously (via blogs). Also the work on 'My Digital Self' enabled them to learn more about one another's activities/interests away from the university. 'I thought the work on My Digital Self was excellent – I've now got a much clearer idea of how to present myself online. I also really liked doing RSS and the wiki – didn't know anything about these before.'

Many of the students have their own studios and already do a lot of production work and their dedication and intentions to carry on developing their sites as part of their future careers was really impressive. Some students have received offers of work as a result of their blogs and showcase sites.

By loosening the control through shifting the focus from the institution to the individual in a learner-centred approach, motivation and achievement have shown a marked improvement from prior cohorts.

The educator said: 'Time saved is difficult to measure but I'm inclined to say "no" from a staff perspective. Unlike modules that had been delivered before (eg Visual Studio, Flash) continuous developments in online platforms means that materials

need constant monitoring and updating. Tracking 30 student blogs is fairly time-consuming.'

19.6 Issues

By taking a platform-agnostic approach students could choose to work on platforms which they felt most comfortable with and this led to several being used. Some technical issues were then seen with web conferencing due to the university firewall and differences in the platforms. (eg PC/Mac, Vista, and certain browsers). Only two students did not have internet access at home so all work had to be done in university time. Some students initially struggled with blogging, as they found it too subjective and based upon opinion rather than fact.

As part of the work on digital identity students explored issues surrounding privacy and ethics which resulted in them becoming well informed and able to make their own choices in terms of online content and behaviour. They were not concerned about using open web-based systems but from an institutional perspective there may be concerns relating to the use of open systems which cannot be administered and controlled centrally.

It is difficult to say how things could have been done better. The 2007 cohort expressed a desire for more blogging and web conferencing so this was incorporated into the module delivery for 2008 but then some students expressed a preference for less blogging and web conferencing.

It was time-intensive from a tutor perspective.

19.7 Key lessons learned and the way forward

There has been considerable interest, both internally and externally, in institutional roll-out as a study skills module. The content would need to be modified since the current students have technical skills not present in the wider community but the core principles of developing and managing a digital identity are transferable across disciplines.

In terms of current delivery, the module is well-situated with a clear context (AV professions). The module is now being expanded to MSc level for delivery in September 2009.

Using open platforms allows students to take control of their work and fosters a sense of ownership. They feel that the work belongs to them and not to the institution. They often carry on using the software after the work has been assessed.

'I want to carry on with my website – I loved the Web 2.0 stuff – it was all new. This module has really opened up doors for everyone.'

19.8 Further resources

Creative Commons, http://en.wikipedia.org/wiki/Creative_Commons [online] (Accessed 27 December 2008).

JISC (2007) *Guidance on learner-centred evaluation* [online] http://www.jisc.ac.uk/whatwedo/programmes/programme_elearning_capital/evaluation/learnereval.aspx (Accessed 27 December 2008)

20 Social Networking: Connect-ing Students and Staff

20.1 Fact box

Social networking: Connect-ing students and staff	
Connect is a social networking site for the staff and students at the University of Westminster. The site is based on an open source social networking framework called Elgg, The primary goal of Connect is to facilitate the development of a 'closed' (university-only) social community within the university.	
Tool	Connect (based on Elgg, an open source framework for building social network sites)
Institution	University of Westminster, London
Contacts	Federica Oradini, oradinf@wmin.ac.uk Gunter Saunders, saundeg@wmin.ac.uk
Initiative	The Connect system is available to all subject areas and to all the students and staff, and also the students who are about the join the university
Duration	Since September 2007
Participants	About 5,000 students have used the site

20.2 Social software tools

Elgg (http://elgg.org) is an open source framework for building social networks. It provides a set of configurable elements, which can be used to build most of the features available in social networking sites. Some of these features include: user profile and preferences; blogging; forums; social bookmarking; and user notification.

Eduspaces (http://eduspaces.net) is an example of a social networking site in academia, and is based on Elgg.

Community@Brighton (http://community.brighton.ac.uk) is a social networking site for staff and students at the University of Brighton, and is also hosted on Elgg.

20.3 Background and rationale

A social networking site, called Connect, and powered by Elgg was set up for staff and students of University of Westminster in September 2007. It is linked to the university's authentication system, and is, therefore, available to anyone who has access rights to the university's computer systems. There is a link from the student's page on the university's site to Connect.

Although, the university has Blackboard, a Virtual Learning Environment (VLE), which has several student-centred tools such as blogs, wikis, there are no social networking tools, which could help bring together the university's community – especially students who are new to the university. Further, the discussion forums within the VLE are limited to the students within a particular module. There is no provision in the VLE to extend the discussions to a programme or to bring in students from several disciplines. The tutor moderates the discussion forums in a VLE, and, hence, the community space is not student-led. Whereas the VLE tools on

a module may not be accessible after the student moves to another module, the Connect system would be available throughout the student's association with the university.

The project team felt that Connect could benefit students before they arrive at the university – especially international students. After the student's arrival at the university, Connect could help them to find out about university clubs, committees, ask queries from fellow students (eg where to look for a flat, shared accommodation). The university is based within a busy metropolis and across multiple campus sites which necessitates having a university-wide system that would help combat the difficulties faced by students in developing a sense of community across the institution. The Connect team was also interested in examining the role of this site in learning as an 'informal learning space' outside the confines of the VLE, wherein students would form their own committees, set up personal blogs, and self-help study groups for discussions about course concepts.

20.4 The initiative

The Connect team did not spend a lot of time in deliberation about the choice of social networking framework or service to set up the social networking site. Elgg (http://www.elgg.org), a social networking framework, has been used in a similar initiative at University of Brighton. The Connect team had discussions with the Brighton team during the decision-making process. Elgg, being open source, was another reason why Connect team chose Elgg, so as to have access to the user and developer community. There was a significant elapsed time during the start-up phase (around five months); there were extensive consultations with stakeholders and committees in the university including the students union.

The Connect system provides a range of features typically associated with Web 2.0 systems including personal and community blogs, tagging, private and public communities, personal and community file storage, and social networking capability including full syndication support. The Connect team was keen to select only a limited number of features of Elgg for Connect, because they wanted to keep the system simple and easy to use.

Connect was set up and hosted on university's servers, and was integrated with the university's user-authentication system. The team ensured, with the help of their technical support colleagues, that the search engines could not find this site. . The university's marketing team were involved in the project and helped to design the home (welcome page) of Connect. Once the system was developed, the university's web manager helped to develop a policy for acceptable use of the system.

Connect is not linked to assessment. In fact, the team had emphasised early on in the initiative to staff and students that anything related to assessment should be in Blackboard (VLE). Some of the reasons were: Connect was perceived as a 'pilot' system, and it has not been given high priority by the technical support team for maintenance and backup. So while the backup of Blackboard and other systems is taken daily, Connect has a weekly backup.

