Ipsos MORI

Great Expectations of ICT

how Higher Education Institutions are measuring up

Research Study Conducted for the Joint Information Systems Committee (JISC) - Report June 2008

JISC

Contents

Introduction

Ipsos MORI was commissioned by the Joint Information Systems Committee (JISC) to carry out qualitative and quantitative research among first year university students.

Background to the research

This research builds on phase one[1], undertaken in June 2007, which comprised an online survey and face-to-face focus groups with students aged 16-18 who were considering going to university. This original phase sought to understand student expectations of Information and Communications Technology (ICT) provision in Higher Education (HE) institutions.

The objectives of this follow-up phase are:

- to **understand student experiences of ICT provision in HE institutions,** particularly in light of the expectations which emerged from wave one
- to **gauge how ICT affects and changes student experiences** in learning, teaching and social/personal use

Methodology

In order to address the research aims, it was appropriate to conduct both quantitative and qualitative research, with the target audience – first year students, aged 17-19, studying in Higher Education Institutions. We were keen to return to the original group from the previous wave of research where possible, to see how the experience of university had affected their expectations; to compare the results quantitatively with last year, and explore the findings in more detail in qualitative discussions.

Quantitative stage

The first stage of this research comprised an online survey. The original aim of the research was to recontact the students who took part in the first wave to follow up on their expectations once they are at university. However, c.500 students responded to the first wave, not all of whom agreed to be recontacted, nor were all eligible for our follow up survey (those who had not gone to university). Therefore, alongside recontacting students where possible, a boost sample, representative of first year students aged 17-19 across institute type, area of study and university geographically, was also contacted, via Opinionpanel, to identify whether findings emerging from the cohort were reflected across the wider student population. In total, 1,111 online interviews were achieved between 18th March and 21st April 2008 – 112 in the recontact 'cohort' group, and 999 in the boost group.

[1] Student Expectations full report
www.jisc.ac.uk/publications/publications/studentexpectations.aspx

Profile of participants			
	Cohort *(112)*	**Boost** *(999)*	**Total** *(1,111)*
Gender			
Male	54	417	471
Female	58	582	640
Age			
17	2	2	4
18	50	445	495
19	60	552	612
Location			
England	92	817	909
Scotland	10	85	95
Wales	7	66	73
Northern Ireland	3	22	25
University type			
College of Higher Education	2	22	24
Post-1992	31	501	532
Pre-1992	41	272	313
Russell Group (pre-1992)	38	195	233
Area of study			
Arts	26	223	249
Sciences	69	604	673
Unclassifiable[2]	17	172	189

The boost sample was representative of first year students, devised using figures from HESA (Higher Education Statistics Agency). The target and achieved percentages are shown below.

[2] This category includes Don't Know and Other. There was an option for 'don't know' in the question – 1% of students gave this response, but the majority of the 'unclassifiable' ones fell into the 'other' category – their course presumably did not match up with any of our options. In future studies it may be worthwhile to identify courses which involve technology specifically and draw out which students would categorise their degree like this. Certainly in the qualitative study, courses such as Computer Aided Design were not considered to be arts or sciences traditionally but obviously had an impact on use and expectations of ICT.

Profile of participants		
	Boost	**HESA**
	%	*%*
Gender		
Male	42	43
Female	58	57
Location		
England	82	83
Scotland	9	9
Wales	7	6
Northern Ireland	2	2
University type		
College of Higher Education	2	4
Post-1992	50	46
Pre-1992	27	30
Russell Group (pre-1992)	20	20

The online survey was designed to compare previous expectations with actual experiences at university, so a number of questions and themes were repeated from wave 1. The questionnaire covered general use of ICT, how useful students find various types of technology, comparing ICT provision with expectations, attitudes to ICT and level of support provided.

The survey targeted students in their first year at university. A number of cohort students were therefore not eligible for the survey as they had not continued to university or HE college. Reasons for not continuing are as follows:

What, if anything, influenced your decision not to go to university this year?

Base: All who had intended to but did not go to university this year (21)

	Number of responses
I chose to defer my place	6
Had a job offer	5
Change in personal circumstances	5
Too expensive	4
Didn't get required grades	2
Other	3

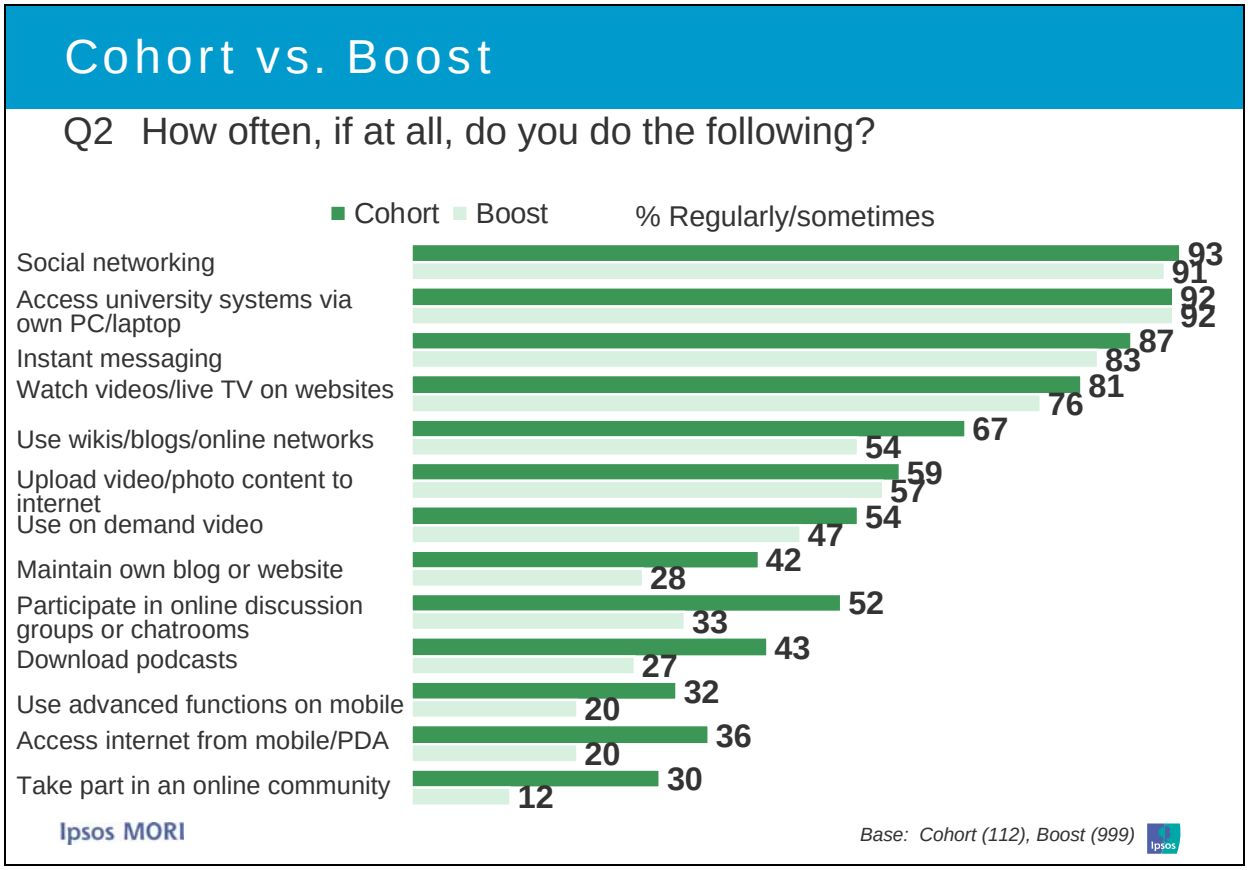
Cohort group

A degree of caution must be exercised when analysing this data. The fact that the survey is online and optional means that any respondents who are interested enough to reply are already receptive to a certain amount of technology. Students in the cohort group who completed the follow up survey, as well as the survey last year, are also likely to be more fluent with technology than others; this is demonstrated by their willingness to take part

in more than just a one-off survey. This is likely to be even more pronounced among students participating in the online focus-groups, who originated from the cohort group, are at the higher end of the scale, and not only are they willing to get involved, they are also comfortable with the technology that the focus group involves.

For this reason, the cohort group are treated separately from the boost group throughout this report. When interpreting the findings, we can take the boost group to represent ***first year students in general***, while the cohort group are more likely to represent the ***more technology literate*** end of the spectrum.

Looking at this tech-literate cohort group gives us an insight into the thoughts and perceptions of high level users of ICT. These students, though they may only make up a small proportion of HE students, are likely to spend more time using ICT and use a wider range of techniques, hardware and software than others. The cohort group is always slightly ahead of the boost group in terms of how often they use technology. In particular, their interactions online seem more sophisticated; over half are in chat rooms and discussion groups regularly or sometimes, as against one third of the boost group.



These cohort students are familiar with technology and are usually able to judge its potential. Any issues or problems that are raised by these students are likely to be more acute for those who are less adept. While we cannot rely on the findings of the cohort group alone to be representative of first year students as a whole, JISC could consider the cohort group as the 'leading edge', predicting takeup and problems for the future mainstream; while the boost group is a benchmark of the mainstream now.

Qualitative stage

As part of the quantitative survey, participants from the cohort group were invited to take part in an online focus group to further discuss their experiences of ICT at university. An incentive of £20 was offered to students, and four online focus groups took place on 7th, 8th and 16th April. Students agreeing to take part were given a link to the group, a username and password, and asked to log in at a certain time. Moderators from the Ipsos MORI project team led the groups, while representatives of JISC were able to log in as observers and monitor the progress of the groups, as well as providing insight and prompts to the moderators where necessary.

The four groups comprised between 5 and 8 respondents, and were not intended to be representative of students, more to provide depth and insight into their experiences of ICT.

The discussion guide (see appendices for example) was developed in collaboration with JISC and covered areas such as technology used, different ways in which it is used, comparisons with school, likes and dislikes, choices made for their own learning, ways in which tutors use technology for teaching, support available and social and personal use of ICT. While not all issues were covered in every group, over the course of the four groups all issues were covered, and the guide was tailored as the discussions progressed.

Acknowledgements

Ipsos MORI would like to thank Charles Hutchings and Malcolm Batchelor of JISC for their assistance throughout this research. We would also like to thank the participants who gave their time to take part.

Publication of the data

As with all our studies, these findings are subject to Ipsos MORI's standard Terms and Conditions of Contract. Any press release or publication of the findings of this research requires the advance approval of Ipsos MORI. Such approval will only be refused on the grounds of inaccuracy or misinterpretation of the findings.

Summary of findings

Our audience

As the method of data collection was online, the respondents who took part in this research are likely to be **more tech-savvy than the average student** population,.

Within the audience we spoke to, the **cohort group are the most ICT fluent**, while the boost group are perhaps more representative of mainstream students. In the cohort group, a third use advanced functions on their mobiles, (32%), against only 20% in the boost group. A third of the cohort join in online communities (30%), as against only 12% of the others. And over half of the cohort is participating in online discussion groups and chatrooms (52%), while only one third of the others do this regularly or sometimes (33%). The cohort, and particularly those who took part in the groups, are also more likely to be from higher socio-economic backgrounds, which also means they are likely to have access to more advanced ICT.

We suggest that JISC can use the attitudes of the cohort group to represent the 'leading edge'- to help predict what mainstream students may want or need in future.

How does real university life change expectations?

Wave 1 – Expectations	**Wave 2 – Experiences**
General uncertainty surrounding what university life would be like, especially technology	87% feel university life in general is as, or better than, expected, rising to 89% of the cohort group. The proportion whose expectations were exceeded in terms of amount of ICT used on their course is notably higher for Russell Group universities (34%). This may be because expectations were lower in the first place, or because provision is greater than at other universities. Students at Russell Group universities are more likely to use online resources than those elsewhere, notably using online library resources more often. Students at these HEIs are also more likely to use non-digital resources regularly; so perhaps they are simply using a wider range of resources. Females are more likely to use non-digital resources than males.

