Edge Hill University

Headlines from the 3rd EHU Student eLearning Survey: 2010/11

Contents:

Introduction

The Students' eLearning Survey 2010 / 2011 was the third annual online survey of students' experiences of eLearning and technology to support their learning. The survey was open from 3 December 2010 to 28 January 2011. As in previous years, the purpose was to obtain a better understanding of students' perceptions, experience and expectations of technology as a tool to enhance learning and teaching. By using the same questions as previously, with a few exceptions, we could compare results against previous years and provided insight to changes in experiences over time.

Technology in mobile devices has developed rapidly over the last couple of years, for example the Apple iPad was launched in the U.S.A. on 3 April 2010 and in U.K. on 28 May 2010 (Apple, 2010). Although this is a relatively expensive device we were aware that at least a few students had iPads and were using them in their studies. The relevant questions in the survey were updated to include such developments and therefore enabled assessment of uptake of mobile devices amongst the student population and the impact of such devices on their studies.

Methodology

The survey was run as a self-completed online questionnaire, run through Bristol Online Surveys (BOS)[1]. The 26 survey questions, some with several parts, included Likert scale, multiple choice and free text responses. Many questions were the same as previous years; a few were updated or added to reflect changes in mobile technology or to enhance questions based on previous responses. Many questions were compulsory, with a neutral mid-range response, 'don't know' / 'never heard of this' option for students to choose if necessary. All free text questions were optional and a number of students provided thoughtful and detailed responses.

Comparisons with the findings of the 2009 and 2008 student surveys were made and some interesting trends emerged. Direct comparison was not always possible due to slight changes to questions or additional questions. Comparisons to the 2008 survey were made against the 261 online responses and did not include the 66 responses on hard copy questionnaires. Due to the much smaller sample size for 2008, comparisons to this survey were not made for all questions.

Findings: Contextual information

Demographic Information

There was a pleasing number of responses to the survey, 750 students which is comparable to the 2009/10 survey (775 students) and more than double the response to the first survey in 2008/09 (327 students).

The Faculty with most responses was Education (394), followed by Arts & Sciences (FAS) (233) and Health (117). Some students did not know to which Faculty they belonged, and all but six of these were allocated to Faculty from their responses to other questions such as discipline. The number of respondents from FAS and the full time / part time split is broadly similar to the 2009/10 survey (Figure 1). The number of respondents from Education increased, mainly due to the increase in part time students who completed the survey, but the number of responses from Health dropped.

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[1] http://www.survey.bris.ac.uk/

The full time (523 students, 71%) / part time (210 students, 29%) split showed an increase in the percentage of part time student responses compared to the last survey (24%).
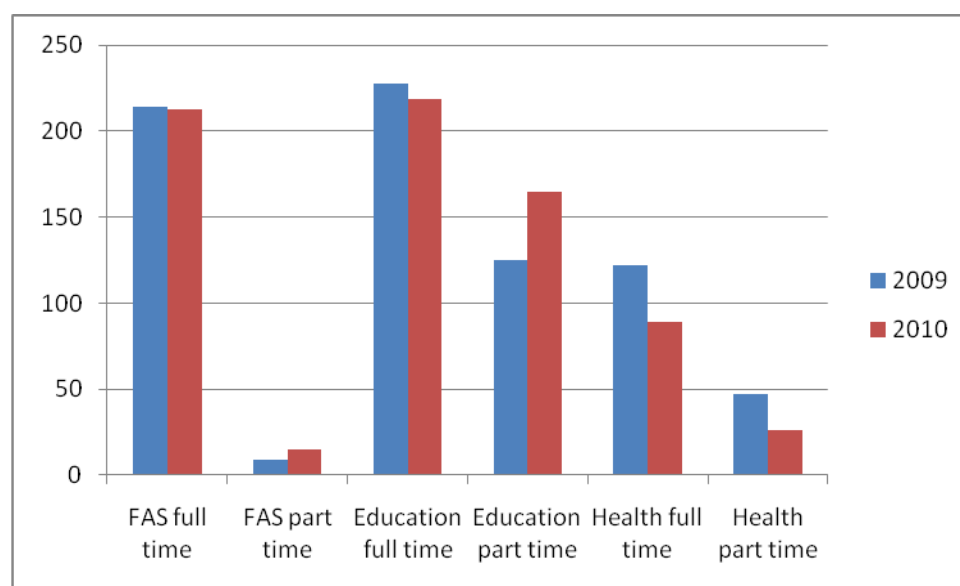

Figure 1. Number of student responses by Full / Part time within Faculty

When students chose to provide their age group, the responses for undergraduate study represented all age groups and responses for the remaining levels of study represented age groups 21 years and above (Table 1). The highest response rate was from first year undergraduates (37%), followed by second year undergraduates and Masters / PG / research (both 22%). Shown in bold in Table 1 are the age group / level of study combinations with most responses. A high number of responses came from first year undergraduates in the 16-18 year old age group (80 responses), then with almost the same number of responses (79) 19-20 year old first year undergraduates, followed by 47 responses from the 41years and over age group studying at Masters / PG / research level. The Table provides an indication of the diversity in age of our student population and will provide feedback on the student experience across the age range and enable comparison of experience by age and level of study. For example, Table 1 indicates that our undergraduates are from all age groups and not just the traditional 18 – 21year olds.

Level of study	16-18	19-20	21-25	26-30	31-40	41+	Total by year of study
First year u/g	**80**	**79**	41	18	31	28	277
Second year u/g	1	67	29	18	25	28	168
Third year u/g	0	17	33	8	12	18	88
Masters/ PG /research	0	0	37	40	42	**47**	166
PD	0	0	3	6	11	18	38
Totals by age group	81	163	143	90	121	139	737
Percentages (rounded)	11%	22%	19%	13%	17%	19%	

Table 1. Age groupings of student respondents by year / level of study. Bold text indicates the three groupings with highest number of responses.

The female / male split was 554 (74%) to 196 (26%), which was very similar to last year's survey. Responses from both genders were found in each level of study, Faculty and age group.

Over 75% (569) of the students were based on the main Ormskirk campus. 13% (97) were studying at a distance on one of our online courses. The remaining 12% were spread through our Outreach and Partner centres, Holy Cross in Bury (11), Shropshire (9), Armstrong House in Manchester (8), Professional Excellence Centre in Wirral (6), Aintree and Woodlands in Chorley (both 5), Liverpool and Preston College(both 2) and Knowsley and Gateway House (both 1). A few students stated that they were currently on placement.

Daily computer use

Students were asked to estimate how many hours per day they used a computer for study purposes. Some of the answers appeared to be weekly totals and any response greater than 10 hours has been treated as weekly. The average number of hours computing usage for study per day overall is 3.0 hours (Table 2). Broken down by full / part time and Faculty and shows that full time Students in FAS (3.5) and Education (3.3) spend slightly more time per day than Health students (2.7) (Table 2). Interestingly, part time students spend on average around one hour less daily (FAS and Education), and the Health result showed slightly higher usage by part time students compared to full time, which may be due to the small sample size (26 part time students providing usable data).

Faculty and full / part time	Average computer usage for study/hours per day
FAS Full time	3.5
FAS Part time	2.4
Education Full time	3.3
Education Part time	2.4
Health Full time	2.7
Health Part time	2.8
All respondents	3.0

Table 2. Average daily computer usage for study purposes in hours

Personal access to computing and the internet, including mobile internet access

The questions on students' access to and ownership of computing technology were extended for the 2010 survey. We wanted to gauge the uptake and ownership of devices with mobile internet access such as smartphones, tablets, iPads and the type of mobile internet access available to the student (unlimited, adequate, none).

Students were asked to indicate their personal access to a range of device types including desktop pc, laptop pc, Mac, handheld device (e.g. tablet, iPad), internet enabled mobile phone (smartphones such as Blackberry, iPhone) . In response to this question many students selected more than one computing device in their responses. The 748 students who had personal access to one or more devices in total indicated access to 1,394 devices, averaging almost two devices per student (Figure 2). About 86% (646) indicated they had access to a laptop, pc or Mac with internet access, 50% (374) access to a desktop pc or Mac with internet access, 36% (271) access to an

internet enabled mobile phone and 10% (77) access to a handheld device. Two students responded that they had no pc or internet enabled device.

Comparison to the previous year showed an increasing trend in two types of device ownership; smartphones up from 26% to 36% of respondents and handheld devices up from 3% to 10%, however, 7.5% (56) of students owned both (Figure 2).