The delays in consultation and some technical issues meant that it was not possible to launch Connect in the pre-arrival stage for students of the 2007/08 academic year. Therefore, the new students were not as involved with Connect as the team would have liked. Nevertheless, the team held events, with the help from the student union, during the induction week to promote the use of Connect: 'If the student union had

not been so keen ... we might not have done it.' The team did not offer face-to-face training for users. Instead, they provided hints and tips within Connect. The team developed short video guides for some key tasks and embedded them within Connect.

20.5 Benefits

Connect gave staff and students a safe (closed) environment in which to experiment with Web 2.0 technologies and to realise the potential of these technologies. Some of the students have expressed preference for having a clear separation between personal spaces such as Facebook, and the social spaces such as Connect within their academic life. The academic staff is also enthusiastic about the role of Connect, and especially in socialisation during the pre-arrival and induction phases.

Several communities have been set up on Connect, eg based around interests (films. cats, wine) or sports (football, cricket); or to seek feedback on a recent initiative of students union; and for strategy development (eg review of the library services; to seek feedback on proposals for re-structuring the information technology provisions within the university). Personal blogs on Connect are reflective contributions, or people who are seeking contacts, information, and solutions. Some staff members have discussed about current issues, or have given students tips to technical problems (eg firewall issues).

The team felt that there were several benefits of setting up an in-house social networking site. It enabled the team or the university to retain full control of the customisation and branding of the service. The team also felt it was beneficial to offer a single sign-on service to their users through a link with the university's authentication system. Single sign-on allowed everyone to know with whom they were communicating.

Using the open source framework allowed the team to select and customise the features they wanted, and to have support from the user and developer community of Elgg. Further, Elgg and, therefore, Connect gave users full control over the access restrictions for their contributions. The project team also had full access to statistics on the use of the service. This allowed the team to understand how the service was being used.

20.6 Issues

There was not a clear criterion for success at the start because the idea was to let the network grow organically and to observe its activities. The first impressions from students were not entirely favourable. They felt the concept was good but the system was not seen as very user friendly. However, one of the students in the focus group discussions mentioned that he liked the design, 'It was very clean ... a simple layout'. However, he then said that it was harder to use than Facebook as he could not find the features he needed.

The design of the site is such that it is not easy for students to advertise the course- or module-related communities they have created to fellow students. With the limited integration to Blackboard, it was not possible to obtain lists of the students involved in a course. These had to be recreated in Connect. This extra work was seen as a problem by both staff and students. Groups of students that did start communities with an academic focus were not able to maintain them successfully. Students

mentioned time constraints, pressures of deadlines, and having to go to a number of systems as some of the reasons for not being able to keep the momentum.

Data derived from evaluations by the Connect team suggests that students were keen to see their tutor's active in the Connect system and this is almost certainly a contributing factor in the lack of academic use of Connect by students. It is worth noting that, where academics have encouraged and worked with students to engage with Connect for academic purposes (eg the visual culture group), more significant contributions have been made.

The students union ran some discussion groups relating to clubs in Connect, but has now decided to operate on Facebook instead. Large numbers of students are already using Facebook accounts to manage their social life, so they feel that Facebook fits more naturally in their academic life too. Many social circles span the university boundaries – including those from other London colleges and friends from school. Students also felt that it would be helpful to have a broader network. 'Because we are in London, we don't always stick to our university.'

The Connect team has investigated the effectiveness of the system through surveys and focus groups with students and staff and have received useful feedback. The team feels that it would have been good to be able to respond more directly to users' needs as the project developed: 'We should be quicker at responding to users' needs.' With the minimal help that the Connect team received from the technical support team (due to some changes in administration) after the launch of Connect, it was not possible to get support to make changes and respond to end users' requirements and feedback.

20.7 Key lessons learned and the way forward

Connect has helped to trigger discussions in the university about the role of Web 2.0 technologies, and, in general about online model of teaching and learning: 'It [the initiative] was beneficial ... we gave the institution a chance to engage with an online movement ... it has opened up staff's eyes.'

The Connect team feels that involvement of key stakeholders, specifically the end users (students, in this case) is fundamental to the success of such an initiative: 'Involve the users from the beginning to the end.' 'Make them feel it's their tool.' It is also critical for the success of such an initiative to have the technical team's buy-in; this ensures regular maintenance, and gives the flexibility for quick response to users' requirements.

Although Connect has not been able to fully demonstrate its usefulness as an informal learning space as yet, it has made people aware of how such as system can help students to engage in informal learning outside the confines of the VLE and face-to-face class settings: 'I still think it's a good idea ... it could have made a big difference.' 'We had the potential to change user's perspectives of online tools for learning but have achieved only partial success.'

There is scepticism about the role of Connect: there are quite a few systems, and people are already overloaded and, in face-to-face settings, is there a need for both the VLE and Connect? 'Students and educators are using blogs and wikis in the Blackboard [VLE]; but it [VLE] can't facilitate community building, which Connect can.'

The university has launched a new service hosted by Google, and students can sign up for Google Apps. In the near future, the university might adopt Orkut (one of Google's tools for social networking), and it might be called 'Connect' within the university. The Connect team is planning to involve students in the design and development of widgets and applications within Google Apps, which will give them flexibility to design their own social spaces, and, thereby, raise the acceptance of the social networking sites among the student community.

20.8 Further resources

Oradini, F. and Saunders, G. (2008) 'Social networking: Connect-ing students and staff', *ALT Online Newsletter*, [online] July, http://newsletter.alt.ac.uk/e_article001142657.cfm (Accessed 3 January 2009).

Oradini, F. and Saunders, G. (2008) 'The use of social networking by students and staff in higher education', iLearning Forum, Paris. http://www.eife-l.org/publications/proceedings/ilf08/contributions/improving-quality-of-learning-with-technologies/Oradini_Saunders.pdf (Accessed 3 January 2009).

21 Google Earth: Practical Exercises in Geographic Information Science

21.1 Fact box

<table>
<tr><td colspan="2">Google Earth: Practical exercises in Geographic Information Science</td></tr>
<tr><td colspan="2">Students undertake a practical lab exercise using Google Earth. This exercise combines data from several sources to enable students to assess the visual impact of a proposed wind farm development close to the Lake District National Park. The aim of the exercise is to make students think about the implications of the source and quality of the underlying data, some of which is user-generated and where the source of the data may be unknown or anonymous.</td></tr>
<tr><td>Tools</td><td>Google Earth, ArcGIS (Geographic Information System)</td></tr>
<tr><td>Institution</td><td>University of Nottingham</td></tr>
<tr><td>Contact</td><td>Gary Priestnall, gary.priestnall@nottingham.ac.uk</td></tr>
<tr><td>Initiative</td><td>Undergraduate and MSc students studying geographic information science on Digital Earth, Mobile and Field GIS modules</td></tr>
<tr><td>Delivery</td><td>Blended, face-to-face, field trips</td></tr>
<tr><td>Duration</td><td>One year</td></tr>
<tr><td>Participants</td><td>45 students</td></tr>
</table>

21.2 Social software tools

Google Earth (http://earth.google.com) is a freely downloadable software application that allows viewing, navigation and other uses of high-resolution aerial and satellite imagery, photographs, 3D terrain, road and street names, astronomical maps and many other types of geographic data.