Wave 1 – Expectations	Wave 2 – Experiences
Expectation that ICT will play a bigger role, and help them learn; but not clear on what this role will be.	Students have been introduced to some new technologies; in the online groups they were comfortable with the idea that they would meet even more new technologies. They find some of these comfortable and easy to assimilate, (WebCT, online administration, course specific information online, emailing tutors). These systems are often compulsory – or so easy to use, that compulsion is not an issue. They can understand how these help them learn. Others are not familiar, but still easy to assimilate; online quizzes, showing YouTube videos or streaming lectures. Others feel less easy to assimilate (especially, using social networking sites for formal teaching purposes) and it is harder for this type of student to see how these can help learning. Three quarters are already discussing course work with friends on social networking sites, but they do not see this as "learning", and this does not yet happen regularly for everyone. Universities could help explain the learning benefits of this behaviour. There are a number of new technologies that students do not yet fully understand in the teaching environment, and have not yet been fully exposed to – for example wikis, and some aspects of collaborative learning. They may simply be unfamiliar with these in any environment, 54% regularly or sometimes use wikis/blogs/online networks and as usual, the cohort proportion is higher (67%). Qualitatively it seems that this refers mostly to online networking, not wikis. In the groups a high proportion do not even know how to use a wiki or in some cases, even know what one is. This perception of not knowing what a wiki is seems common despite evidence from other studies that so many students do use a wiki in Wikipedia. There may be implications here for institutions who wish to push course content into wiki or blog format; half their students may not be familiar with them already, while the other half may be much more *au fait.* The perceived level of usefulness of different kinds of ICT increases with frequency of use; which suggests that where universities manage to introduce ICT effectively, students will feel the benefits.
Students are 'digital natives' – having grown up with ICT and expect to use their own equipment at university.	Students are still 'digital natives'; it is not so much the amount of ICT use that has changed, as the way in which they use it. They are using the same amount of technology overall, and still using their own hardware, though those from higher socio-economic groups will have more opportunities here. 75% (83% cohort) are able to use their personal laptop or PC on all of their university's systems and 86% (83% cohort) find their university's systems easy to use. 64% of students of DE social grade assume they will be able to take their equipment to university, fewer than others; which may be because they do not necessarily have the equipment available. Easy access to ICT in halls of residence is mentioned as a plus point in the qualitative research. For general use, 77% use ICT on campus, but for university use, 72% use it in

	the university library. It may be interesting for JISC or universities to explore whether lower socio-demographic students perform better at universities that provide better forms of access to ICT facilities.

Wave 1 – Expectations	**Wave 2 – Experiences**
Students see ubiquitous internet access as the norm	80% are satisfied with the level of internet access provided by their university, and among those most fluent with technology this rises to 86%. Qualitatively, most accept the need for restrictions on downloads. The most satisfied group are those at Russell Group universities (86%) – and they are also using online resources most often and whose expectations have been exceeded. JISC could look into the reasons behind these higher scores in more detail.
Students expect plenty of ICT support	82% (89% cohort) are satisfied with ICT support in terms of using the university's systems; 67% (71% cohort) in terms of how best to use ICT to help with their studies; and 60% (66% cohort) in terms of hardware/software queries. Students whose expectations have been exceeded in terms of provision of ICT, and in the amount of ICT they are expected to use on their course, are more likely to rate the level of support available more highly than others – they are happy across the board. However, despite this, a quarter (25%) rate guidance on using ICT to support studies as neither good nor poor, or poor. This suggests that there may still be a group having difficulty – and the proportion is higher amongst arts students. Students say they still go to their friends first when they have technology troubles.
Students are flexible and ready to accommodate new forms of technology in learning	Although generally open to the idea of new technologies, just 57% (73% cohort) agree that they like to look for new technologies to help their learning. This report explains that thinking about learning styles does not come very naturally to these students, even though they have now been exposed to a wider range of teaching and learning approaches.
They expect that online materials would be provided, or would back up conventional teaching	79% access course-specific materials at least once a week (72% cohort) and 97% of these find it useful (93% cohort). A minority in our groups described webcast lectures and there was much interest in this – an appetite for increased use of ICT, where it supports face to face teaching (see next point). Students are aware of the need to avoid plagiarism. They generally like to check the validity of information taken from the internet (70% agree), and are happy to use online sources. Most consider that checking sources and

	“putting it in your own words” is all that is required to avoid plagiarism.

Wave 1 – Expectations	Wave 2 – Experiences
Students value face-to-face interaction and really need to see the value and the relevance of technology before they are persuaded. We hypothesised that students' opinions about various forms of ICT would be different when they had experienced the different teacher/learner experience of university. Was that the case?	Face-to-face interaction is still seen as the best form of teaching. However, the use of ICT in teaching is now perceived to be a good thing, but only as long as it is done well. Face to face interaction supported by inefficient or inept use of technology is worse than using none. In the groups, a minority had had difficulties, but for most, their teachers have a good enough level of knowledge to use ICT. Some students perceive themselves to be more tech-literate than their tutors, and these most fluent students tend to be the ones who are most critical, when ICT is not used skilfully or appropriately. As uncovered in the first study last year, students strongly value face to face, formal teaching methods. In the discussion groups, the assumption is that teaching is about conveying knowledge to the learner, from a position of authority. This sets all sorts of expectations about the kind of relationship teachers and students have, and the technology it is appropriate for a teacher to use. Therefore they can feel uncomfortable when teachers relate to them in a flat, non-hierarchical structure (e.g. getting involved with personal Facebook accounts). Teachers setting up a social network site sends a clear signal that formal teaching is now taking place – which is at odds with their expectations of these sites. Students like to contact their tutors via email, with 84% doing this at least once a term (90% cohort) and 93% (90% cohort) finding it useful; especially when they initiate the contact.
Wide use of social networking but students struggle to see how it can be used in learning	Still widely used - 91% use social networking sites regularly/sometimes – 93% of the cohort. Frequency of use has increased, a higher proportion claiming to be 'regular' users (80% for the boost group – up from 65% in wave 1). Use of social networks in teaching, however, creates polarising reactions. In the qualitative groups it emerged that where social networking emerges organically from among the students, it is more successful than social networking systems put in place by the teacher (which can feel overly formal and "fake"). Students tell us that discussing things online gives everyone the opportunity to participate – opening doors to more shy students who may be reluctant to get involved in face-to-face discussions. We heard of teachers setting up WebCT boards which were not used, while pre-existing networks and Facebook groups were used instead. However, 9% of the boost group claim to rarely or never use social networking sites, so universities will have to bear this group in mind – making social networking compulsory may mean that this group misses out because their level of knowledge about the system is currently low. 83% of the boost sample now use instant messaging regularly/sometimes, vs. 90% in wave 1; perhaps the university lifestyle means that IM is slightly

	less useful than it is for sixth formers?

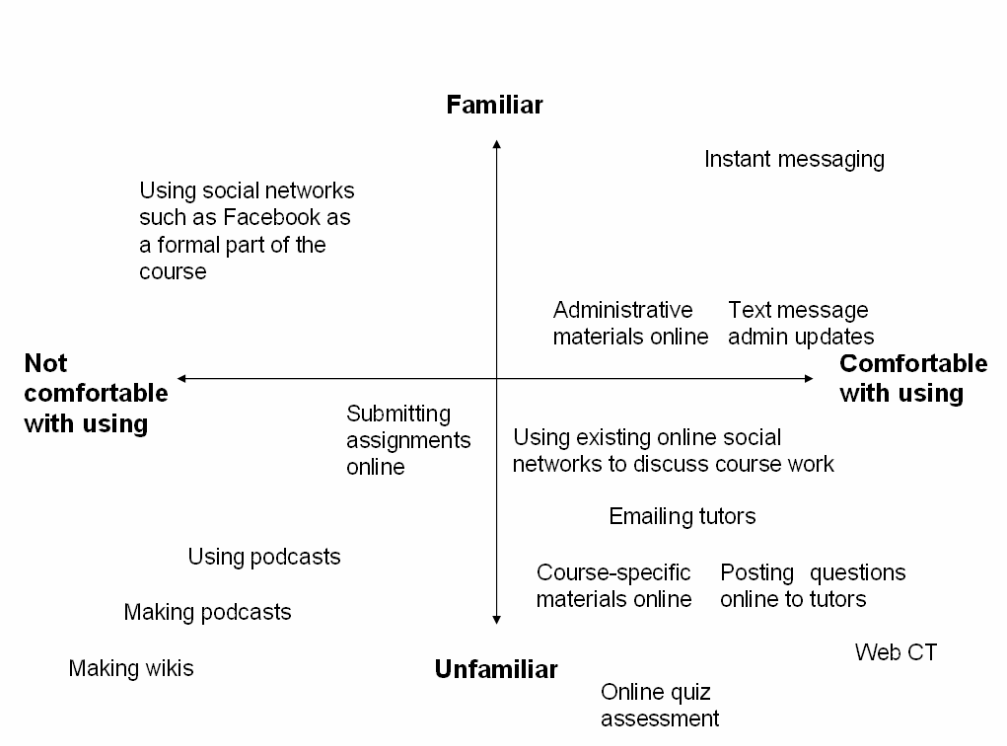
How stretched are they?

Half of students (50%) feel stretched by their use of ICT at university. However, the group who feels stretched contains both students who are very tech savvy, and some who are less advanced in their ICT use – so we cannot assume that feeling stretched means that advanced technology is being used.

These perceptions are course-dependent. Science students' expectations of ICT provision are more likely to be exceeded than those of arts students (30% vs. 21%), and they also tend to feel more stretched (53% vs. 41%). This could be because technology is more central to course content or delivery in the science sphere.

A quarter of all students, both boost and cohort (25% boost, 26% cohort) rate the level of ICT support to help with their studies as neither good nor poor, fairly poor or very poor. This suggests that there may still be a group having difficulty – and the proportion is higher amongst arts students.

In the qualitative groups, some of the arts students told us that where they did not want to use technology, they could usually avoid doing so. Nearly a quarter (25%) of students overall, for instance, never submit coursework online - these are predominantly arts students.



This map identifies the challenges for universities when introducing ICT; it shows the areas where students are currently pushed beyond their comfort zones to use technology. This can help universities to develop the inclusion

of ICT in teaching and course design; to appreciate which elements of technology are likely to be groundbreaking and new for students, and hence the support structures which need to be in place to encourage students to adopt new technologies.

Expectations from school about which technologies are familiar or comfortable are likely to colour experiences at university. In the groups we found that those who were comfortable with submitting online, for instance, were also comfortable with doing so at university. Universities will need to take this variation into account.

Implications for universities

- Universities cannot assume that all types of students are being stretched equally, just because some are. Also, half may not be stretched, so there is an opportunity to help these students become more expert with ICT. Participants in the discussion groups feel that universities should provide students with basic skills for ICT to enable them to undertake their university studies as well as prepare them for work. They did not tend to assume that universities should stretch existing ICT abilities, unless they were on courses directly about ICT.

- Some technologies will be easier to introduce into the teaching environment than others. One challenge is to introduce new technologies – such as wikis, which are perceived to be little used, (although in reality they do tend to be used to a certain degree). Another is to encourage students to use those technologies that they currently use in a social situation – such as social networking sites – for work. These different challenges will require different approaches from teachers and course designers, and universities will need to support their staff to deliver this. Universities need to be aware of the way students already use social networking sites, to help students use the networks they already have in place; also being aware that some students currently do not use social networking sites at all.

- While there is a need here to train students to think about the potential of technology, the actual training would need to be thought through very carefully because, as we shall see, students are often reluctant to use technologies that are forced on them. Universities could benefit from delivering training which highlights the way students think about information, rather than the way they use technology itself. Students note that ICT training is often limited to how to use web based technology, rather than how to think about the potential of various types of technology. There is an opportunity here for universities to really add value to the learning experience, by thinking beyond the practical measures of how to use ICT and training students to look for opportunities in ICT for learning. A second area for training to focus on could be the importance of checking the validity of sources used for research. It appears that students think that they are doing this, although their methods may not be sufficiently rigorous, and training should highlight the best way to do this.

- Students are comfortable using technology for the administration functions of their university, personal and social life (paying rent, using online timetable resources, booking out library books). Universities should take care, however, not to unwittingly discriminate against those who are less tech-savvy, both in teaching and in expectation of using administration systems, as these may also be the students who are the least financially well-off.

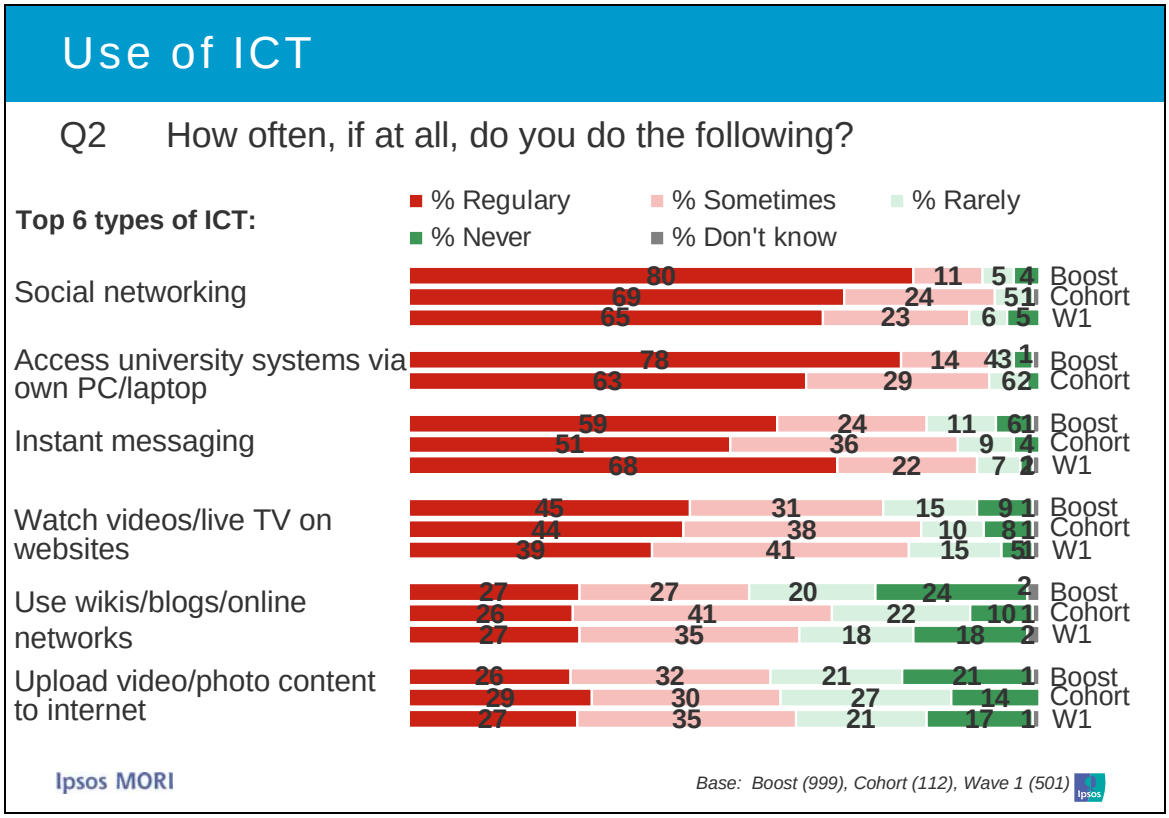
- Different kinds of media demand different conventions – learning through reading, for instance, is different from learning through listening. Universities could take as their remit developing new conventions for learning using digital media.