The students with mobile devices were asked to respond to the voluntary questions about type of mobile internet access available to them and how they chose to access the internet. Responses, where supplied, indicated that most owners of smartphones and / or handheld devices had mobile internet and used it (Figure 3). When on campus, just over half of the smartphone owners and over one-third of handheld device owners were using Wi-Fi (Figure 3).
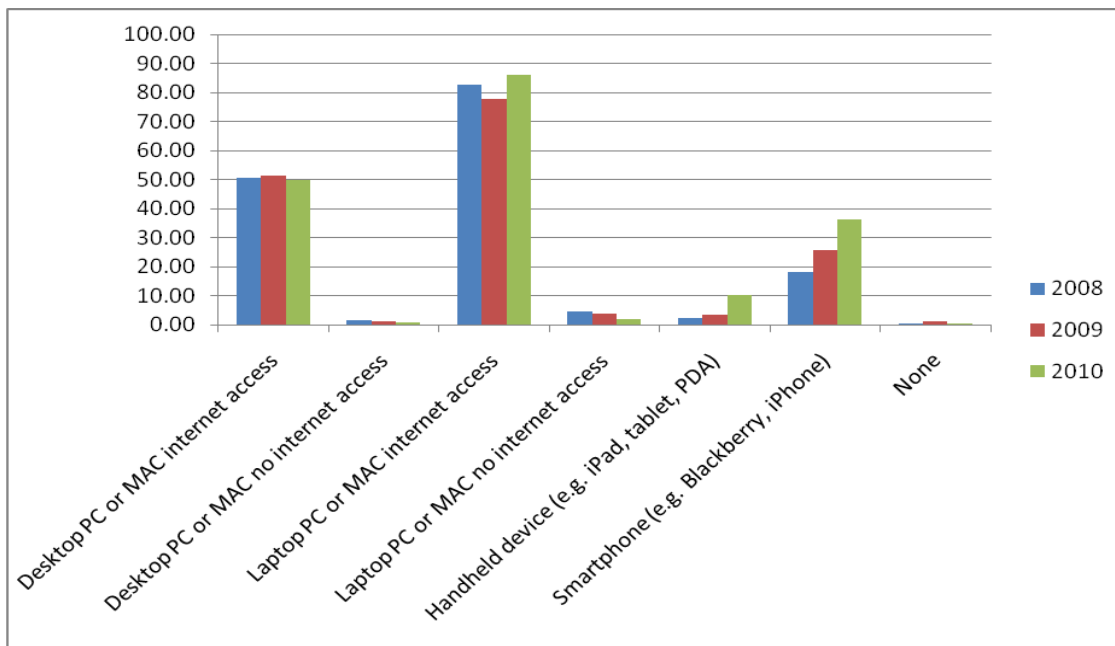

Figure 2. Access to personal computing devices compared to previous surveys by percentage of respondents
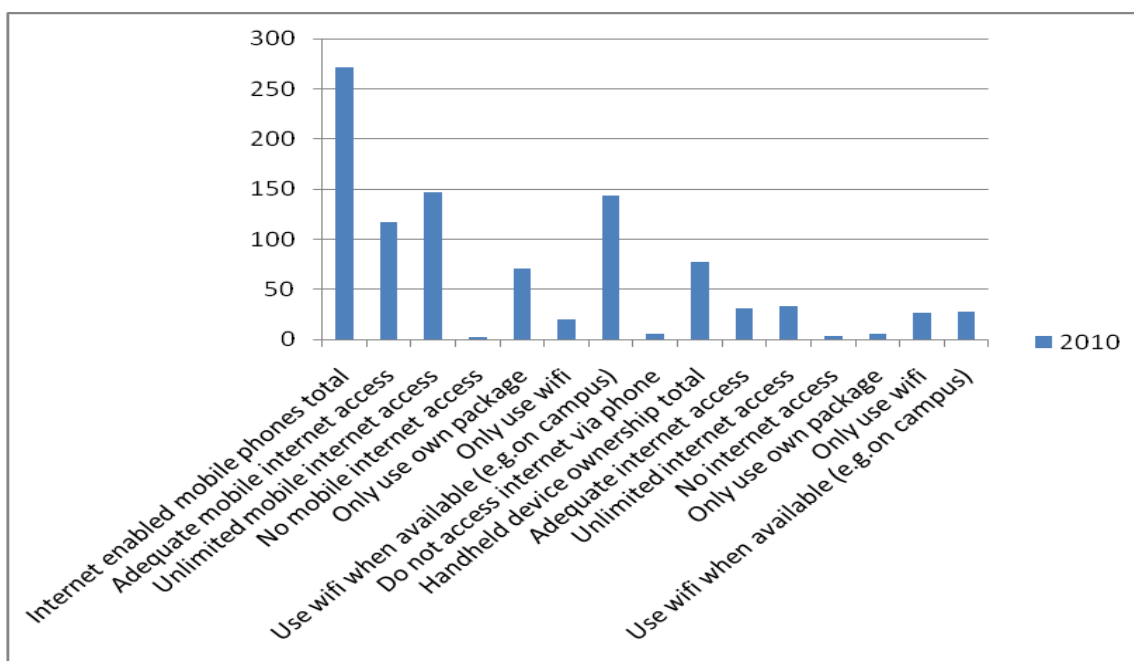
Figure 3. Total smartphone and handheld device ownership and mobile internet access methods by number of respondents

In percentage terms there is an increase over 2009 in mobile device ownership. There was also a slight increase in the number of respondents with access to laptops with internet access, who may also want Wi-Fi access on campus (Figure 2). If these trends continue there is likely to be further increases in demand for Wi-Fi usage on campus.

Findings: technology and physical environment

Open access wireless study areas on campus

There are a number of technology enhanced areas on campus for students to use for study purposes. The computing technology provided varies, some areas providing a large 'classroom' of pcs linked to the university system, others with few pcs or thin client machines and wireless internet connection (Wi-Fi), some Wi-Fi alone and some individual study carrels furnished with a pc. Responses to questions on access to personal computing (previous section) showed that ownership of internet enabled mobile devices is becoming more common amongst the student population and they expect to use these devices for study purposes on campus, using the university's Wi-Fi access (Figures 2,3). Therefore the Wi-Fi access on campus is required to support an increasing number of devices and for planning purposes it is helpful to know where students are studying when not in formal classrooms. We asked students about their preferred study areas on campus when they were not in taught sessions and asked them to select all that applied from a list (Figure 4).
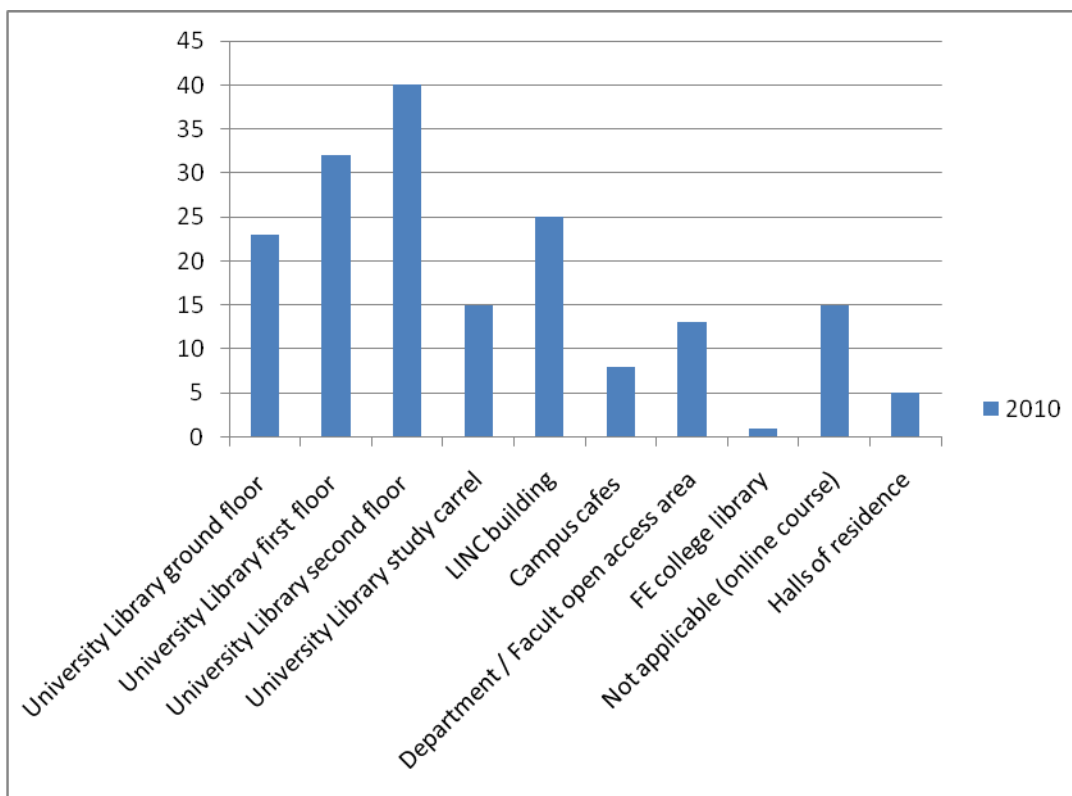