Navigation controls within the software allow the user to zoom, pan and reorient images or to change the perspective from which the image is viewed. Multiple images can be overlaid to provide augmented information about the imagery, eg weather charts overlaid on maps of a region.

Google Earth images may also be annotated with additional content such as place markers, regions (polygons), paths (lines) and 3D objects. Google provides some of this content, some of it comes from third-party organisations or it can be added by end-users themselves.

21.3 Background and rationale

Digital Earth is an optional geographic information (GI) science module for first year undergraduates developed by Gary Priestnall of the University of Nottingham's School of Geography. The course aims to raise awareness among students of digital GI in the public domain and it includes topics such as virtual globes (including Google Earth), neogeographies and mobile GI applications.

As part of the course students undertake a practical lab exercise using Google Earth. The exercise combines data from several sources to enable students to assess the visual impact of a proposed wind farm development close to the Lake District National Park. The exercise makes use of Google Earth's ability to create views onto virtual landscapes generated from a mix of real word and modelled data, in this case a model of the proposed wind farm. The exercise did not require students to use their own home equipment but they could, if they were interested, extend the exercise by using the software and the data at home.

21.4 The initiative

Dr Priestnall emphasises that the practical exercise is not about teaching geography or environmental issues *per se* but rather about teaching the practicalities of using the tools and allowing students to think about what are appropriate uses for such tools. It is getting them 'to think about what they're actually looking at' when confronted with computer-generated 3D visualisation, and the implications of the source and quality of the underlying data.

A concrete example of this involves students using Google Earth to extrude a polygon surrounding a (woodland) block to mimic the woodland having some height to it rather than being a flat photograph. This shows them the difference between an unmodified Google Earth view of the wind farm and a modified view that accounts for the woodland block.

Students see that using Google Earth like this 'could be a very powerful technique', but point out that it could be used in different ways: 'It could be used by a protest group to make the wind farm very visible or it could be used by another group to say, "No, you can't actually see it".'

In the coming year the plan is to include a fieldwork component in the exercise as part of a third year / MSc Course: Mobile and Field GIS. An already constructed wind farm will be modelled and students will be able to take their modelled views out into the countryside (using mobile devices such as tablet computers, with Google Earth installed) and compare them with real-world views. By extending the exercise in this way students will get an even deeper insight into the practicalities, strengths and weaknesses of these new technologies.

21.5 Benefits

The Digital Earth module engages students in how exciting a time it is for GI science. Although the course has only been running for one year, student feedback and anecdotal evidence from the practical sessions has been positive.

21.6 Issues

Although Dr Priestnall was able to put the Google Earth exercise together initially in three or four days, he does note that he is very experienced in integrating tools to create this type of exercise. Someone less technologically capable would face a learning curve and so would take correspondingly longer.

The exercise was introduced to students in a lecture and supported by a detailed handout describing the case study and giving step-by-step instructions. Even so there were a few parts of the exercise that were a bit 'fiddly' and so the lecturer was available to support students in the lab if necessary.

21.7 Key lessons learned and the way forward

Given that 'it's just as easy to stick a very bad map or model on the web as it is a good one', the 'message is for students to be aware that it is just as easy to put up dodgy stuff there as well as legitimate material'. Dr Priestnall says that it is very important to get students to think about the source and quality of the data they are using and to reflect on whether they are making appropriate use of it.

This is a general issue when dealing with data, not just for location-based applications, and is a particular problem with user-generated data where the source of the data may be unknown or anonymous. However, where many individuals are contributing similar or related data independently, the combined effect should be that problems of data accuracy would, at least in theory, be minimised.

'You can show that it is quite exciting as there are opportunities to study cultural geography in different ways by gathering information from crowds of people and seeing how patterns emerge and behaviours are modelled.'

Existing tools are now good enough platforms for this type of work. 'Academics need to embrace that and get the most out of it really and I think it's probably a good time to try and facilitate these sorts of exercise because people will be more used to uploading their photos and so on onto the web and spatially referencing them.'

There are also opportunities to send students out into the campus or more widely to gather their own data and process it as part of course exercises. For example, students could be asked what they were doing, or what they felt like when in a particular location. So, with user-generated data, 'you have this new data source where new geographies can appear which will differ from more conventional maps such as those from the OS (Ordnance Survey)'. This new data could be integrated with other data volunteered locally to place it in its wider context or to form part of a larger activity – across towns and cities or across different educational organisations, for example. These types of activity are a great way of enthusing students that 'geography is as important as it ever has been and coming into the public domain more and more'.

Finally, it is worth noting that the exercise has also been personally rewarding for Dr Priestnall: 'I really enjoyed it in terms of a practical exercise to complement my lectures. It's been one of the best things I've done in terms of teaching and learning and it has proved to be 'a great complement to the taught elements of the course.'

21.8 Further resources

The course description for Digital Earth is at http://tinyurl.com/9f7yfp

Rakshit, R. and Ogneva-Himmelberger, Y. (2008) 'Application of Virtual Globes in Education' Geography Compass, vol. 2, no. 6, pp. 1995–2010. This survey article covers Google Earth, NASA World Wind, Microsoft Virtual Earth and Skyline Globe and looks at existing teaching applications.

Richard, G.A., *Teaching with Google Earth*, http://tinyurl.com/9eu97r, [online] (Accessed 30 December 2008). This is an overview with tutorials on using Google Earth with links to five case studies of applications of Google Earth in geoscience education and instructions on how to replicate them.

Turner, A. (2006) *Introduction to Neogeography*, Sebastopol, CA, O'Reilly Media.

UCL Centre for Advanced Spatial Analysis, *MapTube*, [online]
http://www.maptube.org(Accessed 15 January 2009). MapTube is a free online
resource for viewing, sharing, mixing and creating mash-ups with maps.