Students and ICT

ICT in daily life

Going to university has not affected students' overall usage of ICT: this appears to have changed little for students since wave 1, and remains high for both the boost and the cohort group, Students cite speed, cost and convenience as reasons for using the technology that they do. As was the case last year, students regularly use social networking sites and instant messaging, though accessing university systems via their own PC/laptop is a new form of ICT for students this year.

Social networking sites were popular among applicants, and seem to be even more popular now this group have moved on to student life. There has been no significant change in the proportion of students who claim to use these regularly or sometimes (around nine in ten), but the frequency of use has increased, with a higher proportion claiming to be 'regular' users (80% for the boost group – up from 65% in wave 1). This is less so for the cohort group – 69% - suggesting that it is an 'accessible' form of technology that appeals to all abilities. Instant messaging remains one of the most frequently used technologies, although perhaps the university lifestyle means that IM is slightly less useful than it is for sixth formers (83% of the boost sample use instant messaging regularly/sometimes vs. 90% in wave 1).



In the online discussions, these preoccupations are reflected. Facebook and instant messaging are both mentioned frequently and are a natural, interesting part of life for those who took part. Students mostly use instant messaging services, such as MSN, as a cheap and easy way of keeping in contact with friends. Facebook is used for keeping in contact as well as organising group nights out, clubs / society events, putting up photos and sharing stories of the night before.

> *'I use MSN for chatting to mates, Facebook for messenging people and organising nights out and stuff and sharing photos'*
>
> Discussion group 4, female, law student

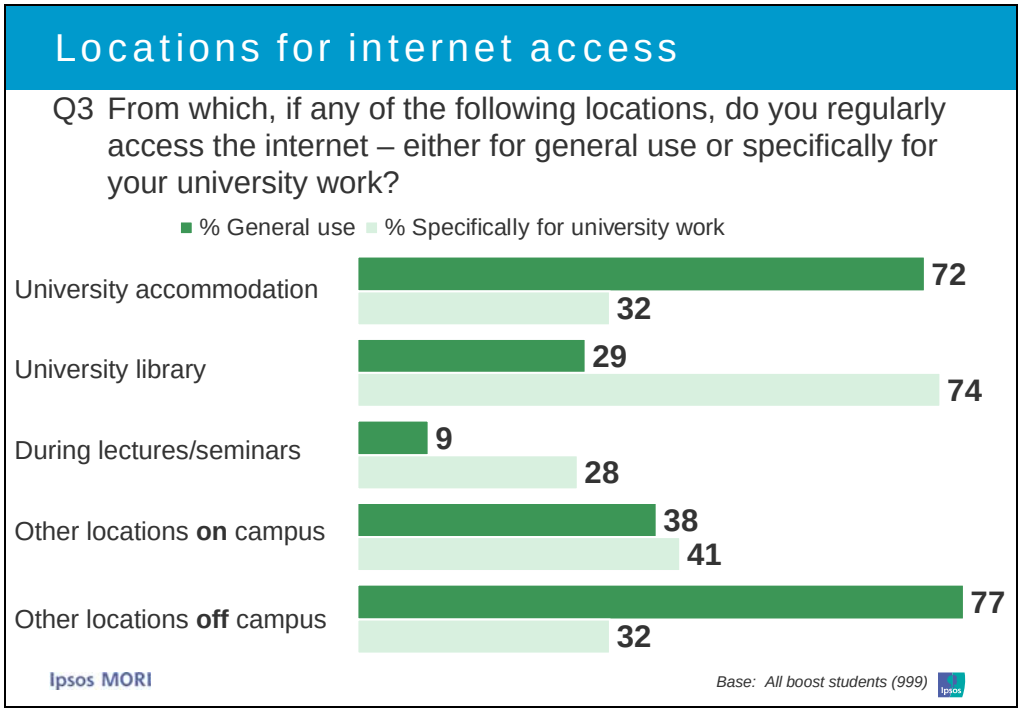
> *'I use Facebook for socialising and receiving information such as gameday and required kit information from the American football team'*
>
> Discussion group 1, male, multimedia computing student

As last year, the least popular form of ICT is participation in an online community such as Second Life, with 73% of boost sample claiming never to do this. The 'tech savvy' cohort group are much more familiar with this, with 53% saying they never use it. Accessing the internet from their mobile/PDA is also little used by students in the boost group – 60% never use this compared with 45% in the cohort group. This method of internet access is likely to reflect high costs of mobile internet, and those less *au fait* with technology, as well as perhaps having less means, than the cohort group are more unwilling to pay this. Almost three in ten (28%) of the boost sample maintain their own blog or website (regularly or sometimes), although the cohort group are much more likely to do this (42%).

Just over half (54%) of the boost group use wikis, blogs or online networks (regularly or sometimes), and again the cohort proportion is higher (67%) which means there are equal numbers of the main sample who do not even use them, let alone maintain their own. There may be implications here for institutions who wish to push course content into wiki or blog format; half their students may not be familiar with them already, while the other half may be much more tech savvy, and very *au fait*. Universities may want to provide different levels of support for different students.

University accommodation and other locations off campus are the most popular places for students to access the internet for general use – most notably for those at pre-1992 or Russell Group universities, with the university library the most popular choice specifically for university work. This result is echoed in the online discussions as when asked, most students said they were either in university halls of residence, or at their home while participating in the group. A third (33%) regularly access the internet during lectures or seminars – for general use as well as specifically for university work. A

higher incidence of males and those attending post-1992 universities do this - it is also higher amongst the cohort group (46%).



Getting to grips with new technology

While students do tend to use slightly more ICT at university than at school / college, the main change has been in the introduction of new types of ICT for teaching and learning since arriving at university. Some forms of ICT - WebCT / Blackboard, online lecture notes and online library facilities - seem to be a central part of the university experience, impossible to avoid. On the whole, students welcome this; the online group participants were comfortable with the idea that university would introduce them to these technologies.

Students are receptive to new types of ICT in principle, although their level of familiarity with each application of technology, and comfort with using it, varies. Looking primarily at the qualitative responses, we can model the students' response to different types of ICT on a spectrum – some are easy to assimilate and use, while others are difficult. Whether students are familiar or not with the technology they use makes a difference; and how comfortable they feel using the technology in the new university environment also makes a difference. For example, WebCT and questioning tutors through email and online are fairly unfamiliar practices to the students coming from a school/college environment; but nevertheless, they tend to get to grips with them easily.

> *All lecture notes are online on WebCT before the lecture for you to print out, the discussion boards are used a lot & you can renew and reserve library books online so it is used a lot more than at 6th form…It's easier because*

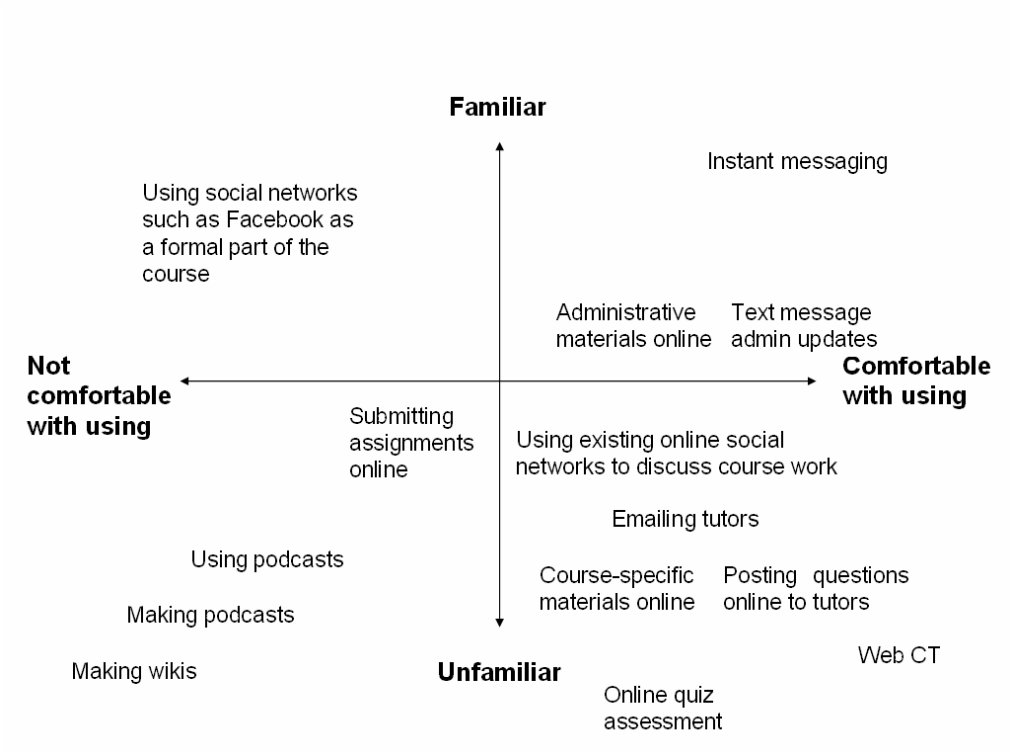
> *instead of several people emailing the tutor with the same question it can be posted on the boards for everyone to access. They'll often be questions about assignments we've been set or a part of the lecture that they didn't understand.*
>
> Discussion Group 2, female, psychology student

Students are somewhat 'forced' into becoming familiar with these applications since they are needed to access very basic things such as timetables, as well as lecture notes or PowerPoint slides from lecturers, with some students even taking exams via this portal. Despite them 'having' to use these systems students appear to feel comfortable with them, can see the benefits, and feel well supported on the technical front.

> *'Done a one hour exam which was on WebCT'*
>
> Discussion group 3, male, geography student
>
> *'The system WebCT seems a lot more suited for university work and lectures'*
>
> Discussion group 1, male, multimedia computer student
>
> *'I didn't expect to be using computers as much as we do but I'm glad that things are accessible on WebCT.'*
>
> Discussion Group 2, female psychology student

These systems are seen as useful by almost every student we spoke to in that they make working easier and more convenient by having course related materials readily available from anywhere with internet access. So although the use of systems such as WebCT is a requirement of the university, students are comfortable using them and choose to take advantage of the resource on offer.

Other practices, such as submitting assignments online, are equally unfamiliar – but students feel uncomfortable with this, preferring the assurance of handing in a paper copy, to know that it has been received. Despite this, three-quarters (75%, rising to 88% in the cohort group) do submit work online (although not always regularly – though this may be more due to the regularity of assignments than anything else), and those who do tend to find the method useful (82%).



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Expectations

University life in general has met or exceeded the expectations of the vast majority of students (87% - with little difference amongst the cohort group – 89%). This is despite the feeling of uncertainty surrounding what university life in general would entail, irrespective of ICT. Prior to starting university, students expected to have high levels of access to technology, and on the whole are satisfied now that they are there. Many were unsure, and did not know what to expect. However, the fact that the latter say their expectations are met or exceeded at university suggests that they may have had a basic level of expectation without necessarily realising it – perhaps based on their experiences at school – so had they arrived at university and found a poor level of ICT, they would have noted that their expectations had not been met. This does not, however, appear to be the case. Prior to starting university, three-quarters (75%) expected to have unrestricted access to all types of web pages on their university's systems, and the vast majority (80%) are satisfied with the level of internet access provided by the university. This level of satisfaction rises to 86% amongst the cohort group, which is an encouraging find given that this 'tech savvy' group are likely to demand more in the way of internet access than their peers in the boost group.

Experiences that students have prior to university, at school or college, vary a great deal with some schools encouraging use of ICT more than others. At one end of the spectrum, some schools only required students to type work and do basic research online, while other schools promoted interactive whiteboards, virtual learning environments and an ICT presence in all subjects. It is worth noting however, that when students discuss schools that use a lot of ICT, they are not always complimentary. Some of the school-leavers felt that their schools had used some ICT options too often, or inappropriately – making ICT at school memorable for the wrong reasons.