Figure 4. Preferred study area on campus as percentage of all respondents

The most popular area, selected by 40% of the respondents, was the university library second floor, which is for silent study and has open access pcs and areas furnished with individual desks. Second

most popular, the library first floor (32%) has open access pcs, areas suitable for small groups to work and quiet, working noise is permitted. The LINC building (25%) and library ground floor (23%) were also popular, with one student commenting that the latter was great for group work. Students wanting quiet areas chose the library study carrels and students requested more of these. Although halls of residence were not on the original list, 5% indicated this was where they studied. A similar percentage did not study on campus but at home, some indicated that the difficulty in finding a quiet area on campus was a factor. Others commented on the difficulty in finding a pc to use at busy times or limitations of the Wi-Fi access.

We know that the university Wi-Fi areas and open access areas are in great demand by students and increasing ownership of mobile technology. The university needs to be able to predict increases in demand for technology and for the last two years we have asked students about the frequency of their use of Wi-Fi on campus (Figure 5). There was an increase in frequency of use in 2010 with over 40% using Wi-Fi at least once a week. Although there was a drop in the percentage of respondents unaware of the Wi-Fi facilities compared to 2009 (from 16% down to 11%), it is surprising that so many are not aware of these facilities as the 'Wi-Fi' signage around campus has been increased to advertise these areas.
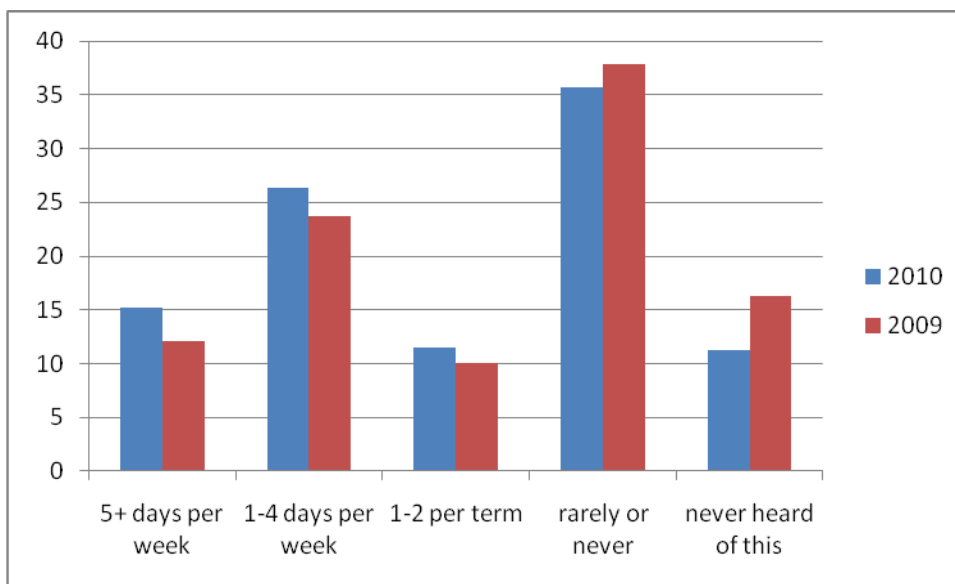

Figure 5. Frequency of use of university wifi on campus by percentage of respondents.

We also wanted to understand how the students used these open access areas to support their studies. For this optional question students selected from a list of five categories (Figure 6). A higher percentage responded in 2010 compared to 2009, around 70% of the respondents chose to answer this question, which means that a number of students who rarely use the space responded because only just over 40% of respondents claimed to use the Wi-Fi spaces once a week or more (Figure 5). The category showing the largest change in percentage over 2009 was accessing module content and other resources from Blackboard, the University Virtual Learning Environment (VLE), increasing for 64% to 85% (Figure 6). This may reflect increasing use of Blackboard by tutors in response to student demand and therefore there is an increase in resources available through Blackboard. Usage in all the other categories fell slightly. Students could add personal responses and the most frequent other use was working on their assignment.
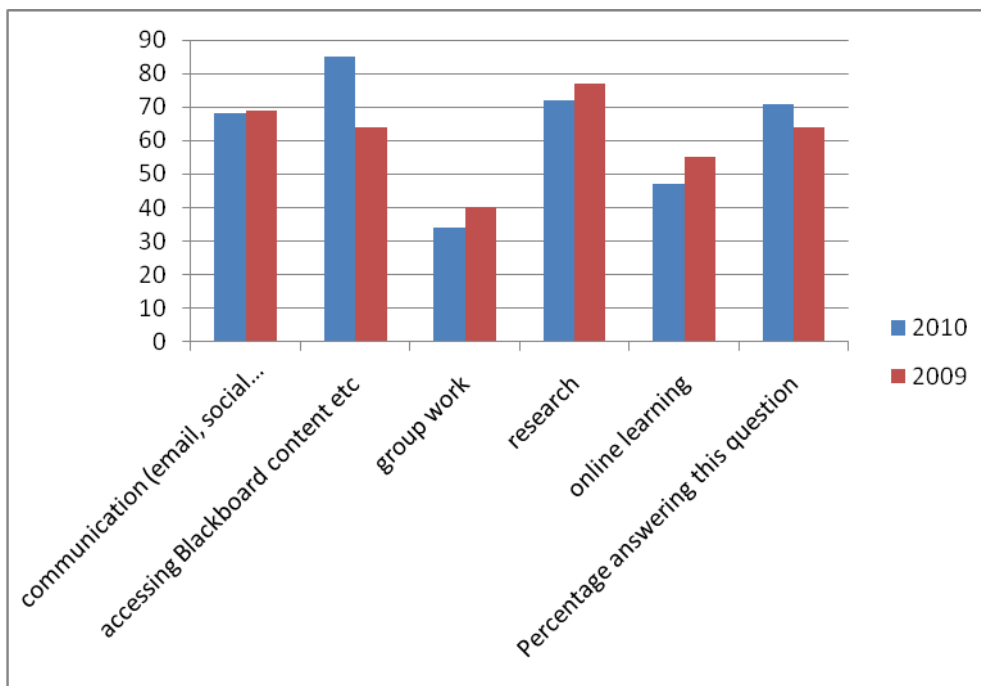
Figure 6. Usage of wireless areas to support learning by percentage of responses to this question

Use of computing equipment in wireless spaces on campus

We also wanted to find out about students use of university computing equipment and their own devices in these areas. Follow up questions asked students how frequently they used either the University's or their own computing equipment, using one of four categories for their response (Table 3). Just over half use the university equipment in these areas either 'sometimes' or 'a lot' and about a half use their own laptop 'sometimes / a lot', showing the high demand for these spaces.

A new part to this question asked about smartphone or tablet use in the wireless areas. One-third of students are using these devices in the areas which supports the high level of ownership of these devices shown earlier (10% for tablets and similar, 36% for smartphones) (Figure 2). There are currently some limitations on access to university resources with smartphones, and responses to other questions indicated that some students were having difficulties in accessing university resources through their mobile device.

	never / rarely	sometimes / a lot
University pcs available in area	45%	55%
Own laptop / netbook	50%	50%
Smartphone / tablet (e.g. iPad)	67%	33%
Laptop loaned from university	95%	5%

Table 3. Use of computing equipment in wireless spaces on campus

The responses indicate the groups using university or their own computing equipment are not mutually exclusive and all permutations of answers to the first two parts of the questrion were received (Table 3). The questions were mandatory and this forces students who choose not to study on campus or students studying online to select 'never, never'. It is suggested that these questions should be amended for future surveys to allow a 'not applicable' response.