22 Using Social Bookmarking: Tools for Finding Things Again

22.1 Fact box

Using social bookmarking: tools for finding things again	
TU120, a short Open University course, offers a structured journey through the world of information. Students are introduced to social bookmarking tools.	
Tools	Delicious, Furl and Simpy
Institution	The Open University
Contact	Juanita Foster-Jones[1], jff@aber.ac.uk
Initiative	TU120 Beyond Google: working with information online
Delivery	Mostly online, with interactive activities and opportunities to experiment with electronic resources
Duration	10-week part-time course
Participants	748

22.2 Social software tools

Bookmarking is the practice of saving the address of a website that you would like to visit in future on your computer. People save them as 'Favourites' on their computers. Social bookmarking involves saving bookmarks to a public website and 'tagging' them with keywords. Tagging a bookmark implies giving a descriptive term that makes it easier to find a favourite site in a long list of bookmarks. Users can see each other's tags and this can lead to material which you may not discover on your own. To create a collection of social bookmarks, you register with a social bookmarking site, which lets you store bookmarks, add tags of your choice, and designate individual bookmarks as public or private.

Examples of social bookmarking sites are: Delicious: (www.delicious.com), Furl (www.furl.net) and Simpy (www.simpy.com).

22.3 Background and rationale

'TU120 Beyond Google: working with information online' offers a structured journey through the world of information. The course helps to recognise when there is a need to look for information; search for it systematically; look at it critically; organise it efficiently; and present it clearly. Study is completely online, with interactive activities and opportunities to experiment with electronic resources.

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[1] Ms. Foster-Jones moved to Aberystwyth in January 2009. She can be reached at the email given in this case study.

22.4 The initiative

Students are introduced to social bookmarking tools which they are asked to evaluate with the help of a checklist. Some of the criteria used are: ability to upload existing bookmarks (favourites); ability to add a description; cache/save a copy of the web page; have private and public links; send links to others. Students are asked to vote on which they prefer based on their evaluations and Delicious is the most popular. One of the course authors, Juanita Foster-Jones, pointed out that Delicious is favoured because it has a wide community of users and it has applications that allow you to add your Delicious bookmarks to other tools such as Facebook, blogs and websites. As a part of a formal assessment, students are asked to include screenshots to show how they have been using social bookmarking site(s) for storing and sharing resources.

22.5 Benefits

Students and educators who are mobile and may not have access to one computer while travelling, can access their bookmarks from anywhere as long as they have access to the internet. Students on short courses or those changing jobs or moving to other educational institutions can keep track of the resources they come across and save their bookmarks on these social bookmarking sites and have access to their bookmarks from anywhere, regardless of where they work or study. Mrs Foster-Jones says: 'This is an online course and we point them to various resources on the web; the students can save these as bookmarks for their future use when they no longer have access to the course website; but students have said that they are bookmarking sites where they are using hot-desks at work, or for sharing resources in a team.'

Social bookmarking enables the distribution of reference lists, bibliographies, papers, and other resources among peers or students. With social bookmarking, it has now become less important to remember where the information was found and more important to know how to find it. One of the students on this course said: 'All my students are Deliciousing away now! … we collaborate on things together too. Saves email traffic too, because we can just add to each other's favourites.'

22.6 Issues

The only issue was the initial hesitation of the students to share their bookmarks. They were concerned about 'how much am I giving away?' but as they got more familiar with the tools they have realised the advantages of tagging, being able to access resources and bookmarks of others, find people with similar interests through the bookmarks, and they realised the potential of the community around social bookmarking.

Away from the course, students have started using it for their activities at work and home, and some of them have recommended these tools to family and friends. Ms Foster-Jones said: 'I have to be honest that my worst nightmare is that these sites might disappear from the face of the earth … because I have put so much into my social bookmarks … but one can actually export bookmarks and re-import in the browser; and there are social bookmarking tools now that are also online reference managers, eg Zotero or Cite-u-like.'

22.7 Key lessons learned and the way forward

Students should be made aware of the choice of social software tools (bookmarking in this case), if possible, and also some criteria for evaluation, as in TU120. The evaluation criteria help them to understand the potential of the tools and to make choices based on their requirements. Some students who feel that they will be using one computer may not use these tools – as it was observed on this course. It was also observed that not all students could specify meaningful tags to start with and gradually they learn to categorise the digital resources in more than one category using a variety of tags.

In response to the question about whether such tools should be integrated with the institution's VLE, Ms Foster-Jones replied: 'Taking a pragmatic approach: by using Web 2.0 tools, students will have access to Delicious and Facebook as long as these tools are there but students won't have access to the VLE when they leave the institution. Web 2.0 tools have a strong user community, and applications to integrate these tools within web pages are continuously being developed, I can access my tags from the sidebar in Firefox – so I don't have to go to Delicious anymore; I have access to my bookmarks there and then.'

22.8 Further resources

Course description of TU120 Beyond Google: working with information online available at http://tinyurl.com/5a75vt (Accessed 14 January 2009).

Fichter, D. (2004) Tools for finding things again' *Online*, vol. 28, no. 5, pp. 52–6.

Gilbertson, S. (2006) 'Social bookmarking showdown', *Wired*, [online], http://www.wired.com/techbiz/it/news/2006/11/72070 (Accessed 6 December 2008).

Roush, W. (2005) 'Tagging is it. Social bookmarking emerges as a wiser way to navigate the web', *Technology Review*, vol. 108, no. 6, pp. 21-22

Junaita Foster-Jones, Bookmarks related to Social bookmarking on Delicious available at http://delicious.com/jfj24/social_bookmarking (Accessed 28 January 2009).

23 Student Engagement: Discussion Forums and Web Conferencing

23.1 Fact box

Student engagement: Discussion forums and web conferencing	
Discussion forums and web conferencing are asynchronous and synchronous means, respectively, for supporting student engagement and learning. This case study captures the experiences of two educators at the Open University who use FirstClass (discussion forum) and Elluminate (web conferencing) to support distance-education students.	
Tools	Discussion forums (FirstClass Conference); other tools include web conferencing (Elluminate), instant messaging, blogs, photo sharing, plus more 'traditional' materials such as print, static web pages, DVD video, CD-ROM supplied software
Institution	The Open University
Contact	Jon Rosewell, J.P.Rosewell@open.ac.uk Frances Chetwynd, fdc2@tutor.open.ac.uk
Initiative	Various courses in the Faculty of Mathematics, Computing and Technology
Delivery	Distance education, ranging from fully online to print-centred courses
Duration	The institution has been using conference/forum-based tools for more than 20 years
Participants	Courses ranging from 100 to 1400 students per presentation. Overall use of forums is much larger: eg 479,000 messages in the last year; 156,000 students using the StudentHome website. Individual forums or conferences may have as few as six participants (eg some Elluminate sessions)

23.2 Social software tools

FirstClass (http://www.firstclass.com) is a commercial software suite that supports collaboration through conferences (forums), email, instant messaging and other features. FirstClass conferences enable people to discuss common topics in text-based discussion threads much like Usenet's newsgroups (http://en.wikipedia.org/wiki/USENET) but with access controlled by the institution's course teams or systems administrators. FirstClass may be accessed through a standard web browser or through a FirstClass desktop application.