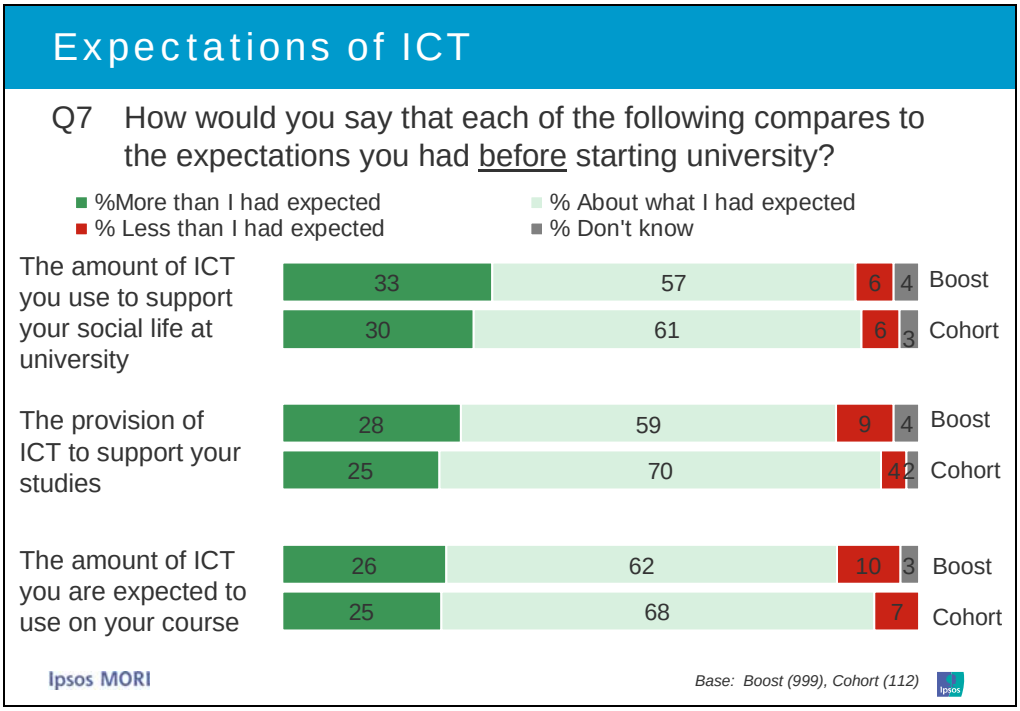
> *'At school, all students had access to computers and a school email address, which teachers could contact us on, but more commonly they approached us. We had a virtual learning environment (Moodle I think) which had bulky documents on it to save printing costs (eg exam past papers and mark schemes, syllabuses etc)'*
>
> Discussion group 1, male, medical student

> *'When I was at school we only used the computer in ICT. Same with college.'*
>
> Discussion group1, male, pharmacy student

> *'It (ICT) was sort of forced upon us, like in lessons which required no technology and would have been better taught without it, we were asked to make presentations on PowerPoint or other ICT related things which were just unneeded'*
>
> Discussion group 3, female, biology student

> *'Very little - mainly internet for research and Word to type up assignments'*
>
> Discussion Group 2, female, human geography student

This shapes students' perceptions of university and to a certain extent, determines where technologies sit on the perceptions chart above. This has implications in terms of managing the expectations of students prior to starting university; they will all be starting from different bases. Not only does this affect expectations but may affect how well students will later cope at university. We will go on to discuss this 'digital divide' below.



Most students get what they expect from their university in terms of the provision of ICT to support their studies. For 87%, the provision is as or better than expected. This was also the case in the first wave, as when students are particularly interested and ask about provision on applying, they tend to be pleasantly surprised - 92% of those who asked for information about ICT found the provision met or exceeded their expectations. The proportion of the boost sample who feel that the provision of ICT is *less* than expected is double that of the cohort. This may be because the cohort are more aware of what they want and therefore their expectations are more likely to be met, or it could be that due to their interest, this group are more likely to seek out any technology available.

In the first study, students expected that ICT would play a bigger role for them at university. On the whole, students' expectations have been met, in terms of the amount of ICT they are expected to use on their course (62% found it to be about what they expected), while around a quarter (26%) found it to be more than they had expected – a proportion which is much higher amongst those who feel their ICT skills are stretched. The 9% who feel that the amount of ICT they are expected to use is less than expected also tend to feel the same way about ICT provision and the amount of ICT used to support their social life

The proportion whose expectations were exceeded in terms of amount of ICT used on their course is also notably higher for Russell Group universities (34%), suggesting that the traditional image of the universities may influence expectations in terms of technology. The same is true of ICT provision, with three students in ten from Russell Group institutions (31%) feeling that their expectations have been exceeded in terms of ICT provision. This is also reflected in satisfaction with the level of internet access provided by the university – the most satisfied group are those at Russell Group universities

(86%). This may be an indication of image and expectations rather than actual provision; we could speculate that the more traditional image of the Russell Group universities means that students have lower expectations of ICT provision than their counterparts at more modern institutions, or this could be due to better provision at these institutions.

Of the three areas asked about, the amount of ICT used to support social life at university was the area that exceeded expectations for the highest proportion of students (33%).

Of course, it can sometimes be the case that participants in surveys claim their expectations were correct, in order to appear knowledgeable. But in this instance, students in the discussion groups also say their expectations of ICT at university have been met or exceeded and that it is of an adequate level; which helps to bolster the quantitative findings. Some reservations are expressed - some staff do not have the skills to use appropriate technology, yet it seems that these tutors and lecturers are in the minority and difficulties seem to be quickly resolved when they occur.

> *'I expected it and am happy with the amount we use'*
>
> Discussion group 1, female, design and art direction student

> *'It was better than I expected'*
>
> Discussion group 3, male, geography student

> *'It's annoying when they waste time trying to figure out how to turn the projector on!'*
>
> Discussion group 4, female, law student

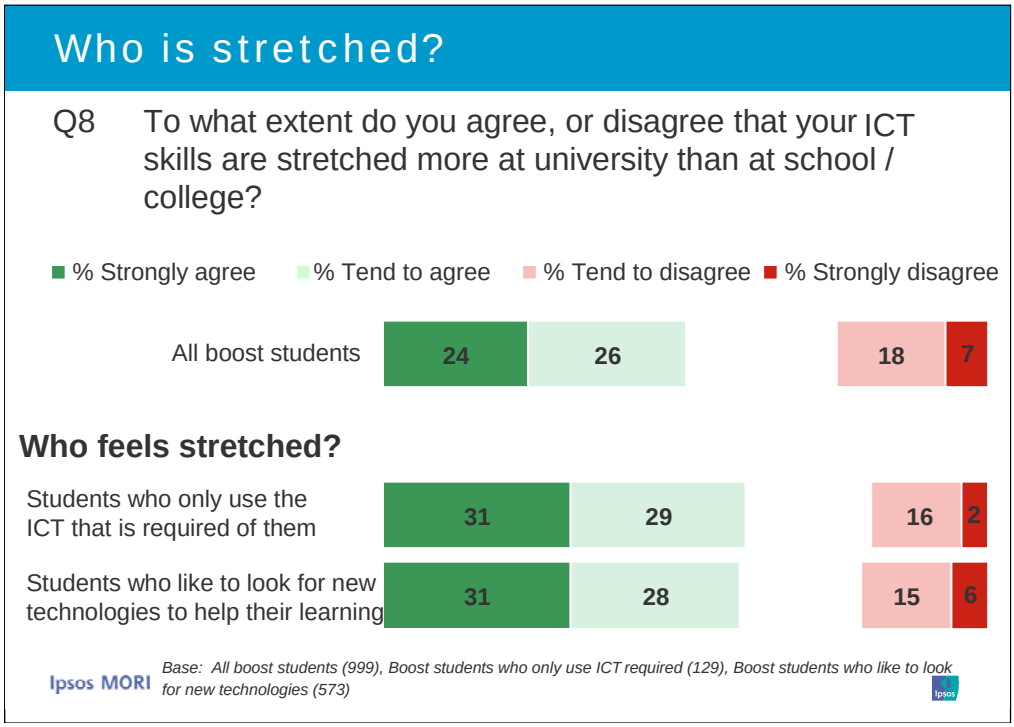
> *'I'm happy with what they use... itis more than what I expected'*
>
> Discussion group 4, female, digital animation student

> *'Some of them just don't know how to do stuff, and have to ask for help from the students, quite funny really'*
>
> Discussion group 3, female, psychology student

How stretched do they feel?

While just over a third (36%) in the first study felt that their ICT skills were stretched at school/college, half (50%) feel that their skills are stretched

further at university. But those who are in this "stretched" group do not have the same needs. The group contains both those who only use the ICT which is required of them (so we may assume they are less tech savvy) and those who like to look for new technologies (so we may assume they are more tech savvy).



As we also found in wave 1, amongst students who looked into ICT provision at a potential university, expectations in terms of provision of ICT are met or exceeded for science students more than arts students. Perhaps because of this high level of provision, science students are also more likely to feel that their ICT skills are stretched more at university than at school/college.

It was not, however, specifically noted to be the university's role to stretch ICT skills and it was noted in the discussion groups that training was expected in terms of basic ICT ability, but not in terms of stretching existing skills.

> *'They should ensure that people have basic IT skills for work'*
>
> Discussion Group 2, male, computer science student

> *'If they're encouraging you to use IT & using more and more technology it's their (universities) responsibility, I feel, that they also make sure that you can use IT sufficiently so you aren't at a disadvantage to another student who knows computers well.'*
>
> Discussion Group 2, female, psychology student

In the qualitative discussions this variation across different subjects also emerged. As one would expect, those studying computer science or graphics are familiar with a number of programmes that others may not be, whilst those studying subjects such as drama seem to make more use of social networking sites such as Facebook. When asked to make a comparison between the technology use on their course compared to that of their friends, art / design students perceive that they use less advanced technology than others who are on non-arts courses.

> *'Probably (use ICT) less so because of the course I'm on'*
>
> Discussion group 1, female, design and art direction student

> *'Drama definitely benefits from social links like Facebook.'*
>
> Discussion group 4, male, drama student

> *'On my particular course there is a lot of 2D/3D CAD for design projects and portfolio layouts'*
>
> Discussion Group 2, male, product design and innovation student

> *'I am expected to use / own the best software for the given situation. All units of my course require a different program'*
>
> Discussion group 1, male, multimedia computing

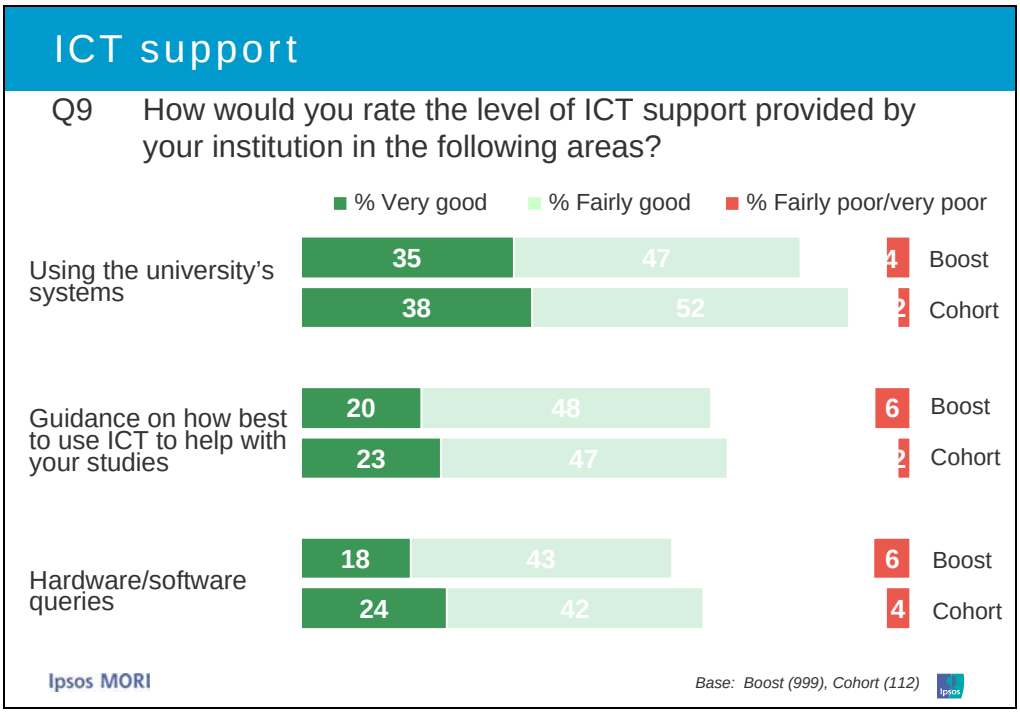
Support

The university's electronic systems are deemed easy to use (86% agree) and there is no concern amongst students about ICT going wrong, with the assumption that the technical support will be there if they need it. This is consistent with the first wave of research, which found that students expected a certain level of ICT support. Support is seen to be good in terms of using the university's systems, hardware/software queries and guidance on how best to use ICT to help their studies. Students whose expectations have been exceeded in terms of provision of ICT, and in the amount of ICT they are expected to use on their course, are more likely to rate the level of support available more highly than others. This could be because these students need the support more than others, and so are aware of exactly what is available, or it could also be simply due to expectations of support.