Usage and development of the university VLE

Frequency of use of Blackboard (university VLE)

Students were asked how frequently they logged in to Blackboard, the university VLE. The responses showed that almost three-quarters were logging in at least three days per week and almost 95% logged on at least once a week (Figure 7).
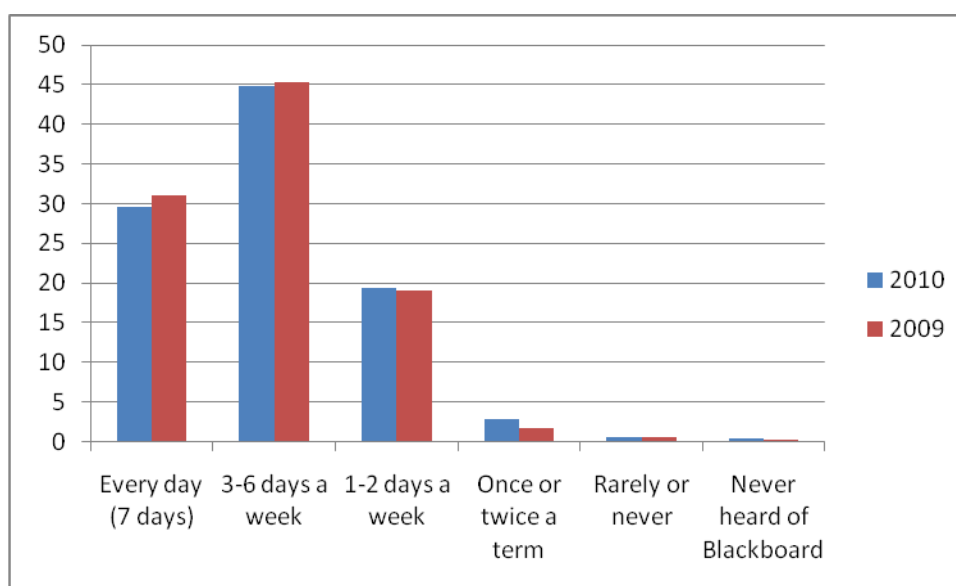

Figure 7. Frequency of logging on to Blackboard by percentage of respondents.

Students' experience of Blackboard to support their studies

The feedback and comments from previous surveys have been used to try to address issues and improve the student experience. Therefore the same set of questions was asked again this year. Students were asked to consider a number of statements on various aspects of Blackboard and to rate their experience in one of five categories: strongly agree, agree, neutral, disagree, strongly disagree. The statements have been split into three groups and the percentage of 'strongly agree' and 'agree' responses totalled and presented in Figures 8-10. One new question was added to include mobile devices (Figure 9).

The responses to statements around their experience of Blackboard as an 'anytime, anywhere' and communication tool are shown in Figure 8. This showed that over 80% of respondents value highly the freedom to learn at place and time of their choosing, about 70% value the use of resources on Blackboard to enhance their knowledge gained from lectures and to catch up on missed lectures. Communication with peers or tutors was also rated highly by more than half. Compared to the 2009 survey there is little change.

Students were asked to rate the technical aspects concerning access to the VLE, both from home and on campus, and the importance of customising their VLE. The responses to technical issues (Figure 9) showed that there is a slight increase in the percentage agreeing that they sometimes had technical difficulties accessing Blackboard both on campus and at home. However, as in previous years, some of these are likely to be issues outside of Blackboard itself, for example, students wanting to access Blackboard on a mobile or insufficient wifi signal. Rated important by a high percentage (86%) was advance warning of planned downtime, reflecting the importance of Blackboard in students' studies. The response to the question on accessing Blackboard via a mobile device, showed that almost 50% agreed that this was important to them (Figure 9). This indicates to the university that there is a demand for mobile access to study tools and resources. Less important to most students were options to customise Blackboard.
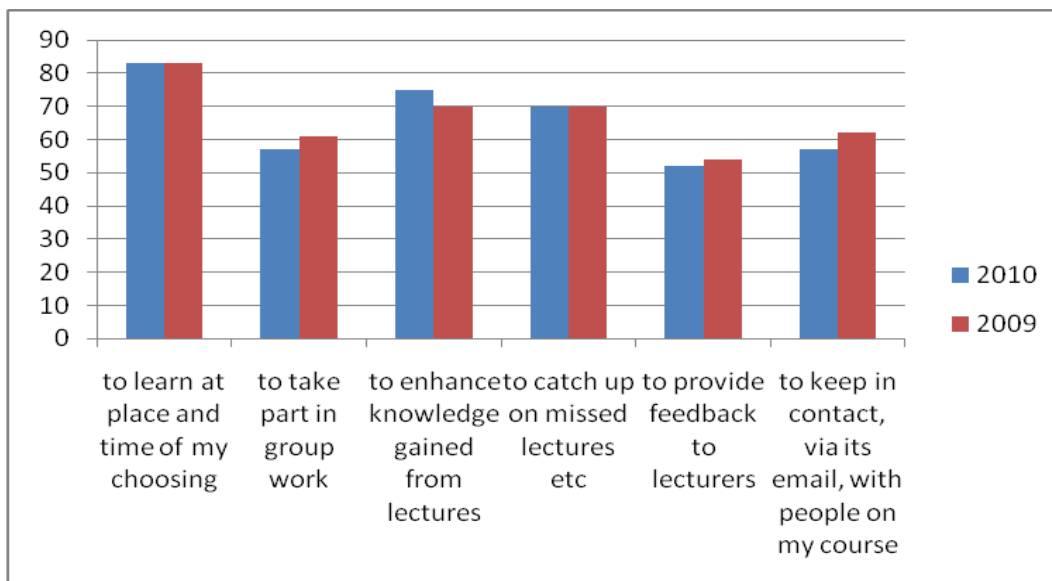

Figure 8. Percentage who strongly agree or agree with the statement on their experience of Blackboard
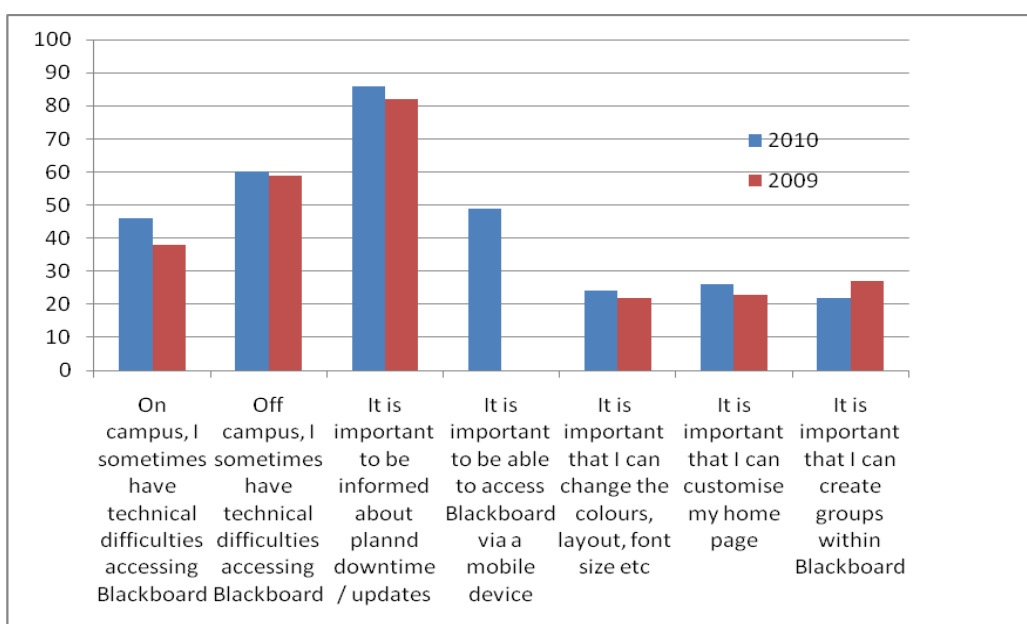