Elluminate (www.elluminate.com) is also a commercial software suite that supports collaboration. However, in contrast to the text- and file-based conferences offered by FirstClass, Elluminate conferences are aimed at live, multimedia interaction. To support this interaction, Elluminate provides features such as audio, video,

whiteboard, instant messaging and slide shows. Elluminate is accessed through a small Java application downloaded and installed on the user's computer and so can run on many platforms. A broadband internet connection is recommended, especially when using video sharing or sharing other large files.

23.3 Background and rationale

The Open University (OU) has been using online forums in one form or another for over 20 years with forums coming in all shapes and sizes from a handful of students to many hundreds of students and with individual courses having one or many different forums.

Forums do play a key role in many courses. For example, in some courses the use of a forum is compulsory because part of the coursework involves group collaboration through the forum. Some courses also operate tutor group forums where a tutor gives hints to his or her allocated students in advance of an assignment or works through the assignment answers afterwards.

In other courses, particularly a number of short courses introduced recently by the university, forums are important because there is no tutor support, and so forums (and other tools) are essential for facilitating peer support. On the university's T189 Digital photography: creating and sharing better images course, for example, a number of forums are used to group discussions around different topics, such as using the course software and advanced photography tips. These forums complement a photo-sharing website as they are places for longer, more detailed discussions in contrast to the photo-sharing site, which is aimed at allowing students to make short comments on each other's work.

There are also many courses where forums play a less central role. In these cases they might be used as a general café where students can drop in and discuss a course or study-related topics or ask course-specific questions. One advantage is that in a larger or more active forum students 'can ask questions and get a pretty quick response – [so they] don't have to wait for tutor to respond to email or phone call,' although it should be noted that, as happens in internet discussion forums, a quality response is not guaranteed.

Many courses also have a parallel forum where members of the course team can discuss aspects of the course or course assignments or ask for advice on how to deal with specific student-related issues. In an organisation such as the OU where tutors are distributed throughout the UK and beyond this has the added benefit of helping tutors feel less isolated than they might otherwise be.

Where Forums rarely have a 'live' aspect the emphasis of Elluminate is very much on live interaction. Elluminate supports this through voice, text chat, slide shows and other tools. This set of capabilities enables tutors to run virtual lessons although there are important differences between the two modes of delivery.

23.4 The initiative

The use of Elluminate has been strongly driven by the distance-education needs of the university. On many courses students and tutors simply cannot meet for face-to-face sessions. Whereas in the past tutors may have had a series of phone calls with each of their students individually Elluminate offers the possibility of bringing them all together.

The modes of interaction are also much richer than a phone call could offer – for example both tutors and students have access to a virtual whiteboard where they can share ideas and questions. One tutor used this in a session based around revision questions on a previous year's exam paper: 'We went through [the questions] on the whiteboard together and they can save a copy of what they've done [to refer to later] … it's not obviously tailored to each individual but they can ask questions and they can write on the whiteboard themselves.'

The OU experience with Elluminate is relatively new, and the university is just beginning to roll it out to replace its existing live conferencing facility. but it does seem to offer many new possibilities over those offered by forums and other more traditional communication tools: 'With Elluminate I hadn't thought of it as something that I could use to run additional sessions for students and certainly I had a student this year who was thrilled because she can't go to tutorials, she'd never met another student or spoken to another student and it was a great bonus for her.'

23.5 Benefits

Forums provide a means for students and staff to interact remotely and at times of their own choosing. Their many-to-many nature means that anyone can contribute, read and benefit from [historic] discussions held on the forums.

By consistently using FirstClass forums across its range of courses, the OU enables staff and students to build up their confidence and skills over the years they are with the institution. By providing these shared spaces where everyone can come together, 'students feel less isolated, [they] can get to know people [they] may never have met if following the same degree programme'. Given the distance-learning nature of OU courses this enables people with shared interests to come together when they might otherwise never have met.

Like forums, Elluminate also helps bring students and staff together as discussed above. This reduces the feeling of isolation that can affect distance learners. It also enables tutors to work more effectively with their student groups. 'If I prepared one thing for three people and ran it over 40 minutes that was better than preparing three ten-minute things for each person,' observes one tutor.

Although Elluminate offers a wide range of quite advanced features it is still possible to deliver very effective sessions using a few basic features. One tutor who is just starting out with Elluminate comments: 'You can run good tutorials very simply which is one of its bonuses I think. So although it does lots and lots of very fancy things you don't need all of that so you could use it very effectively with minimal training, using just the minimum facilities on it.'

23.6 Issues

Moderation is an important consideration when running forums. The role of moderator involves pointing students at relevant information, ensuring the conference 'flows' and dealing with difficult behaviour. One tutor cites examples of common problems: '[Some] students will sail as close to the wind as possible when asking about assignment questions and there are one or two who want to use it to moan about the university or about the course or their tutor and this can ruin it for the other students … [But] students don't want their hard work on an assignment question being ruined by other students posting an answer and having that question voided.'

Moderators (and tutors) can help the 'flow' in a couple of ways. First, by not jumping into the debate too soon. Moderators are seen as 'authorities' and their intervention can kill further discussion. One tutor notes: '[In] forums there's a skill in providing students an answer but trying to engender help from others. Not answering the question so quickly that other students don't join in but also not leaving it long enough so that the students feel ignored.' Second, by setting an appropriate tone for the forum. Here moderators can help by being encouraging and by avoiding forum postings that could be seen as being abrupt or inflammatory.

To help make moderators effective in their role the OU has also developed a short tutor moderator's course where would-be moderators practise a range of moderation skills with other course participants.

Use of the new technologies offered by Elluminate also brings new issues. For example, it can be tiring for the tutor to run an Elluminate session because they don't have the visual clues you get in a face-to-face session: 'So if you say something in a tutorial or you write something on the board you can just say "John, you're looking confused, did you not understand that?" or you can see whether everyone's writing and you don't have all of that.' Although there are some feedback mechanisms, eg people can put their [virtual] hand up if they want to speak, a lot more falls on the tutor having to manage that. This problem is compounded by the tendency on some students' part to like being lectured to rather than being interactive: 'In that situation it's easier for them to get away with it. They like you to lecture them in silence and let you do all the talking.'

A large session could be very difficult to handle and this is something individual tutors will have to experiment with. However in tutors' experience 'students are quite reticent' and 'pretty well-behaved'. Furthermore, Elluminate offers those running sessions various access settings to enable them to control what features students can use in any particular session. 'The university is just getting going with this; down the line you might get some badly behaved people.'