In the groups, students assumed that "support" just meant technical help with programmes, crashing computers, or helping them learn how to use university

administration systems. They also agreed that unless their course focused on ICT as part of the content, it was relatively easy to avoid using ICT which felt unfamiliar. ICT is principally seen as either a delivery method for administration, or as course content in itself.

There was no sense in the groups that the university's remit was to help them become more skilled at using ICT, or to think in new ways about ICT, on a broader level. In the first study, students struggled to see how new technologies would help with teaching and learning, so it appeared they had no expectation. However, now, a quarter (25%) of boost students (26% of cohort) rate the level of *ICT support to help with their studies* as either neither good nor poor, fairly poor or very poor. This suggests that there may still be a group having difficulty – and the proportion is higher amongst arts students.



Support provided by the institution is not, however, the first port of call for students when things go wrong. The majority will go to their friends first to try to solve the problem before approaching institution-based support. This seems to be mostly to do with convenience.

> *'If I'm having trouble with something I'll always ask my mates first'*
>
> Discussion group 4, female, chemistry student

> *'My mates are usually in the same boat so we help each other'*
>
> Discussion group 4, male, IT student

> *'I haven't used the tech support but apparently it's quite good'*
>
> Discussion group 3, female, psychology student

Digital divide

The participants in this research emerged as high socio-demographic, technology-literate students – perhaps more so than the average university student. There are therefore, implications for how far we can infer findings to all students.

In terms of those who took part in our online group, they can all be described as 'tech-savvy'. When asked to judge their own ICT abilities most believe their abilities are higher than those of their friends.

> *'I think I'm better at it (ICT) that most of my mates'*
>
> Discussion group 4, male, medical student

> *'I'm quite computer literate so I have no problems myself – however courses were run at the start of the year to help people not familiar'*
>
> Discussion group 1, male, multimedia computing student

These respondents all appear to have access to their own ICT and are not reliant on the university facilities, which suggests that they may have a higher disposable income or parents who give them equipment. In reality, it is harder to reach those without this personal access, since it would be more of an effort for those students to attend and take part in an online discussion in the evening. This also leads to a division in terms of convenience in getting university work and administration tasks completed. For those students without access to a personal computer / internet it will be more of a struggle to complete work and be as computer literate as counterparts with access at home. This is an area which would benefit from further exploration. One way universities help to combat this divide is by placing computers in halls of residence, as flagged up by a participant in the online group.

> *'We have clusters in our halls as well as uni in case you don't have laptops or printers etc'*
>
> Discussion group 3, female, medical student

However, 'clusters' in halls were not mentioned by any other students in the groups so it appears to be an exception for universities to provide such facilities (or, the students in our groups did not need to use them, so did not flag these up). It may be interesting for JISC or other universities to explore whether students from lower socio-demographic groups perform better at universities that do provide better forms of access to ICT facilities.

ICT and Learning

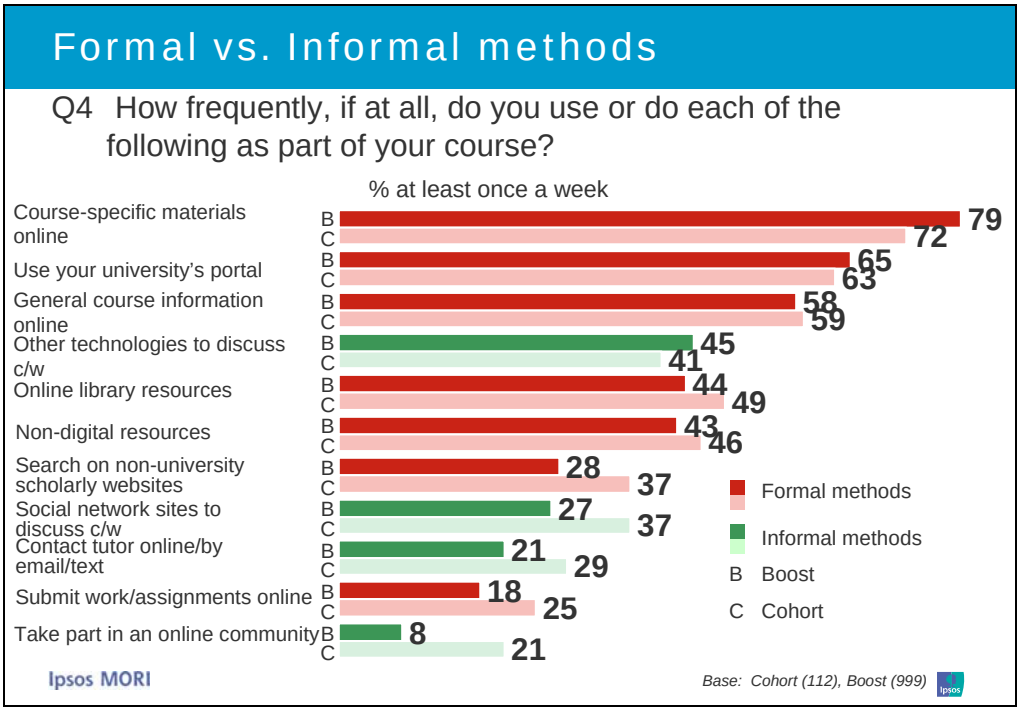
Successful learning techniques

When it comes to their course students tend to prefer to use more 'formal', institutionally provided, types of ICT and access course specific materials online, use their university's portal and access general course information on a weekly basis. Reflecting the more traditional nature of the universities, students at Russell Group universities are more likely to use formal techniques than those at other universities, notably using online library resources and also non-digital resources.

The least frequently used formal method is submitting assignments or coursework online. A quarter (24%) of students claim never to do this – predominantly arts students and those at post-1992 universities, although the technology-confident cohort group are much more likely to do this (just 11% never do). There is also a geographical split, with those at Welsh universities less likely to submit work online than their English, Scottish and Northern Irish counterparts.

Less frequently used are informal methods such as online communities or virtual worlds specifically as part of their course, emailing tutors and social networking sites to discuss coursework with others. A quarter (25% of boost sample) claim never to use social networking sites to discuss coursework with others – this group is more likely to be male, and as may be expected, be a relatively low level ICT user, use only the ICT that is required of them and don't tend to look for new technologies to help their learning. The cohort group are more amenable to this and just 15% never do this. Non-university provided scholarly websites, such as Google Scholar, are used to a certain degree – three in ten (28%) use these sites at least once a week. As may be expected, it is those at the higher end of the ICT-comfort spectrum that use these – those who like to look for new technologies to help their learning (33%) and notably the cohort group (37%).

Despite differing levels of usage, and with the exception of taking part in an online community or virtual world, students perceive both formal and informal methods to be useful.



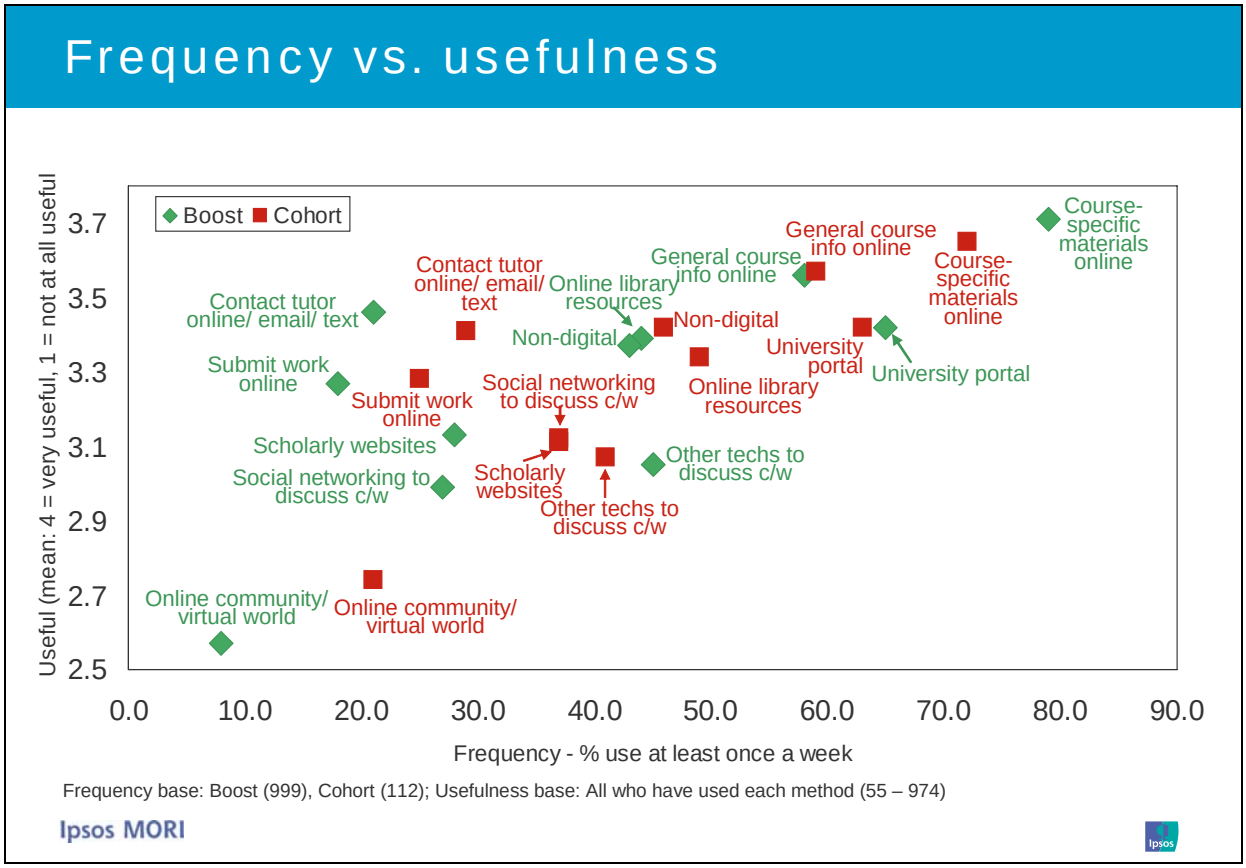
When it comes to their course, students tend to see ICT as something which is primarily there to help them with course administration. Being able to access course-specific materials online was felt to be the most useful deployment of technology at university, followed by accessing general course information online and contacting their tutor/lecturer online or via email or text. They do all this on a weekly basis. There was an inherent expectation from the first wave that lectures and other materials would be available online. It is therefore encouraging to see that many students now use and value such a resource.

Students at Russell Group universities are more likely to use online resources than those elsewhere, notably using online library resources more often. However, students at these HEIs are also more likely to use non-digital resources regularly, - which might reflect differences in the student body, the methods of orientation used by the universities, or a range of other factors. We can also see a gender divide here, with females more likely to use non-digital resources than their male counterparts.

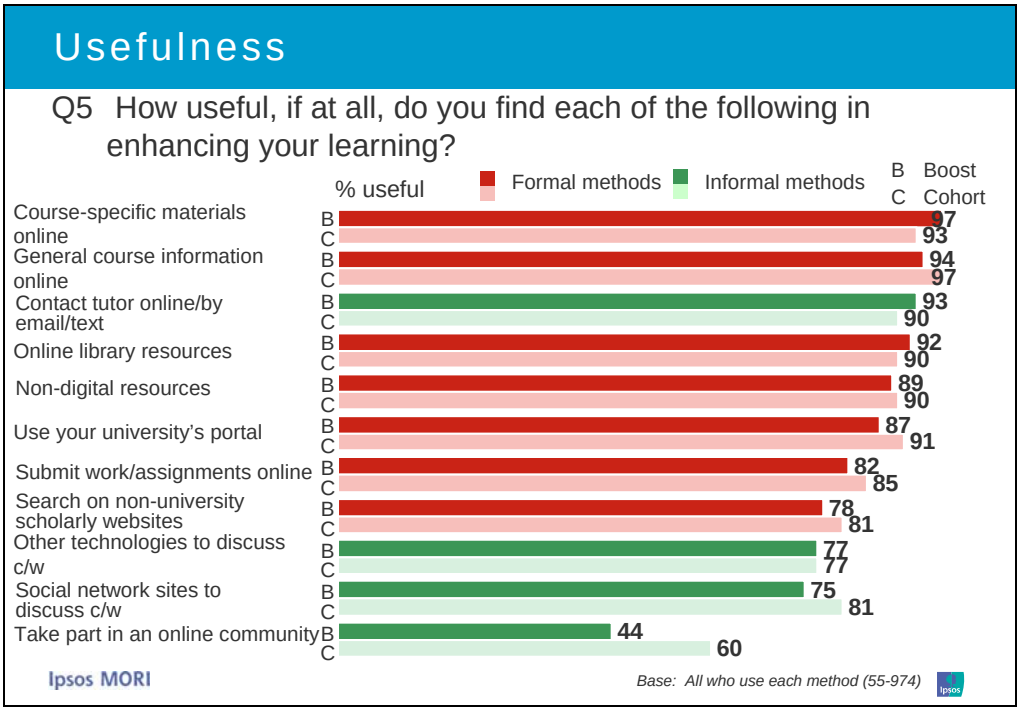
Networking sites such as online communities are seen as useful when it comes to learning and teaching – but are used in a very informal way. Social networking sites are used regularly and around three quarters (73%) of the boost group discuss coursework using these sites (though this discussion does not necessarily happen regularly, and around a fifth (21%) say they do not find it useful). The cohort group are much more likely to use social networking to discuss coursework – 84% do this. Students who took part in the discussion groups had some reservations about using social networking sites for university work, despite this, many still used them and said they prove useful. This slight discrepancy between what the students say can perhaps be explained by those who took part in the survey answering they use social networking sites without being able to express any concerns they

may hold about them. Whereas those in the online groups were able to answer in more detail explaining that they do use social networking sites, however they hold some reservations.