Figure 9. Percentage who strongly agree or agree with the statement on technical aspects of Blackboard
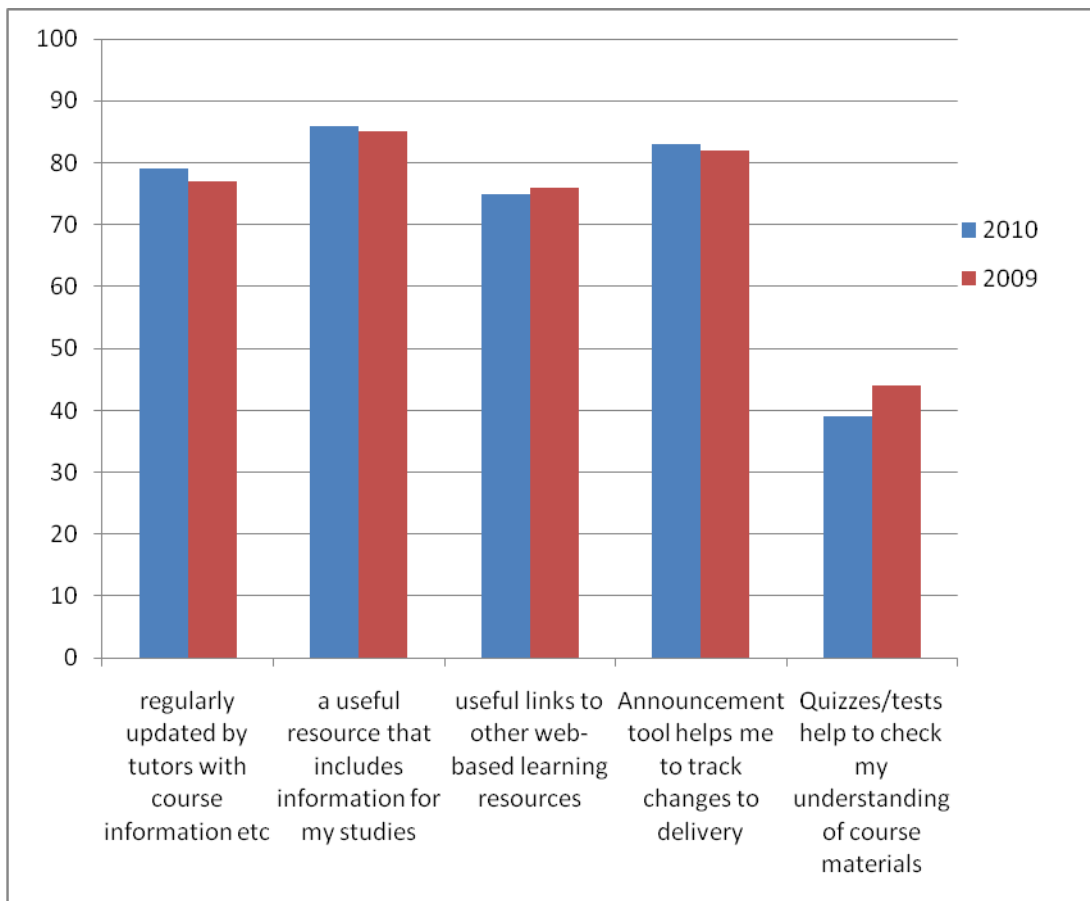
Figure 10. Percentage who strongly agree or agree with the statement that Blackboard is or provides the options named

Students were also asked about their experience of some optional features that may be provided by tutors. More than three-quarters agreed or strongly agreed that Blackboard was regularly updated by tutors, was a useful resource for information on their studies, had links to other web-based resources, and the Announcement tool was used appropriately (Figure 10). A much smaller percentage (39%) thought online quizzes and tests helped their understanding, however 43% gave a neutral response which may indicate that these features are not used on their course of study or may not be appropriate.

VLE Training

Students were asked how much training they had received in the use of Blackboard. About 20% had received no training, 20% 'not enough', just below 60% said they had received enough training and 2% 'too much'. For those that received training, the most frequently used methods of delivery were: group training without hands on experience, group training with hands on experience, handouts, peer training.

Analysis of the contextual data for those who received no training showed that nearly all were from Faculties of Arts & Sciences or Education and they were mainly first year undergraduates or Masters/postgraduate/research and therefore they are probably new to this University. The range of disciplines was wide in both Faculties so the access to training is affecting students from a number of departments. We then asked those who received no training about why this had

occurred. Most responded that no training had been offered for their course, although some missed the training offered. From the other options, over a quarter had not seen additional training advertised and some students commented that they did not need training. There is online training available but these training materials also seem to be underused.

Blackboard and its impact on student learning

Students were asked three questions about the impact of Blackboard on their learning and the features they would like in their ideal Blackboard. These were optional questions and responses were free text. It is pleasing that there were 290 responses regarding the features that improved their experience of learning and 184 with suggestions for their 'ideal' Blackboard. However, there were also 277 responses to features that had a negative impact on their learning. Many comments were reflective and thoughtful and provide the university with rich data on the student experience and the VLE. These responses have been summarised and are shown under the headings *Technical*, *Tutor involve*ment and *Student involvement*. Whilst we commend those features and practices that have a positive impact on students and will disseminate as good practice, this report has placed more emphasis on the negative impacts as these are the areas we need to address.

Technical	Access whenever they want
	Access from wherever they are
Tutor involvement	Uploading lecture notes and presentations
	Providing module handbooks, timetables
	Sending alerts of changes to timetable etc
	Uploading resources
	Communication with students
Student involvement	Accessing lecture notes & presentations before and after the lecture
	To use resources catch up on missed work / enhance learning
	Access to module handbooks, timetables, resources
	Alerts for changes to e.g. timetable
	Access 24/7, access from home / placement
	Communication: student to student and student to tutor

Table 4. Main features of Blackboard that have improved students' experience of learning

The main features that had a positive impact are shown in Table 4. The feature praised most often was the availability of lecture notes, for access both prior to the lecture and to enhance their learning after the lecture. Comments received included, *'being able to download presentations from lectures means that you can concentrate without having to write everything down, as when you are writing you often miss something important'*, *'features such as lecture presentations and notes are a very useful tool especially for private study, revision or if one has missed a lecture'*.

Students also value the freedom to access course material whenever they want and wherever they are, '24/7 access to course materials', 'I can study a module from over 100 miles away at my own

convenience'. Communication tools for student to student and tutor to student contact were valued, such as Announcements of changes to timetables, Discussion boards for peer and tutor support.

Features having a negative impact are shown in Table 5. As a consequence of nearly 95% of the respondents using Blackboard at least once a week (Figure 7), reliability and speed of the VLE is important to their studies. A number of respondents commented that these were poor and have a negative impact on their experience.

Other technical issues possibly involve 'timing out', which is not obvious to the student, or, a comment that also has appeared previously, when downloading material the student gets '*thrown back*' to main page. New comments this year involve difficulties with mobile access, *'very difficult to access from a mobile device '; chat, 'chat didn't work'*; and one detailed piece of constructive criticism about an online exam, *'doing an online exam (65 questions in 90 minutes) when it took an average of 1 minute for the computer to move from one question to the next … I couldn't finish the exam because of the slow system … at least, as a 1st yr student, it wasn't part of my final degree-grade - but obviously it's a concern'*. Further investigation and resolution of these issues will be prioritised. It is a concern that, if they are not resolved, they will impact negatively on the student experience.

Technical	Issues with access & reliability, especially off campus
	When downloading material, get 'thrown back' to main page / 'time out' issues
	Mobile access not supported / difficult
	Difficulties with chat
	Extremely slow responses during online exam
Tutor involvement	Underuse of VLE, not uploading material that they have promised
	When loading material, consider layout / easy to find
	Training given - not providing sufficient induction for new students
Student involvement	Access difficulties, slow speed, downtime, no back button
	Training issues? Not intuitive, download difficulties, time out annoying & can lose work. individual problems for new students
	Misunderstandings - web sites are easier to use

Table 5. Features of Blackboard that have had a negative impact for students.

The tutor involvement with negative impact issues may be summed up as communication and training (Table 5). Comments that tutors underuse Blackboard, do not load up material that students expect and students finding navigation difficult (although the latter may be outside of tutor's control) are all communication issues between tutors and students. Students stated that, *'not all tutors put lectures/seminar notes on', 'modules laid out in a different way - and therefore difficult to find your way around … uniformity is good'*.

Some students appear to have received insufficient induction in use of Blackboard, one student commenting *'Information regarding Blackboard arrived along with a great deal of other paperwork, but apart from a brief mention of it in an email from a tutor answering an unrelated question, I don't feel it's purpose has been helpfully underlined to me. As I understand it, Blackboard is my main link with the university and the real key to successfully completing my course, I feel this should have been made clearer to me earlier on'*. The comments regarding difficulties with Synchrynous Chat under 'Technical' may also be training issues for tutors and / or students.

A number of students, as in previous years, commented that access difficulties, slow speed, problems downloading files, navigation difficulties and downtime, were having a negative impact (Table 5). Although most comments were brief, *'Blackboard is slow and navigation is difficult'*, *'access and reliability'*, there were a few more detailed comments, *'it is time consuming, sometimes it is not organised effectively, some subjects have sessions in organised files and some are all over the place. Also one you taken a long time to find what you want and you click on it, it goes back to the main page and you have to back track and find the page again! very annoying and time consuming!'* It is not known if students contact helpdesks or try to resolve their individual problems, but we need to encourage students to raise their problems appropriately to try to resolve them.