23.7 Key lessons learned and the way forward

Aside from courses where forum use is compulsory (eg due to the nature of the course learning activities) participation commonly follows a 'Rule of thirds' (described by Robin Mason) whereby one-third of participants make many postings, one-third of participants make few postings and the remaining third either only read postings or do not participate at all. This seems to be the case regardless of the size or focus of the forum in question.

'Flaming', where someone posts an insulting or hostile message on a forum, also occurs from time to time, but one tutor comments positively: 'A little bit of flaming [occurs] but mostly to be fair students (who moan) are usually told to go away. Students who are enjoying the course don't want it ruined for them by students perpetually moaning about it. Mostly students will ignore students complaining about the course.'

To address problems of fatigue when using Elluminate one tutor 'made the sessions for one hour, it's quite tiring for the tutor actually, especially when you're learning it yourself, and offered them twice. Not everybody came anyway but that meant that the number of people was reduced which was a lot easier. … I think you need to have a clear idea of what your aim for the tutorial is, which you need in face to face

anyway, and then tailor what you do to achieving that aim. It's no good thinking it's the same as face to face because it isn't.'

One tutor sums up the experience as follows: 'I think that you just have to give these things time, use them and try and build up experience and expertise and disseminate this expertise.'

23.8 Further resources

Amundsen, C. and Sohbay, E. (2008) 'The untapped learning potential of CMC in higher education', *Handbook of Research on Computer Mediated Communication*, edited by Kelsey, S. and St.Amant, K., Information Science Reference; also available online at http://tinyurl.com/a7oyz4 (Accessed 22 December 2008). This paper describes two case studies of FirstClass conferencing from the instructor and student perspective.

Carbonaro, M., King, S., Taylor, E., Satzinger, F., Snart, F. and Drummond, J. (2008) 'Integration of e-learning technologies in an interprofessional health science course' *Medical Teacher*, vol. 30, no. 1, pp. 25–33. This is a case study describing the effects of changing from a small group face-to-face classroom setting to a blended learning environment that included use of Elluminate.

The 'Rule of thirds' was first put forward by Robin Mason and referenced in http://cands.open.ac.uk/?p=1395 (Accessed 14 January 2009). This is a talk on 'Equitability and dominance in online forums' which looks at patterns of posting on a wide selection of OU forums. Slides (but not audio) are available at http://www.slideshare.net/J.P.Rosewell/equitability-and-dominance-in-online-forums-an-ecological-approach-presentation (Accessed 14 January 2009)

24 Supporting a Group of Distance-learning Students on Skypecast

24.1 Fact box

Supporting a group of distance-learning students on Skypecast

Skypecast is a Skype feature that allows moderated audio and chat discussions for up to 100 users. Skypecast has been used on the distance-learning T216 Cisco networking course to demonstrate network router and switch configuration exercises.

Tools	Skype and Skypecast
Institution	The Open University
Contact	Andrew Smith, a.smith@open.ac.uk
Initiative	T216 Cisco networking
Delivery	Blended, distance learning, online, limited face-to-face
Duration	2-3 years
Participants	30 distance-learning students

24.2 Social software tools

Skype (www.skype.com) is a freely available software application that allows free audio and video calls and text chats between registered Skype users anywhere in the world. Skype also supports paid services, such as low-cost calls to landlines and mobiles (including cheap international calls), voice mail and call forwarding. Skype has been available since 2003 and has over 300 million registered accounts.

One of the attractions of Skype compared with similar applications is its pervasiveness. The application is available for Windows, Mac OS X and Linux users as well as on many models of mobile device and even Sony's PSP games console. All communications occur over a standard internet connection.

Skype is peer-to-peer software. There is no centralised application or directory of users; instead information is distributed throughout Skype users' computers.

24.3 Background and rationale

The Cisco networking course is a course that requires its students to develop practical skills, and to this end there are four day schools to help students learn how to configure routers and switches. It was felt that any extra practical support would be invaluable for students.

Skypecast is a Skype feature that allows moderated audio and chat discussions for up to 100 users. Skypecast has been used as part of the distance-learning T216 Cisco networking course.

24.4 The initiative

Andrew Smith who is a tutor on T216 has run Skypecast sessions for groups of 30 or so students at a time. In these sessions, he has led his students through 40 minutes of pre-planned network router and switch configuration exercises using live equipment through an application (NetLab+) running separately from Skype. This virtual class allows students to see the results and problems of specific configurations and to reflect on them.

The tutor uses audio to lead the session while at the same time students interact using Skype's chat facility. Although Skypecast allows the session leader to let other people speak, in practice this became unmanageable – the quality of the audio degraded quite badly.

Instead students use the chat facility to make comments, to ask questions, or to answer each other's questions. Two colleagues also joined the session and intervened in the chat where necessary – not so much as moderators, but rather as co-facilitators helping the flow of the process – allowing the tutor to concentrate on the scenarios. The overall combination of contributors led to a very dynamic process.

The audio, chat and NetLab+ sessions are all recorded, and after some minor clean-ups are made available to the students. This enables them to work through the sessions, even if they were not able to participate the first time.

Mr Smith already has plans to run these sessions on a larger scale and also to look at different scenarios and populations, eg to establish how younger students would deal with this type of interaction and to explore different learning scenarios. The two colleagues who joined the sessions will also run their own sessions.

24.5 Benefits

The ability to bring students together in a group exercise is very useful for a distance-learning organisation such as The Open University. Students can observe what is going on; they can participate in configuration exercises and they are able to demonstrate their understanding in the chat facility.

The tutor can see this and go back over a point or describe how it would apply in a different context if necessary. Fellow students can also correct each other's misunderstandings quite quickly via chat.

For some students these sessions have helped fill in the gaps in their knowledge – Open University students are often isolated and getting acknowledgement that they're working along the right lines helps. This 'activity is certainly not hindering them,' says Mr Smith, who has noted an improvement in student assignments since introducing these sessions.

24.6 Issues

These sessions place extra effort on the tutor but this has been offset by spending less time in phone calls or on other activities as a result. However, gathering 30+ people into a Skypecast has not always been easy. 'Some students haven't had either the technology or the wherewithal' to join and sometimes there are technical issues that prevent them, eg with organisational firewalls. (Some educational establishments have been known to block Skype or restrict access to it, so the IT department should be consulted before embarking on using Skype.)

One lesson learned over the years has been to allow time before each session to do a dry run where students check everything is working. This has been successful in getting more people into the session at the start, although there will still be some who do not try things until the last minute.

Another issue is that quality of service is not guaranteed with Skype; sometimes it has been very reliable, but at other times it has been easier for the tutor to restart the Skypecast.

Skype's recent announcement that they were withdrawing the Skypecast facility has left Mr Smith looking at alternative solutions such as Elluminate (www.elluminate.com) and Asterix (www.asterisk.org) to carry on his success.