Online communities or virtual worlds are seen to be less useful, with 40% saying taking part in one is not useful (slightly fewer – 31% - of the cohort) While over two in five (44%) – and 60% of the cohort – do claim to find these useful, this figure is much lower than for other technologies. Little difference can be seen in level of usage between arts and science students.



As shown above, the perceived level of usefulness of various types of ICT increases with level of use. Little difference can be seen between the perceptions of boost and cohort students.



Students tell us that the need for ICT provision varies by course. Overall, ICT is viewed positively for learning, with nine in ten (89%) students agreeing that ICT helps support their learning. Despite this figure, students continue to flag up the importance of high standards of teaching (as last year). Several commented that while technology in learning has become very important, it is not a replacement for good teachers or face to face interaction.

> *'A teacher is the most important thing about the learning process, but it should be well supported by good IT provisions and training in order to be effective'*
>
> Discussion Group 2, male, product design and innovation student

> *'(Tutor's ICT ability) doesn't matter as long as they can properly convey what they're trying to teach'*
>
> Discussion group 4, male, computer science student

> *'Sometimes I prefer to just have them lecture face to face if everything was done via technology it wouldn't be as personal or helpful'*
>
> Discussion Group 2, female, English student

Although 57% like to look for new technologies to help their learning, as was the case before starting at university, once there students still find it difficult to

think about how different technologies can help their learning in different ways. New technologies are often only discovered through their friends, who pass on word of mouth recommendations about technologies that students would not previously have considered as a learning tool. As may be expected, the cohort group are more likely to look for new technologies (73%).

Training given by universities in ICT appears not to address this issue according to students. Students are not trained how to think about the potential of various types of technology – instead, training is often limited to how to use web based technology, and can be seen to be "patronising", and not particularly relevant for them. Yet, some students feel it is very important that the university does provide them with training around ICT.

> *'They did a 'how to use online resources' session, and I found it patronising'*
>
> Discussion group 4, male, drama student

> *'I think uni should be teaching us, some people are more technological than others, they know what to look for, and some people don't even know how to use a pc so are missing out through no fault of their own really'*
> Discussion group 3, female, psychology

While there is a need here to train students to think about the potential of technology, the actual training would need to be thought through very carefully, because as we shall see, students are often reluctant to use technologies that are forced on them. Universities could benefit from delivering training which highlights the way students think about information, rather than the way they use technology itself.

Looking back to our chart of the technologies with which students feel comfortable, ICT that is driven by the learners themselves is successful. In the discussion groups students told us about using their own networks to build learning. We heard about tutors setting up discussion boards via Web-CT which were not used, while existing IM, email and Facebook routes to communicate were used.

> *'We have online discussion boards but nobody really seems to use them'*
>
> Discussion group 1, male, pharmacy student

> *'Think it's easier just to email the lecturer'*
>
> Discussion group 3, male, geography student

The collaborative learning success stories we heard related to learners creating their own forum, using methods such as informal online discussions. Students tell us that this gives everyone the opportunity to participate – opening doors to more shy students who may be reluctant to get involved in face-to-face discussions. It is evident that the learning has to be instigated by the learner, rather than be forced upon them by their tutors, when situations can be seen to be somewhat 'fake' and achieve only low levels of participation. However when initiated by the student, learning could be seen as a more 'social' occasion (particularly on sites such as Facebook, which are primarily used for socialising) and therefore may not be strictly seen or perceived as 'learning'. As mentioned above, three quarters are already discussing course work with friends on social networking sites, but this does not yet happen regularly for everyone, so it could be a growth area for universities.

These methods are seen to be more successful when informal – students note chatting via Facebook, and creating Facebook groups of their own. In the groups, students often did not recognise discussion in this way as learning and therefore we needed to prompt and probe to get them to think in this way. There is an implication here for tutors and lecturers, and a potential training need to help tutors identify the opportunities for their students to help themselves to learn.

> *'We have set up a Facebook group as we learn in small groups of 12 and we ask questions that way'*
>
> Discussion group 3, female, medical student

> *'I contact my friends through Facebook when I have a problem'*
>
> Discussion group 4, female, chemistry student

> *'It may benefit quieter people who don't have the confidence to speak out in a group'*
>
> Discussion group 3, female, medical student

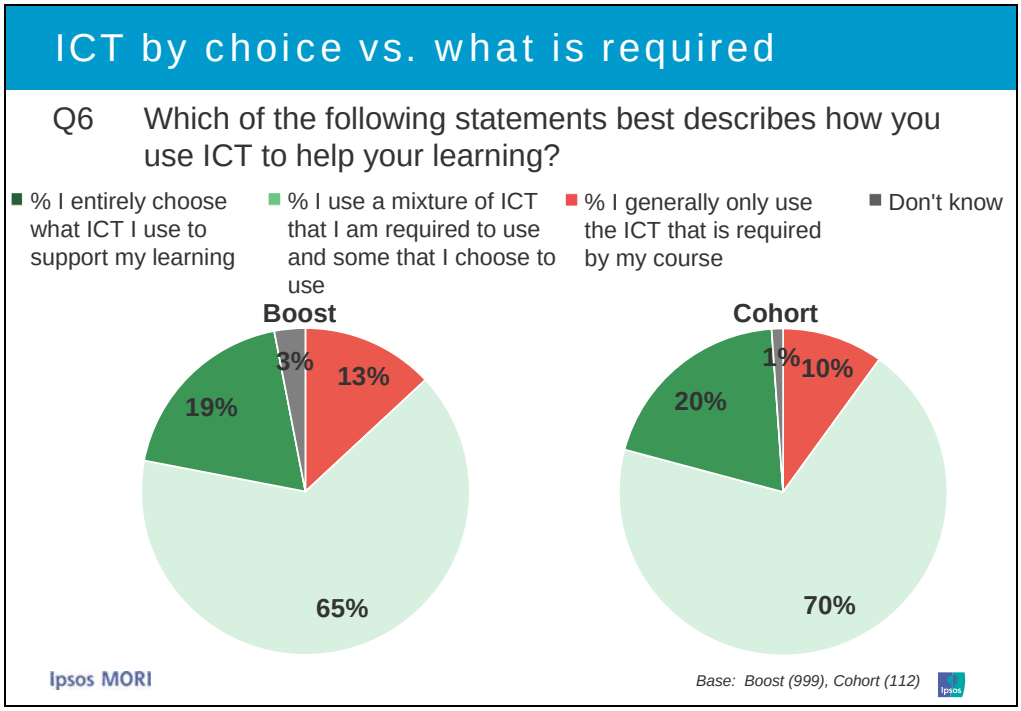
> *'For one of our subjects, we have a Facebook group we created ourselves to discuss the work with tips and things'*
>
> Discussion group 4, male, computer science

> *'You can send an email to a large group of people and read all the responses'*
>
> Discussion group 3, female, medical student

While the vast majority of students are active users of social networking sites, 9% of the boost group claim to rarely or never use the sites. These students

are more likely to be male, and note that they use ICT to support their social life at university less than expected. This suggests that their low use of social networking was not necessarily expected – one reason could be that they are resistant to social networking but had expected that they may miss out on a social life if they do not participate, but have found this not to be the case. If universities do encourage more use of social networking, there is a need to consider how this more distant minority can be included. If this group are expected to use social networking sites, they may simply opt out, and their learning could suffer.

Following the success of student-led collaboration, it is encouraging to note that students tend to be proactive in terms of using technology for their learning, beyond what is expected of them. Almost three in five (57%) agree that they like to look for new technologies that help with their learning, rising to 62% in the post-1992 universities. Just 13% only use the ICT that is required by their course with the majority (85%) making their own decisions about technology, and using more than just that which is required. This often involves students making use of more informal forms of ICT for formal purposes e.g. use of Facebook for collaborative university working.



Academic research

Prior to starting university, the vast majority of students expected to have to use the internet or online databases more than they had to date to complete their work at university. On arrival, this expectation is met, with 89% using online library resources, such as journals, databases etc at least once a term (44% at least once a week - higher for students at Russell Group universities – 53%) and the vast majority of these find the source useful in enhancing their learning.

Students tend to head to the internet as a first port of call for academic research, and predominantly use generic search engines such as Google, but are then likely to check the information they find against other sources such as the library. Some mention Wikipedia as a starting point although again they double check this against references given. The vast majority (69%) like to check the validity of the information they take from the internet – a figure that is higher amongst the cohort group (78%), perhaps due to a higher awareness of what information is available, and that not all of it is legitimate or credible.

Specific academic websites, such as Google Scholar, are used less than other sources of information, with only three in ten (28%) using the websites on a weekly basis, although they are seen to be useful by those who use them (78%). The cohort group are more likely to use this method for research (37%)

> *'I usually Google...then go to the library'*
>
> Discussion group 4, female, digital animation student

> *'I would almost certainly use the Internet first, but I would definitely go to the library too - if it was for research purposes.'*
>
> Discussion group 4, male, maths student

> *'Wikipedia, then use the references to get credible information'*
>
> Discussion Group 3, male, physics student

In the groups, students are very aware of plagiarism, and tell us that their universities take it extremely seriously. Students take a number of measures to ensure that it is not something they are seen to be doing; they know that online sources can be riskier to use than offline. The action students take, however, is chiefly putting things into their own words, or looking at a number of websites to ensure the same points appear. However, other than cross-checking online information with references, journals and libraries, students do not see that there are any more rigorous ways in which students ensure information is credible. This cross checking would be complex and time consuming, so they are comfortable using their online sources, therefore, and do not believe that their learning suffers. These findings contrast with the quantitative findings, where 69% of the boost sample agree that they like to check the validity of information taken from the internet. This could be for one of two reasons – the first being that students feel they ought to check the validity, so say that they do. The second reason could be that they do actually believe that they are checking the validity, although their methods are not rigorous. This is a key message for institutions, to ensure that students are aware of both the importance of checking the validity, and the best way in which to do this.

'Make sure I reference…reword things, and don't copy and paste things'

Discussion group 3, female, biology student

'It ensures I understand what it is I'm writing (putting things into own words)'

Discussion group 3, female, biology student

'To put it into your own words, you need to have a reasonable understanding'

Discussion group 3, male, physics student

'You have to compare different sites so you know it's right'

Discussion group 3, male, physics student

Teaching

Expectations of ICT in teaching

Some technology in teaching is "under the radar" for students and seen as very normal. PowerPoint presentations in lectures (though some lecturers still use OHP), WebCT for filing of lecture notes, emailing tutors, which is usually available all the time and for some, and the submission of work online, are all seen as normal.

Submitting work or assignments online appears to vary by university and by course, with science students much more likely to do so than arts students (70% submit work online at least once a term compared with 58% arts students), and those at Pre-1992 universities are also more likely than others (74% at least once a term). Students often prefer to submit a paper version of an assignment – either on its own or alongside an electronic version. Sometimes they are asked to do this, sometimes they simply want the reassurance that their assignment has been received.

These students are all still in their first year, and many appear to still have the school mentality of top-down teaching. In the discussion groups, the assumption is that teaching is about conveying knowledge to the learner, from a position of authority. This sets all sorts of expectations about the kind of relationship teachers and students have, and the technology it is appropriate for a teacher to use. This distinction between teacher and learner may change over a student's university career, as students move away from the 'school' mentality; but in the first year, it is very evident.

One of the arguments against the use of social networks in teaching is that teachers (authority figures) should not impinge on the 'private' space and technology use of students. Use of social networks, for example, can be appropriate, but does not feel right when led by the teacher. While students talked about creating their own group on Facebook and inviting their tutor to join, this would be less successful if the tutor were to create the group and invite students.

> *'We set it up for our group, but in our last group we added our anatomy tutor so we could ask him any questions'*
>
> Discussion group 3, female, medical student

> *'We have actually done group work through Facebook! We had a presentation to give and we were put in groups of six and we all had Facebook. Most of us lived off campus and it was easy to liaise and share notes through Facebook.'*
>
> Discussion Group 2, female, psychology student

This is because when the teacher creates the group, this sends a signal that formal "teaching" is taking place. Students then relate to the experience differently, judge the outcome differently, and become concerned over security and also the quality of teaching via social networking sites.