Your ideal VLE

In response to the question, 'If you could create your ideal VLE, what tool or features would it contain?' we received many thoughtful responses which they feel would improve the VLE. A number of comments served to address the perceived problems with the current VLE, such as improved speed, reliability, simplified layout (shown under 'Technical' in Table 6). Others ask for technology tools that are commonly in use: simple navigation tools such as search facility, bookmarking, back button; highlighting to show new material has been added. Comments include, *'A search box to find the documents you need, as they are not always in the right place'*, *'Bookmarking which page of the course content you were last on so you don't need to scroll through the whole thing again', It would be much quicker … there would be an area with a quick glance timetable with the lecturer, location and time on it'*.

Linking to responses to other questions, students with iPhones / iPads and other mobile devices want access via these devices, *'access via a mobile phone', 'iPad, or iPhone app which is available and perfect for university studying'*.

Technical	Faster, reliable, simplified layout (or departmental issue?)
	Search facility, bookmarking, back button
	Highlighting when new material added
	Mobile phone / mobile device access
Tutor involvement	Simplified layout, better organisation / layout within module
	Lecture notes made available
	Timetables, communication with students
Student involvement	Search facility, clearer layout, easier access to resources - less links to get there

Simplified login	
'how to' key	

Table 6. Tools or features students would like in their ideal VLE.

A simpler layout of material on Blackboard also involves teaching staff, as better organisation and layout of module material depends on them (Table 6 Tutor involvement). '*A standardised required style and content across courses/modules*', '*It would have a better structure instead of having so many files for one subject in a module*', '*relevant resources for all assignments in one folder*'. A few asked for timetables to be available and for other aspects of communication with tutors such as chat to 'talk' to tutors when they are online.

Some students want to login once only then have access to everything, they do not like the repeated logins needed, '*Login would be generated from the Edge Hill login and not have to be re entered*', '*It's a bit clunky - lots of clicks needed to get anywhere*'. When they are accessing learning resources, they ask for features such as search, fewer links to get hold of resources, and clearer layout. For example, one suggestion to help with training, '*how to' key- which tells you how to access certain materials/files on blackboard- esp. journals etc as I haven't been told specifically how to access these*'.

Innovations in teaching and learning

Technology tools and learning

There is a range of technology tools that may be used to support teaching and learning within the university. All students have electronic access to, for example, library facilities and are entitled to a baseline presence on Blackboard, such as timetables, module handbooks. The extent to which Blackboard is used to support a module depends upon individual lecturers' pedagogical choices, preferences and skills. The use of other technology tools may depend to some extent on the student's own discipline and modules being studied; incorporation of technology is less relevant in some modules.

We wanted to explore the creativity of our students around uses of technology. Firstly we asked them to select, from a list of ten tools, those which could be used in their learning and to name any other useful tools. 600 (80%) of respondents selected one or more of the tools (Table 7). Responses were split down by age group to detect any age-related trends. Highlighted boxes indicate that one-third or more of the age group had selected this tool.

Learning technology	16-18	19-20	21-25	26-30	31-40	41+	Selected by total
Facebook / social networking sites	58	110	69	32	47	34	350
Blogs	23	43	30	14	22	24	156
Wikis	22	40	16	16	17	15	126
Instant messaging (chat)	36	55	42	18	30	21	202

Video messaging e.g. Skype	12	22	20	9	26	25	114
SMS texting	**39**	**68**	45	24	39	21	236
Access to learning resources from mobile devices e.g. smartphone, iPad	**46**	**92**	**59**	**33**	**42**	29	301
Interactive Flash-based activities	24	44	31	16	19	18	152
Virtual worlds e.g. second life	13	22	16	10	11	10	82
Voting tools	12	20	19	11	12	14	88
Other	5	11	15	14	22	24	91
Totals by age group	290	527	362	197	287	235	1898
% of responses to this question	15.3	27.8	19.1	10.4	15.1	12.4	

Table 7. Number of responses by age group to 'Could the following be used in your learning?'

The tool selected by the highest number of students was Facebook/social networking, selected by 350 (47% of respondents), next was access to learning resources from mobile devices (301, 40%). These two were selected by more than one-third of all respondents in age groups up to and including 31-40. SMS texting (236) and instant messaging (202) were popular with the younger age groups. The youngest two age groups appeared more keen to explore these tools, supplying a higher percentage of responses (15.3%, 27.8%) than would be expected from the number of respondents (11%, 22%) (Table 1). Conversely, the mature students in three older age groups seemed less keen to select these tools for use in their studies.

Compared to previous years, social networking remains the most popular, selected by around 45% for each of the three years of the survey (Figure 11). Mobile access to learning resources from mobile devices such as smartphones, iPads was selected by 40%, an increase over both previous years. SMS texting and Instant Messaging (although interest in the latter shows a downward trend) were requested by more than a quarter. The remaining tools listed were selected by at least 10%, with video messaging, virtual worlds and voting tools each showing an increase over 2009. This may reflect that students are using these technologies or have seen them used and can see benefits for their studies.

Students were also asked if there were other tools they would like to use and there were a few suggestions made; podcasts, videoconferencing, online gaming style systems (where students move up from level 0 (novice) and as they acquire skills move up to a final level at end of module) and future technologies such as XBox Kinect.
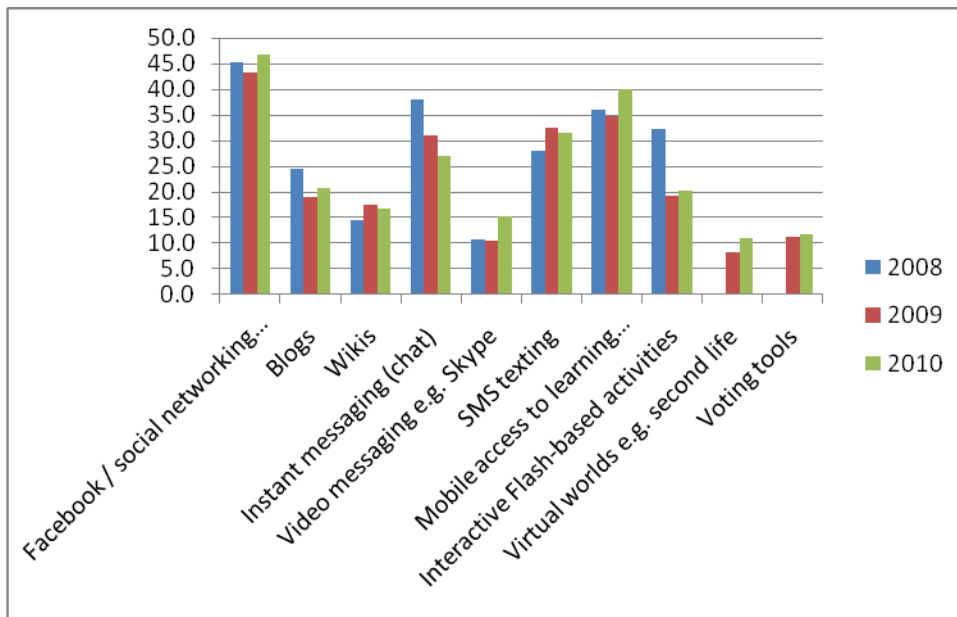
Figure 11. Technology tools students would like to use to support their learning (by percentage of respondents)

Students' ideas for using other technologies

A follow up to this question asked students for their thoughts and ideas as to how these technologies could be used to support their learning. However, slightly under half of those selecting technologies that could be used gave a response to this question. This may indicate that they had not thought about the first question and just 'ticked the box' because they wanted the technology to be used but didn't know how it could support their learning, or that they found it difficult to express their ideas. Others have given detailed and thoughtful responses that can be used to inform the university's direction for support of eLearning. Of the responses made, a large proportion, about 82% contained positive ideas, with only 6% containing negative comments regarding these technologies. The remaining responses tended to be either misunderstandings, for example a few appear to regard wikis as the same as Wikipedia, or neutral comments.

Using technology for communication was the most common theme, from University to student, student to student and group communication. Communication topics included dissemination of short pieces of information, e.g. last minute room changes, cancellation of lectures, alerts for examination dates, assignment submissions and library renewals, and more complex interactions between groups of students, with or without tutor presence. The former were all suggested as uses for SMS texting.