24.7 Key lessons learned and the way forward[2]

Mr Smith notes that patience is useful for the educators. 'Make no assumptions – you have got to tell the student everything that they're going to be doing' step by step – including registration, set-up, login, doing a dry run, joining the Skypecast. Aside from helping the student participate, he notes that this extra interaction helps build more of a relationship with the student than might otherwise be possible in distance education.

Finally Mr Smith notes: 'It's an excellent leveller, it doesn't matter who the person is on the other end, how great or not they are, how techie or how not so they are, they can all participate. I get the impression it's non-threatening, a lot of people could become used to Skype or Skype-like technology and this is potentially the way forward in delivering skills to a distributed population. It doesn't matter where they are, even what time zone they're in.'

24.8 Further resources

'Bringing Composers into classrooms through Skype' [online] http://campustechnology.com/articles/66727 (Accessed 14 January 2009). A short news article on augmenting music teaching using Skype.

Course description of T216 Cisco networking available at http://www3.open.ac.uk/courses/bin/p12.dll?C01T216.

Klock, C. and Gomes Rde, P. (2008) 'Web conferencing systems: Skype and MSN in telepathology', *Diagnostic Pathology*, July 15, vol.3, Suppl 1, p. S13. This paper describes a similar application in the field of pathology.

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[2] Skype have recently withdrawn Skypecast from active service for the immediate future. However, we hope that the experiences captured in the case study will help to inform web- and video-conferencing initiatives.

25 Using Twitter to Support Students and Their Projects

25.1 Fact box

Using Twitter to support students and their projects

A group of students at the University of Portsmouth have used Twitter and a wiki to help them work more closely with their supervisor and with each other while undertaking their project work. This case study discusses their use of Twitter.

Tools	Twitter
Institution	University of Portsmouth
Contact	Manish Malik, manish.malik@port.ac.uk
Initiative	Support for students while they are doing projects which last for three to four months
Delivery	Online using Twitter and a wiki
Duration	Since early 2008
Participants	Students doing projects in the Electronic and Computer Engineering Department

25.2 Social software tools

Twitter (www.twitter.com) is a free service that allows groups of people to keep in contact through the internet or via mobile phone by sending short updates (text messages) known as 'tweets'. Each update consists of a maximum of 140 characters in response to the question 'What are you doing?'

Twitter users may choose to send updates to a specific person, a group of friends or to everyone via a 'public timeline'. Every Twitter user also has a profile page where their tweets are displayed

By choosing to 'follow' someone, a Twitter user can automatically keep track of their updates and so find out what they are doing. Updates can be read on web pages, through RSS and through instant messaging as SMS messages.

Twitter supports an application programming interface (API) and a number of add-on applications have been developed using this, eg to read updates on other social networking sites such as Facebook.

A wiki is a set of web pages whose content may be extended or modified by a group of registered users. Wikis are often used as spaces where users may collaborate to work on some shared project or task or to create some shared description or understanding of a set of topics.

Using a simplified mark-up language makes wikis more accessible than using standard HTML files. Support for page versioning means that changes can be rolled back and it also allows the evolution of a page to be tracked over time.

25.3 Background and rationale

A group of students at the University of Portsmouth have used Twitter and a wiki to help them work more closely with their supervisor and with each other while undertaking their project work.

Use of Twitter started early in 2008 and is the idea of Manish Malik, a Senior Lecturer in Portsmouth's Electronic and Computer Engineering Department. His aim was to create an informal environment in which he could communicate with his students and they could communicate among themselves. By doing this he hoped that his students would be more open about any difficulties they faced and could also mutually support each other when they faced common challenges.

Each student also had their own wiki space where they were required to record their project progress, where they could upload documents for review and where students could brainstorm and refine their project definitions. Mr Malik, as their supervisor, was also able to edit this wiki space to add his own comments and suggestions.

Where the wiki was used for formal, detailed and persistent exchanges of information, Twitter was used for informal, short and ephemeral exchanges. This combination of electronic communications, supplemented by the occasional email, has now replaced twice weekly face-to-face meetings.

25.4 The initiative

Mr Malik feels that it is important to give students some guidance when starting out. In this case an introductory presentation showed them how Twitter can be used before they were asked to use it. This presentation was based around several scenarios, eg a question from a student that set the scene, and then showed how other students helped to solve the problem.

With familiar scenarios, everyone could understand that using Twitter was for their own benefit and they would use it. For example, the lecturer cites one of the real interactions that occurred: 'A student posted "am stuck with this modem not working", another finds that he has used the same modem and suggests a few things to try. I also stepped in to help. With so many suggestions the problem got solved quickly. Others see this happening and the community feelings grow and they join in too.'

The success of this initial work has encouraged the lecturer and his colleagues to explore new applications for Twitter. Recently he has begun to use it with a group of students for whose pastoral care he is responsible. For example, posting links to items on student life or guiding students towards useful university services with the aim of encouraging them to use Twitter regularly.

But he cautions that differences between these applications could necessitate differences in people's approaches to using Twitter. For example, where student projects last three or four months, the pastoral care role can last several years and it is not yet clear how best to support this longer term relationship.

25.5 Benefits

Student projects are a concentrated effort over three to four months. Twitter helps supervisors get more from their students, and the project quality improves because both the supervisor and the students help each other more.

Twitter '[removes] the boundaries between you and your student – it's giving you a more informal "chit-chat" environment – 140 characters is no effort communication so they're willing to do that'. The lecturer also notes: 'Not only can you create this community and help them informally you can also understand or get into what their way of working is.' This insight gives further help in determining when and how to help them.

25.6 Issues

Early on in using Twitter there were problems in the service's availability. This meant that messages could not be sent. However, this problem has not been experienced subsequently although availability issues are something users of any web service should be aware of.

Other issues to consider are privacy and data protection. By default all Twitter messages are available to any Twitter user, although messages may be private. Mr Malik feels that here it is important not to be too restrictive lest the formation of the community and subsequent communication be stifled. 'If you lock your communications then you're locking yourself out from the rest of the world. That might affect the group dynamics or even creation of the group initially.' For sensitive subjects other channels may be preferable.

25.7 Key lessons learned and the way forward

One of the key messages from this scenario is that the supervisor role changes from being didactic to being facilitative. Mr Malik notes: 'It [the role] changes dramatically so I'm no longer dictating things as if I'm telling them in the classroom, saying this is what is good … I'm doing that direction thing on Twitter as well; however, it's more informal and it's more "OK I'm here to help".'

Ongoing communication also gives you an insight into the student's behaviour over time so you can adjust your interaction over time. Although using Twitter requires work the benefits outweigh the time spent.

25.8 Further resources

'NYU professor stifles blogging, Twittering by journalism student' http://tinyurl.com/4o4kuj [online] (Accessed 14 January 2009). This article discusses a US case of the live use of Twitter in the classroom and its relation to privacy.