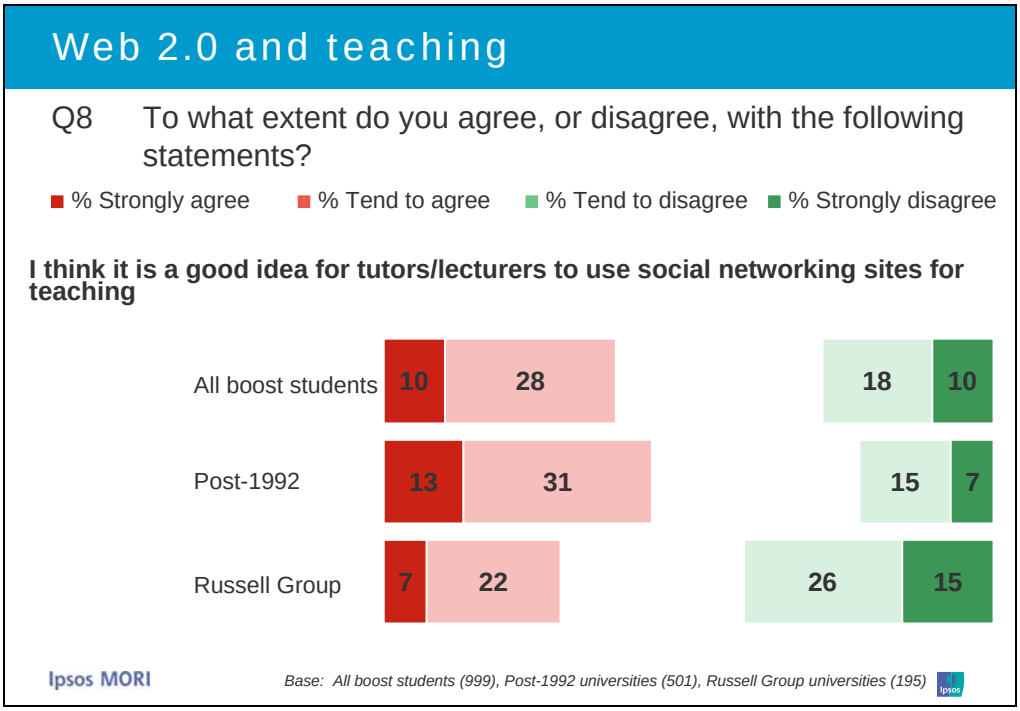
> *'I only use it for peers and friends. You wouldn't want lecturers and tutors to see Facebook'*
>
> Discussion group 1, male, pharmacy student

> *'I'd probably get distracted by other stuff on Facebook and not end up doing anything'*
>
> Discussion group 3, female, psychology student

> *'I don't know, it would seem kind of weird getting lecture notes or speaking to your lectures through Facebook!'*
>
> Discussion group 4, female, law student

> *I would be a bit angry to be honest - tuition fees aren't cheap!*
>
> Discussion group 4, male, maths student

This is especially apparent among Russell Group students, as the chart below illustrates; only a third want teachers to use social networking sites, while overall 38% agree that it is a good idea for tutors/lecturers to use social networking sites for teaching, by no means an insignificant percentage. Nearly half of post-1992 university students would like to see teachers using these sites. Females are also more receptive to this idea than males. This polarity in opinion could be put down to a number of reasons. Those against the use of such websites for university work talk about issues of privacy (keeping tutors and social lives separate), formality of teaching and security (or lack of) of documents as reasons not to use it. Despite some strong views about this, those students who have used social networking sites for collaborating about university work all say they found it very useful. It should be noted however that this could be down to the students themselves being in control of the learning environment as opposed to their tutors.



Web 2.0 in teaching

While more innovative examples of ICT, such as wikis, podcasts, online quizzes, online exams and lectures streamed online so students can watch from anywhere do exist, they tend to be the exception rather than the norm. Use of these features depends on teacher competence, and the actual teaching is still seen to be vital – more important than the technology. This may suggest that the onus is on the student to actively look for new technologies to help their learning, and the 12% (boost sample) who do not do this are likely to be at a disadvantage unless their university is fairly progressive. Very few students note that their university uses too much ICT for teaching – just 14% agree that this is the case, although it is noteworthy that amongst the cohort group, which we understand to be more favourable to technology, the proportion who agree that too much ICT is used is double that of the boost sample (29% vs. 14%). This could be because this group is more aware of different technologies, and more competent, and so they are perhaps aware of the potential of technology and notice when it is being used badly by lecturers. In contrast, the other group more likely to agree that too much ICT is used, is those who only use the ICT that is required on their course (22%) - effectively the low level users.

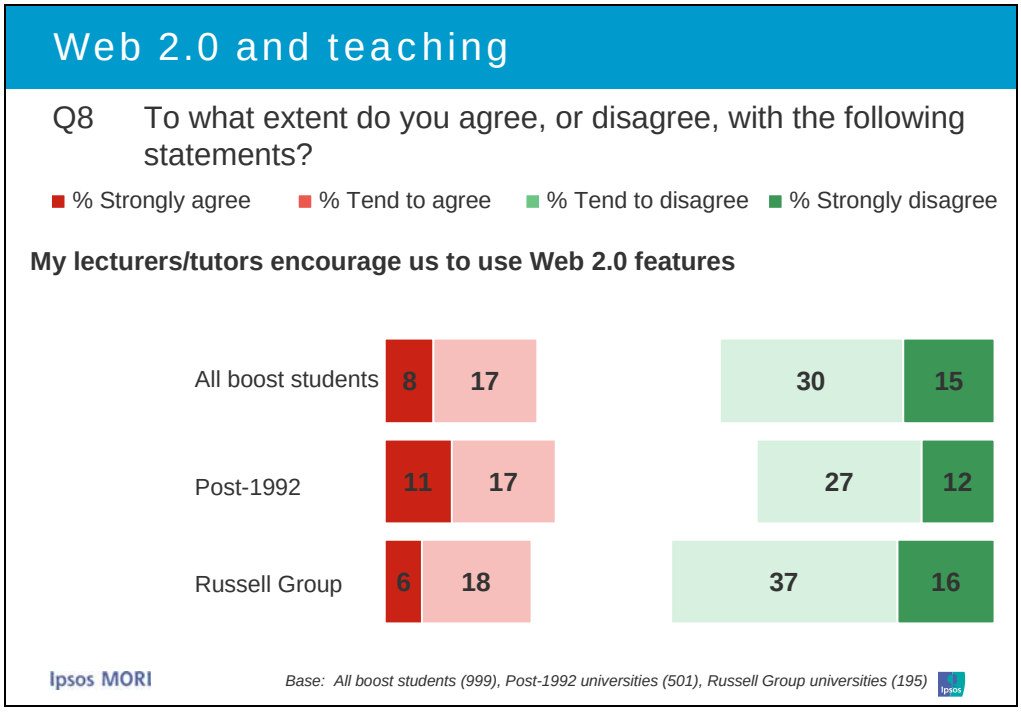
There are a number of new technologies that students do not yet fully understand, and have not yet been fully exposed to – for example wikis, and some aspects of collaborative learning e.g. online groups that tutors set up for them, as previously discussed. This contradicts the quantitative findings, which show that 54% regularly or sometimes use wikis/blogs/online networks, although this is not specifically in relation to university work. Although a minority of students do use wikis at university a higher proportion do not even know how to use a wiki or in some cases even know what one is. In the first discussion group only two out of the six respondents had ever used a wiki and this was reflected in all the other groups. Those who do benefit from high-

tech teaching methods note that their peers are not using the same level of technology in their learning, and some of their friends are envious.

> *'Wouldn't know how to set up a wiki'*
> Discussion group 4, male, medical student

> *'Most of my friends on other courses don't use wikis so much I don't think, and they are jealous that I can watch lectures from my bed so I guess they can't'*
> Discussion group 1, male, medical student

Students tend not to be actively encouraged by their lecturers/tutors to use Web 2.0 features to help with learning. The chart above shows that teachers do not tend to "sell" the value of Web 2.0 features to students. Just 25% agree that this is the case, although students who are more receptive to new technologies for learning tend to be more aware of the encouragement of tutors – perhaps they are interested already, so the tutors encourage them, or perhaps the encouragement of tutors sparked an interest.



One of the most vital messages emerging was the importance of accessible tutors, and 93% of students find it useful to be able to contact their tutor/lecturer online or by email or text. Students are most responsive when they initiate the contact, and having tutors available to contact at any time was seen to be very important – be it via email or social networking sites (as long as it is on the student's terms).

Social and Personal Use

The most common use of technology at university is simply to support daily life – through such things as administration, clubs and societies and communication with both tutors and friends, and a third of students use more ICT than they had expected to support their social life at university.

Prior to university, students expected to have to take their personal laptop or PC with them to university, and expected to be able to use their own equipment on all of their university's systems (81% expect this to be the case), and the vast majority now do this on a regular basis. Three-quarters (75%) are able to use their personal laptop or PC on all of their university's systems – slightly higher, 83%, amongst the cohort group. As might be expected, this figure is lower for students of DE social grade (64%), who do not necessarily have the equipment available. There is little difference across the university types.

Students in the online discussion seem to be well equipped with their own ICT kit. In the online discussion all appear to have their own computers / laptop, access to the internet and a mobile phone. They are expectant of the university to provide them with support for use of these technologies and most seem to provide this adequately.

> *'Yes, we have wireless coverage across campus for laptops, and there are usb ports in computers to put in hard drives etc'*
>
> Discussion group 1, male, medical student

Some mention using their laptops in lectures to write notes, or even using iphones / ipods.

> *'Few of us use Google docs for making notes in class via iphone/ipod touch when we don't have laptops'*
>
> Discussion Group 2, male, product design and innovation student

This certainly doesn't seem to be normal practice though since when we ask others about using iphones / ipods most say they do not and are impressed by the idea as something they have never done before. This could relate to the digital divide discussed earlier, in that technology such as this is only personally available to the most well off students. Therefore, students who cannot afford such gadgets are again left at a disadvantage.

In terms of the implications this has for JISC it is important that universities continue to support students in using their own equipment on campus. Some

students do not have access to personal ICT equipment and they should not be forgotten. These students suffer, in that they are unable to be as flexible in their working habits on a practical level (have to be on campus to use a computer / internet) and an academic level (ICT skills not being as comprehensive) making every task more time-consuming. These students need more accessible ICT facilities and training to enhance their overall university performance.

Conclusions and Implications

How to exceed expectations

Overall, universities are perceived to be providing a basic level of ICT provision to a good standard. Expectations are met, and sometimes exceeded. This study gives some success stories for the use of ICT among students; some universities are leading the way.

- WebCT and online administration systems, plus personal involvement from tutors in e.g. online quizzes feel like sensible, user-friendly technologies.
- When students see others benefiting from new technologies they are envious and want to be included – there is an appetite for ICT.
- When students set up their own mechanisms for collaborative learning, they are more engaged than when tutors set up the mechanisms for them.

However universities are not currently perceived to be leading the way in developing new ways people can learn. At the moment, technology training for students (and, one might suspect, for staff) tends to focus on how to use different systems. There is little sense that for these students, the university has a remit to encourage them to think differently about information, research and presentation.

Thinking differently about information is going to be crucial as Web 2.0 takes off, for both teachers and learners. To tell a story orally demands a certain set of skills, but to write a good report, the information must be deployed in a different way. A television journalist, weaving pictures and sound together to tell the story, needs a whole different set of skills, manipulating the information in a new way; which academics have called “secondary orality”. In the era of networking and emergent information systems, a whole new range of skills is necessary in our academic culture; the skills required to create online frameworks for collaborative, learner-led work.

There is a real opportunity for universities to be at the forefront of developing and evolving our new conventions for learning through digital media. These conventions will be useful in the widest contexts of business, public life and academia.

As in the last survey, technology for technology’s sake was not appealing to this group of students. However, the university’s attitude to technology is important, and can create a point of difference and support university reputations. We suggest, therefore, that investment in the thinking behind and beyond the technology, as well as in technology itself, might well pay dividends.

Appendices

Statistical Reliability

Because a sample, rather than the entire target population, was interviewed the percentage results are subject to sampling tolerances – which vary with the size of the sample and the percentage figure concerned. For example, for a question where 50% of the people in a sample of 1,111 respond with a particular answer, the chances are 95 in 100 that this result would not vary more than three percentage points, plus or minus, from the result that would have been obtained from a census of the entire population (using the same procedures). The tolerances that may apply in this report are given in the table below.

Approximate sampling tolerances applicable to percentages at or near these levels (at the 95% confidence level)

Size of sample or sub-group on which survey result is based	10% or 90% ±	30% or 70% ±	50% ±
1,111 (i.e. all students)	2	3	3
112 (i.e. cohort group)	6	9	9
999 (i.e. boost group)	2	3	3

Source: Ipsos MORI

Tolerances are also involved in the comparison of results between different elements of the sample. A difference must be of at least a certain size to be statistically significant. The following table is a guide to the sampling tolerances applicable to comparisons between sub-groups.