For the more complex situations, several tools were suggested for obtaining instant feedback from tutors in lieu of face to face tutorials / seminars, such as instant messaging (chat), Skype (video messaging), videoconferencing. It is interesting that these 'instant' tools were preferred to the Discussion board on Blackboard which students and tutors access and post comments whenever they choose, as it relies on regular visits to follow threads of discussions. Video messaging was mentioned by distance learners as very helpful, one student with previous experience of Skype commented: *'On my pre-degree course we were all asked to use Skype, but it's never been referred to on my degree. I thought it was excellent. We could have group discussions, also including our personal tutors.'* Other comments were, *'Being able to talk to a lecturer in 'real time' rather than waiting for them to respond when their timetable allows would be very helpful'*, *'A specific time of*

day when you could access tutors for just an hour (each tutor taking it in turn) to discuss ideas and ask questions.'

The most popular communication tool, mentioned by at least 118 students, was Facebook. Nearly all the comments were extremely positive and showed that our students are proactive and well organised. The most frequent use of Facebook was to set up groupwork and / or cohort group for peer support, discussion of topics and sharing of resources. Although there were similar comments last year, there are far more examples of this type of this use expressed this year. Praise for Facebook included; most students use Facebook, they use it frequently, it is considered faster and easier for communication with other students than Blackboard discussion or chat tools. There does appear to be increasing usage of social networking for learning and in some cases to keep discussion private and without tutor input. There is an increasing blurring for students between online professional / study life and social life. This raises factors that the institution may wish to consider, for example, how it is best to introduce to students to online identities, IPR (Intellectual Property Rights), appropriate online behaviour and practice. There are also IPR issues for academic and support staff should they choose to incorporate Facebook into teaching, allowing access to lecture notes for example.

There were a few dissenting voices and comments that indicated, as would be expected, that some students were not experienced with technology and feared that additional tools would make their study more difficult. Examples include: a few wish to separate social and learning environments, Facebook is too distracting, preferring face to face approach, inexperienced students think it will complicate their studies and increase time needed.

From responses to computing equipment ownership in the contextual section, more than 36% of respondents own internet enabled mobile phones and are using them to support their studies. From comments received, some university systems are not currently available on mobile devices and there were requests for mobile access to Blackboard on iPad / iPhone. Students commented that mobile access to lecture notes would be beneficial, for example it would reduce demand for campus pcs during busy periods and also benefit off-campus study, *'Mobile access to lecture notes would be excellent as a way to refresh my knowledge in school whilst on placement, without having to find and log onto a pc.'* To support mobile learning there were suggestions for an Edge Hill university App, similar to those which some universities already provide.

Some requests appear to be simpler to implement, such as requesting that tutors providing lecture notes to support PowerPoint on Blackboard, podcasts of lectures, class blogs / wikis to gather material for assignments or group tasks. One student suggested real time access to lectures, using a password, for students unable to get to campus on a particular day.

VLE and students' preferences in using technology

Study and eLearning components of course on Blackboard

Students were asked the same questions as in 2009 about the number of modules to which they had access, their frequency of use of electronic resources and tools available through the VLE or EHU's intranet and the importance of these resources in their studies. Three students (0.4%) did not currently have access to any modules, most have access to between 3 -5 (308, 41.1%) and 83 (11.1%) could access more than 8 modules (Figure 12).
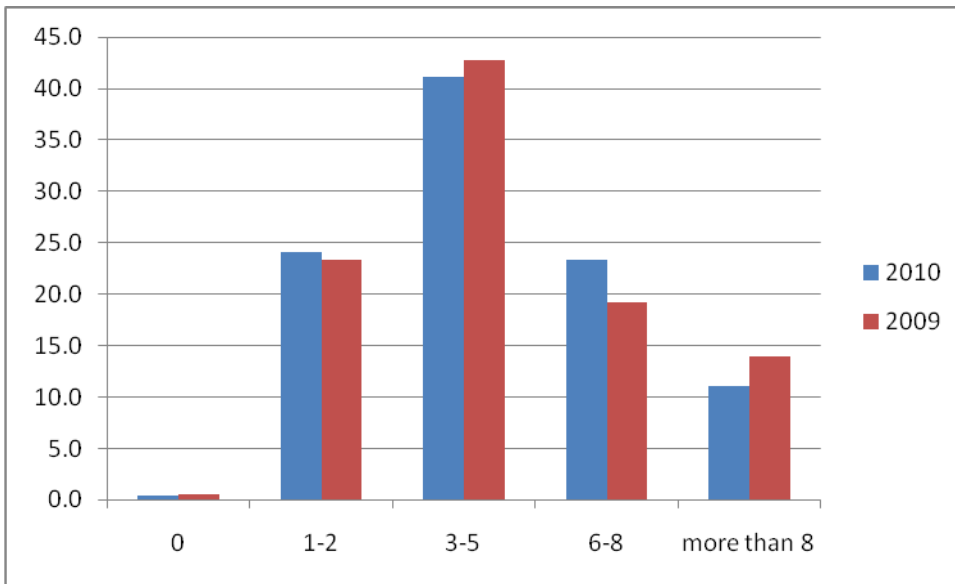
Figure 12. Number of modules to which a student has access in 2010 compared to 2009 by percentage of students.

Although not all modules have online resources available, a further question asked students how many of their modules were on Blackboard and contained eLearning resources such as lecture notes, orTurnItIn (plagiarism detection software) (Figure 13). Due to the grouping of number of modules it is not possible to pick out trends from these graphs.
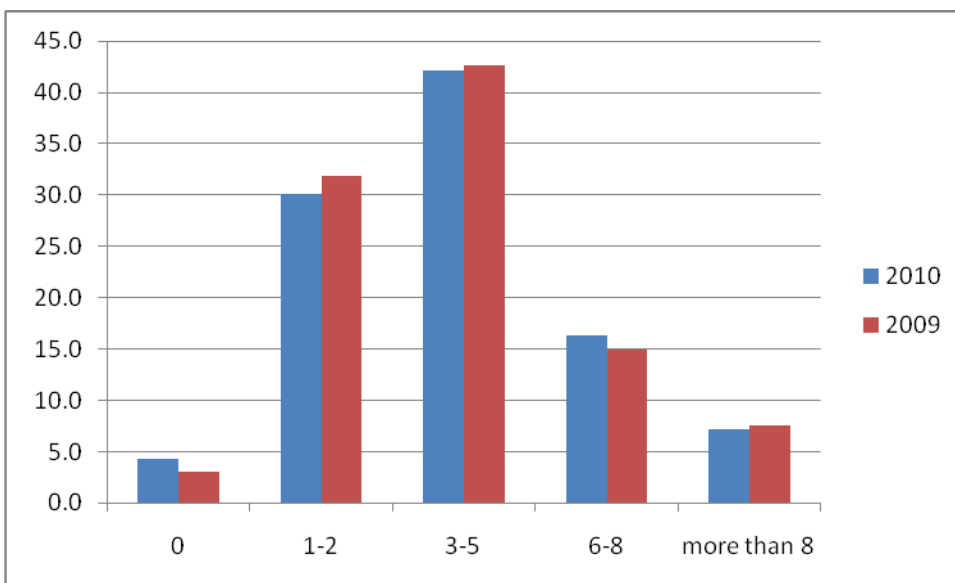

Figure 13. Number of modules on Blackboard and with eLearning components by percentage of students.

Preferences in using technology to support learning

Students were asked about their preferences for study purposes of a range of technologies and tools available through Blackboard or the University's computing systems, They were asked firstly to categorise how often they used individual technologies in the range: never, rarely, sometimes, a lot, never heard of this, and secondly to rate the importance to them: very important, quite important, quite unimportant, very unimportant. To simplify the results, the most popular and

least used are reported (Figure 14, Table 8) and the most important to the student and least important (Figure 15, Table 8).