 Skiba, D.J. (2008) 'Nursing education 2.0: Twitter and tweets', *Nursing Education Perspectives*, March/April, vol.29, no.2. This is a short survey article describing several case studies of Twitter in academia.

Young, J.R. (2008) 'Forget email: new messaging service has students and professors atwitter', *Chronicle of Higher Education*, vol. 54, no. 25, p. A15. This paper discusses Twitter and provides a number of examples of its use in universities.

26 Using Facebook to Obtain Student Feedback

26.1 Fact box

Using Facebook to obtain student feedback

In 2008, as part of a wider initiative to improve the student experience, Royal Holloway embarked upon a £1.3 million project to develop a new learning space in one of their libraries. At the suggestion of the space developers, and as part of a wider consultation, Royal Holloway created a Facebook group, Love your library, and invited students to join and comment on what they liked and what they hated about the existing library space.

Tools	Facebook, social software:
Institution	Royal Holloway University of London
Contact	John Tuck, john.tuck@rhul.ac.uk
Initiative	Facebook group to determine users' views on the library space
Delivery	Online
Duration	Seven weeks in 2008
Participants	About 200 self-selecting students

26.2 Social software tools

Facebook (http://www.facebook.com) is a free-to-join website that allows members to network with their friends or in member-created groups (eg for members living in a particular city or having shared causes or interests or belonging to specific organisations). The site is operated on a commercial basis, and generates its revenues from advertising to members. Facebook was founded in 2004 and has over 130 million active members worldwide.

Facebook features include: profiles which allow members to share their photos and other personal details; walls which allow (text) messages, links (URLs) and files (eg photos, videos, music) to be shared between members and support discussion between members; Status which allows members to let others know what they are currently doing; and applications which allow the basic Facebook features to be augmented with additional features provided by third-party application developers.

26.3 Background and rationale

In 2008, as part of a wider initiative to improve the student experience, Royal Holloway embarked upon a £1.3 million project to develop a new learning space in one of their libraries. At the suggestion of the space developers, and as part of a wider consultation, Royal Holloway created a Facebook group, Love your library, and invited students to join and comment on what they liked and what they hated about the existing library space.

It was felt that giving students the opportunity to use a social network tool that they were familiar with might produce more realistic opinions than a traditional

questionnaire written by the library staff. It was also possible that students would have ideas and views that the library staff had not considered.

26.4 The initiative

The Facebook group was promoted in various ways across campus and with a link on the library website (http://www.rhul.ac.uk/loveyourlibrary). Word spread and within 24 hours of launching the group many responses had been received. Group membership grew to 193 very quickly, several discussion subtopics were created within the main group, and during the seven-week consultation period there were 49 comments and 45 posts on the group wall.

A wide range of comments was received; some were quite constructive, others were more general comments. In several cases when a discussion thread was started others would simply add their agreement. However, from time to time a student would disagree with the direction of a thread, put forward a different position or counterargument and a debate would start.

An example of the type of issue that emerged came in a student-created 'Café in the library, yes or no' discussion topic that considered whether including a café in the new space was a good idea. A fair number of students commented against this idea. However a deeper analysis of the total feedback after the consultation period showed that comments against a café in the library represented less than 10% of overall opinion or total feedback. However the developers did take this and other feedback into account, by creating a scaled-down, less dominant refreshment space in the library than might otherwise have been built.

Another example of how feedback was used related to heating and ventilation. Just over 25% of students commented on these and so a considerable amount of money – somewhere around 10% of the budget – was spent on trying to improve these aspects, money which might not have otherwise been spent in this way.

The Facebook group is still open (as at December 2008) so people can continue to view others' comments and comment on the changes now that the redevelopment is complete. This could represent an opportunity for gathering further feedback on whether the redevelopment has been successful.

26.5 Benefits

Facebook offers a very open-ended way of consulting people and so can produce interesting or unanticipated points of view that other approaches may not pick up. 'When you start structuring questionnaires the tendency is to ask the questions you want to ask and get the answers to those questions rather than just letting people say what they want to say,' says Les Watson, Director of Information Services at Royal Holloway at the time.

It was also felt that by using Facebook the consultation would perhaps reach students who may not normally have got involved in giving feedback. The virtual nature of the site also results in a different atmosphere from a focus group and differences of opinion may emerge more readily.

26.6 Issues

It can be a temptation for those involved in managing the consultation to wade into the (student) discussion. However, Mr Watson also says: 'My response was to say

let's not intervene, let it take its course. Now that's quite difficult to do if the discussion's not meeting your expectation of what you think the project's going to be about. But I think you have to do that really. If, at the end of the day, you want to do something different that people didn't suggest in Facebook conversations I think you have to justify it.'

As noted above, Facebook also probably brings in a different set of participants than a focus group or questionnaire would. This means that it can exclude people from participation, for example those who are maybe not active computer users. The key here is to acknowledge during data analysis that Facebook-generated feedback represent one specific part of the student body.

26.7 Key lessons learned and the way forward

Facebook and similar sites are places where students go to have social interactions. Mr Watson comments: 'I think the level of intervention of just creating a group and just standing back and seeing what happens is about right.'

There are dangers if the group is seen as too 'official', eg if it is university-branded, and it will be less effective if it looks like a 'Big Brother' type of thing or if somehow the institution looks as if it is manipulating the discussion. However, it can be a temptation for the institution's members of staff to contribute to the discussion, and this risks running counter to institutional policy. In particular this can be the case when members of staff are also students of the same institution and this can raise management issues.

Mr Watson notes that the key to success is attitude: 'I think the attitude has to be "We'll take whatever they say" and I wouldn't change that. You know I was a bit dismayed when they said, "No café in the library" but you have to let them say it.'

26.8 Further resources

Eberhardt, D.M. (2008) 'Facing up to facebook', *About Campus*, vol. 12, no. 4, pp. 18–26. This is a primer for educators on social networking sites with a focus on the positive and negative aspects for student interaction and learning. It lists advice for educators looking to promote student learning and development through social networking.

Facebook statistics at: http://www.facebook.com/press/info.php?statistics (Accessed 14 December 2008).

Hargittai, E. (2007) 'Whose space? Differences among users and non-users of social network sites', *Journal of Computer-Mediated Communication*, vol. 13, no. 1, pp.276–97 [online]. http://jcmc.indiana.edu/vol13/issue1/hargittai.html (Accessed 28 January 2009). This is a study on the use of social networking sites by young adults (focusing on 18–19 year-old US college students).

Heiberger, G. and Harper, R. (2008) 'Have you Facebooked Astin lately? Using technology to increase student involvement', *New Directions for Student Services*, Volume 2008, no. 124, pp.19–35. Ideas for increasing college student involvement using Facebook grounded in Astin's theory of student involvement.