Tools that are considered very important by more than 50% in 2010 include all those used 'a lot' by more than 50% of respondents (Figures 14,15). Online databases / journals, submisson or collection of assignments and eBooks were also considered very important. Online submission / collection of assignments increased in use between 2009 when 33% used it 'a lot' to 42% in 2010.
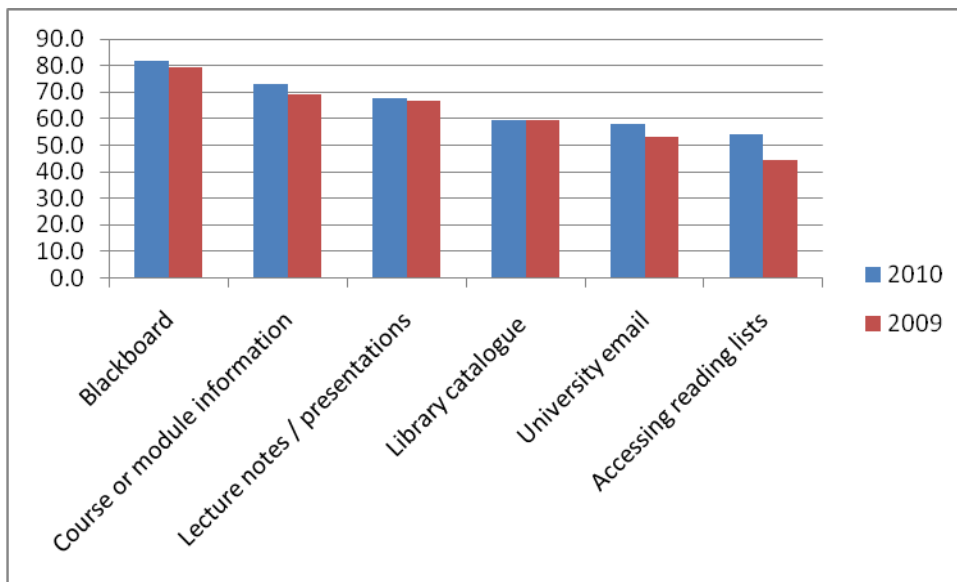

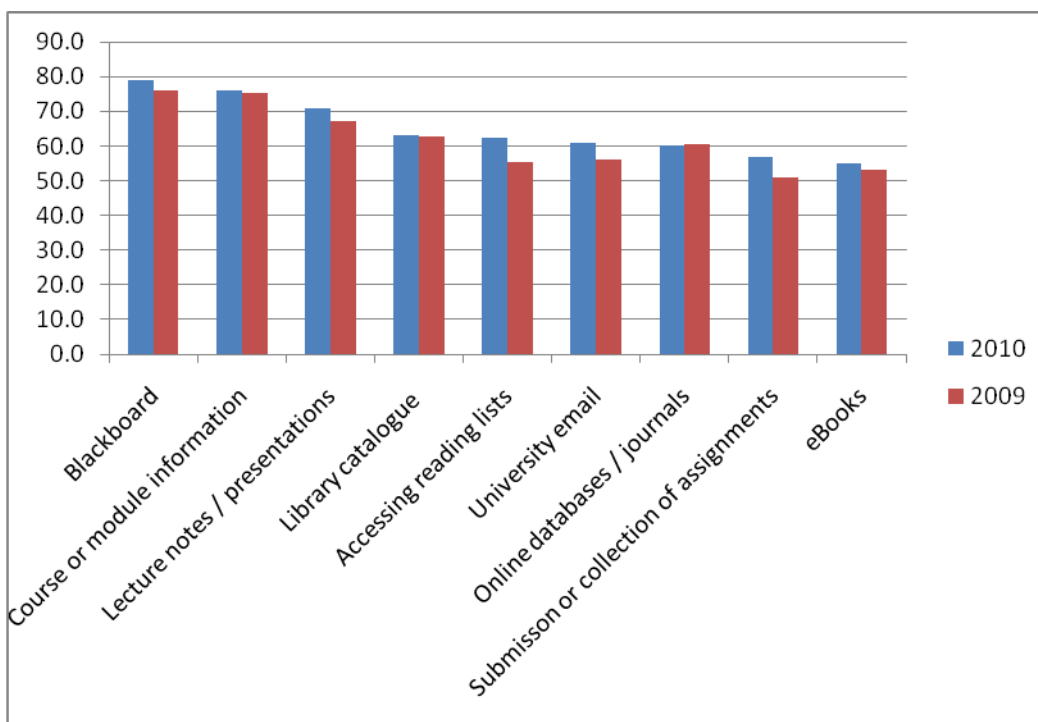*Figure 14. Technologies used 'a lot' by percentage of respondents*

Figure 15. Technologies considered 'very important' by percentage of respondents

The technologies mostly 'never' used are online examinations (Table 8). This may reflect that online examinations are rarely offered. They are also considered 'unimportant' by the highest percentages (Table 8). The feedback surrounding the Chat tool is interesting. Less than half have used online Chat, although from amongst those who have used Chat there were a number of comments about difficulties with this tool in response to question 13, features having a negative impact on learning. However, this was a tool proposed by a number of students in their ideal VLE (question 14). Two other tools that are offerred less frequently are past exam papers and online labs / simulations, the latter will have relevance to a limited number of modules.

Least used technology	% who have never used it	% considering it 'unimportant'
Online examinations	57.7	40.8
Online Chat	53.6	41.2
Past exam papers	53.5	37.2
Online labs / simulations or role play	51.5	43.1

Table 8. Least used of the technology tools in 2010

Cross-cutting themes

There are themes that appear in several areas of the survey. *Blackboard technical performance* is a theme running throughout; students are informing us of issues and concerns via the survey. Some of these have been raised in earlier years; and examples are slow speed and access difficulties.

Others are voicing *personal difficulties* in using technology, both 'beginners' who reported difficulties using computers to support their studies and the technologically-experienced with smartphones and other mobile devices who cannot fully use these because the university does not yet support them.

Good or poor *Blackboard design, layout and deployment* by tutors form another recurring theme. The student experience of Blackboard it seems is largely determined by how it is set up and managed by tutors.

Increased use of *mobile devices* appeared in several areas. Students like the freedom to access study material 'anywhere, anytime' and the lightweight compared to laptops / netbooks. They expect to be able to use these mobile devices.

Key Messages

Students

1. The student population is very diverse: diversity in age ranges, diverse in experience of computing / technology, diverse in ownership of computing devices (or none).
2. To assess their ICT training needs and seek training if appropriate. Seek guidance if the time they are spending using computers for study purposes is excessive.
3. The usage of the VLE is frequent, 95% using it at least once a week, therefore problems with access and / slow speed are factors having a negative impact on their experience. Navigation of the VLE is 'not intuitive'.

4. Students with mobile devices (e.g. iPhones, iPads) expect to be able to use them to support their learning and the university systems are not yet fully able to do this.
5. Facebook and social networking is increasingly used: to support informal learning, peer support, group working, and communication. However, some would need persuading that Facebook could be used to enhance their learning.
6. We should feedback to students that their suggestions have been varied, showed thoughtful reflection and good ideas, and have been passed on. We also need to feedback what has been achieved as a result of their suggestions, what is in progress and make sure the message is updated regularly.

Tutors, practitioners
1. Lecture notes and presentations on the VLE are greatly appreciated by students. Presentation slides in advance of a lecture can help students gain more from lectures.
2. Consider a simplified design and organisation of resources on Blackboard to aid students' navigation.
3. Training in Blackboard does not always appear to be provided. Some students are novice computer uses and should be guided to sources of additional support / training.
4. Encourage students to respond to the EHU Student survey. It is their chance to be heard.

Central Support (IT Services, LS)
1. There are technical issues regarding access and speed of the VLE which have appeared in each survey (2008, 2009, and 2010). These should be considered as priorities and progress with resolution better communicated to staff and students.
2. Better 'signposting' to technical support is needed.
3. There is an increasing demand for Wi-Fi access. There were comments around slow speed of Wi-Fi.
4. Students with mobile devices expect to use them and are facing difficulties with, for example, the VLE. A few requested an Edge Hill App. What is available should be advertised to students / staff and progress on developments made known.
5. There is a continuing need for the laptop loan schemes for a small minority of students. It needs to be well publicised.
6. Some students reported that the amount of noise made studying in some areas too difficult. They value silent and individual study areas and requested more of these.
7. We need to make sure that students are aware of alternative open access wireless spaces they can use. For example, students may not be aware of facilities in the main Faculty of Health and Faculty of Education buildings. We need to improve or internal advertising of open access wireless facilities. For example, there does not appear to be a mention of the facilities in Faculty of Health and Faculty of Education on their webpages. The Library mentions its own facilities, although 'Wi-Fi throughout' needs to be made more prominent and the adequacy of the service checked at busy times. Alternative locations could be advertised on the plasma screens in the library and elsewhere.

Managers
1. Organisation and provision of training in the use of the VLE, particularly for new students at both undergraduate and Masters / PG, needs reviewing.
2. New staff should receive Blackboard training.

3. Encourage academic staff to make lecture notes and presentations available on the VLE where appropriate.
4. The communication systems within the University need to be improved so that students can be made aware of how they can raise technical and training issues.

References

Apple Press Releases (2010) http://www.apple.com/pr/library/2010/ accessed 21.3.2011

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