Differences required for significance at the 95% confidence level at or near these percentages

Size of sample on which survey result is based	10% or 90%	30% or 70%	50%
Cohort (112) vs. Boost (999)	6	9	10
Males (471) vs. females (640)	4	6	6
Post-1992 university (532) vs. Russell Group university (233)	5	7	8

Source: Ipsos MORI

Topline findings

JISC Students Expectation Study – Wave 2
Online quantitative questions
FINAL TOPLINE – 11/04/08

- Results are based on 1,111 online responses – 112 in the cohort group and 999 in the boost sample
- Data are unweighted
- Fieldwork between 18th March and 21st April 2008
- Where results do not sum to 100, this may be due to multiple responses, computer rounding or the exclusion of don't knows/not stated
- Results are based on all respondents unless otherwise stated
- An asterisk (*) represents a value of less than one half of one percent, but greater than zero

Screener questions

S4 **What, if anything, influenced your decision not to go to university this year?** MULTICODE OK. ROTATE LIST

Base: All who had intended to, but did not go to university this year (21)
NB. THESE RESPONDENTS WERE INELIGIBLE FOR THE SURVEY, THEREFORE SCREENED OUT AFTER S4 AND NOT INCLUDED IN THE TOTAL FIGURE OF 1,111

ACTUAL FIGURES ARE USED DUE TO SMALL BASE SIZE

	N	
I chose to defer my place	6	
Had a job offer	5	
Change in personal circumstances	5	
Too expensive	4	CLOSE
Didn't get required grades	2	
Other	3	
Don't know	0	

S5 **Institution** SINGLE CODE ONLY

	Cohort %	Boost %
England	82	82
NI	3	2
Scotland	9	9
Wales	6	7
Type:		
College of Higher Education	2	2
Post-92	28	50
Pre-92	37	27
Russell Group (pre-92)	34	20

ASK ALL

S6 **Are you?** SINGLE CODE ONLY

	Cohort %	Boost %
Male	48	42
Female	52	58

S7 **How old are you?** SINGLE CODE ONLY

	Cohort %	Boost %
16	0	0
17	2	*
18	45	45
19	54	55
20+	0	0

Q1 **What area of study are you currently following?**
SINGLE CODE ONLY

	Cohort %	Boost %
Business and management	10	9
Education and teacher training	6	4
Environment	2	2
Health and social care/Health studies	3	4
Humanities: arts, languages, English, history	17	18
Information technology and computing	4	6
Law and criminology	4	5
Mathematics and statistics	4	3
Psychology, philosophy, politics, economics	10	8
Physical Sciences	11	8
Social sciences	3	6
Technology, engineering and manufacturing	7	6
Medicine, Dentistry and Veterinary Medicine	5	4
Don't know/not sure	1	1
Other	14	17

Use of ICT

This section asks about your use of ICT (Information and Communications Technology) at university.

Q2 **How often, if at all, do you do the following?** SINGLE CODE ONLY. ROTATE STATEMENTS

		Regularly	Some-times	Rarely	Never	Don't know
		%	%	%	%	%
Use social networking websites (e.g. MySpace, Flickr or Facebook	**Cohort**	69	24	5	1	1
	Boost	80	11	5	4	*
Download podcasts	**Cohort**	12	31	29	28	0
	Boost	11	16	27	45	2
Use instant messaging	**Cohort**	51	36	9	4	0
	Boost	59	24	11	6	1
Watch videos or live TV on websites	**Cohort**	44	38	10	8	1
	Boost	45	31	15	9	1
Upload video or photo content onto the internet	**Cohort**	29	30	27	14	0
	Boost	26	32	21	21	1
Use on demand video	**Cohort**	21	34	23	21	1
	Boost	22	25	20	27	6
Use advanced functions on your mobile phone (e.g. Mobile TV, GPS or email)	**Cohort**	7	25	25	43	0
	Boost	8	13	23	56	1
Participate in online discussion groups or chatrooms	**Cohort**	15	37	29	18	1
	Boost	12	21	30	36	1
Use wikis/blogs/online networks	**Cohort**	26	41	22	10	1
	Boost	27	27	20	24	2
Maintain your own blog or website	**Cohort**	13	29	17	41	0
	Boost	13	15	17	54	1
Take part in an online community, for example a "virtual world" such as Second Life	**Cohort**	7	23	17	53	0
	Boost	5	7	13	73	2
Access the university systems via your own PC / laptop	**Cohort**	63	29	6	2	0
	Boost	78	14	4	3	1
Access the internet from your mobile/PDA	**Cohort**	13	23	20	45	0
	Boost	8	13	19	60	1

Q3 **From which, if any of the following locations, do you regularly access the internet – either for general use or specifically for your university work?** MULTICODE OK

	General use		Specifically for university work	
	Cohort %	Boost %	Cohort %	Boost %
University accommodation (e.g. halls of residence)	68	72	47	32
University library	37	29	77	74
During lectures/seminars	17	9	37	28
Other locations **on** campus	55	38	52	41
Other locations **off** campus	69	77	46	32

Q4 **How frequently, if at all, do you use or do each of the following <u>as part of your course</u>?** SINGLE CODE ONLY. ROTATE STATEMENTS

	Every day %	Once a <u>week</u> or more %	Once a <u>month</u> or more %	Once a <u>term</u> or more %	Less often %	Never %	Don't know/ %
Use online library resources (e.g. journals, databases etc)							
Cohort	5	44	32	10	4	4	1
Boost	7	37	32	13	6	4	1
Use social networking sites to discuss coursework with others							
Cohort	7	29	24	17	6	15	1
Boost	6	21	21	11	13	25	2
Use other technologies (e.g. mobiles and email) to discuss coursework with others							
Cohort	6	35	28	9	13	8	2
Boost	9	36	22	10	9	13	1
Submit work / assignments online							
Cohort	4	21	33	16	14	11	1
Boost	2	16	23	25	9	24	1
Access course-specific materials online (lecture notes, slides, podcasts for example)							
Cohort	21	52	16	5	4	1	1
Boost	28	51	14	3	2	2	1

Q4 **Continued**

	Every day %	Once a week or more %	Once a month or more %	Once a term or more %	Less often %	Never %	Don't know/ %
Access general course information online (e.g. timetables)							
Cohort	14	45	25	10	4	1	1
Boost	18	40	25	10	4	2	1
Use non-digital resources (e.g. books and paper journals) in the university library							
Cohort	6	40	34	7	9	2	2
Boost	8	35	35	12	6	3	1
Use your university's portal							
Cohort	27	37	16	2	4	6	9
Boost	32	33	11	5	3	4	12
Take part in an online community, for example a "virtual world" such as Second Life							
Cohort	5	16	11	4	13	47	4
Boost	3	5	3	3	8	74	4
Contact your tutor/lecturer online or by email or text							
Cohort	4	24	46	16	6	2	2
Boost	3	19	40	23	11	4	1
Search for papers/journals on non-university provided scholarly websites (e.g. Google Scholar)							
Cohort	4	33	30	14	10	7	2
Boost	5	23	28	14	14	15	2

Q5 **And how useful, if at all, do you find the following in enhancing your learning?**
SINGLE CODE ONLY
ASK EACH OPTION IF CODES 1-5 AT Q4

Base: All who have used each option

	Very useful %	Fairly useful %	Not very useful %	Not at all useful %	Don't know/ %
Using online library resources (e.g. journals, databases etc)					
Cohort (107)	44	46	8	1	1
Boost (945)	44	47	5	1	3
Using social networking sites to discuss coursework with others					
Cohort (94)	30	51	17	1	1
Boost (731)	24	51	18	4	4
Using other technologies (e.g. mobiles and email) to discuss coursework with others					
Cohort (101)	28	50	17	2	4
Boost (857)	28	50	16	4	3
Submitting work / assignments online					
Cohort (99)	43	41	10	3	2
Boost (749)	42	40	11	3	5
Accessing course-specific materials online (lecture notes, slides, podcasts for example)					
Cohort (110)	69	24	5	0	2
Boost (974)	74	23	2	1	1
Accessing general course information online (e.g. timetables)					
Cohort (110)	61	36	2	1	0
Boost (974)	62	32	4	1	1
Using non-digital resources (e.g. books and paper journals) in the university library					
Cohort (108)	50	40	8	0	2
Boost (959)	46	43	8	1	2
Using your university's portal					
Cohort (95)	52	39	9	0	0
Boost (844)	51	36	7	1	4

Q5 **Continued**

	Very useful %	Fairly useful %	Not very useful %	Not at all useful %	Don't know/ %
Taking part in an online community, for example a "virtual world" such as Second Life					
Cohort (55)	24	36	15	16	9
Boost (222)	18	27	26	14	16
Contacting your tutor/lecturer online or by email or text					
Cohort (108)	52	38	9	1	0
Boost (950)	52	41	4	1	2
Search for papers/journals on non-university provided scholarly websites (e.g. Google Scholar)					
Cohort (102)	33	48	16	3	0
Boost (828)	32	46	15	2	4

Q6 **Which of the following statements best describes how you use ICT to help your learning?** SINGLE CODE ONLY

	Cohort %	Boost %
I generally only use the ICT that is required by my course	10	13
I use a mixture of ICT that I am required to use and some that I choose to use	70	65
I entirely choose what ICT I use to support my learning	20	19
Don't know	1	3

Q7 **How would you say that each of the following compares to the expectations you had <u>before</u> starting university?** SINGLE CODE ONLY. ROTATE STATEMENTS

	More than I had expected %	About what I had expected %	Less than I had expected %	Don't know/ %
The amount of ICT you are expected to use on your course				
Cohort	25	68	7	0
Boost	26	62	10	3
The provision of ICT to support your studies				
Cohort	25	70	4	2
Boost	28	59	9	4
The amount of ICT you use to support your social life at university				
Cohort	30	61	6	3
Boost	33	57	6	4

Attitudes towards ICT

The following questions ask about your thoughts about ICT at university.

Q8 **To what extent do you agree, or disagree, with the following statements?** SINGLE CODE ONLY. ROTATE STATEMENTS

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to dis-agree	Strongly dis-agree	Don't know
	%	%	%	%	%	%
ICT helps support my learning						
Cohort	46	39	12	1	1	1
Boost	47	41	8	1	*	1
My ICT skills are stretched more at university than at school / college						
Cohort	30	28	22	15	4	1
Boost	24	26	25	18	7	2
My university uses too much ICT for teaching						
Cohort	14	15	26	31	12	2
Boost	4	10	31	39	15	1
I think that it is a good idea for tutors / lecturers to use social networking sites for teaching						
Cohort	17	45	14	13	6	4
Boost	10	28	29	18	10	4
I am satisfied with the level of internet access provided by my university						
Cohort	38	47	10	3	0	2
Boost	36	44	9	7	3	1
I like to look for new technologies that will help me with my learning						
Cohort	29	44	19	6	0	2
Boost	20	37	29	10	2	2
My lecturers/tutors encourage us to use Web 2.0 features (e.g. blogs, wikis, multimedia sharing software etc) to help with our learning						
Cohort	19	29	21	22	9	3
Boost	8	17	24	30	15	7
I like to check the validity of information taken from the internet						
Cohort	31	46	20	1	0	2
Boost	25	43	18	10	1	2

Q8 **Continued**

	Strongly agree	Tend to agree	Neither agree nor disagree	Tend to dis-agree	Strongly dis-agree	Don't know
	%	%	%	%	%	%
I am able to use my personal laptop or PC on all of my university's systems						
Cohort	36	47	9	2	2	4
Boost	40	35	8	5	2	10
I find the university's electronic systems easy to use						
Cohort	38	46	11	4	0	2
Boost	36	50	9	3	1	1

Q9 **How would you rate the level of ICT support provided by your institution in the following areas?** SINGLE CODE ONLY. ROTATE STATEMENTS

	Very good	Fairly good	Neither good nor poor	Fairly poor / Very poor	Don't know / not applicable
	%	%	%	%	%
Hardware/software queries					
Cohort	24	42	21	4	9
Boost	18	43	18	6	15
Guidance on how best to use ICT to help with your studies					
Cohort	23	47	24	2	4
Boost	20	48	19	6	7
Using the university's systems (e.g. accessing library online, registering for courses, clubs, societies online etc)					
Cohort	38	52	6	2	3
Boost	35	47	10	4	4

Q10 **How would you say that your overall experience of university life in general so far compares to your expectations before you went?** SINGLE CODE ONLY?

	Cohort %	Boost %
Better than expected	46	48
About what I expected	43	39
Worse than I expected	9	12
Don't know	2	1

Q11 **This survey has been conducted by Ipsos MORI on behalf of JISC, an organisation which supports ICT in further and higher education. Would you be willing to be recontacted by JISC or Ipsos MORI in the future for further research into your use of ICT at university?** SINGLE CODE ONLY

	Cohort %	Boost %
Yes	93	53
No	7	47

Discussion guide

JISC 32791 Online Discussion Guide – FINAL
14th March 2008

Before the forum begins we will send the participants the following information by email:

Thank you for joining our online discussion group. You will be speaking to (NAME OF MODERATOR) online, along with about 8 other people.

The discussion will take around an hour and this is how it will work:

- We work for an independent market research company called Ipsos MORI. This means Ipsos MORI has been asked to carry out some research for a client, but we are in no way linked with the client - you can say anything you want in the discussion, positive or negative. Most of all though, be honest!

- We also adhere to the market research Code of Conduct so everything you say within this online forum remains strictly confidential. That means that you don't have to be concerned that something you say might appear on a website or in the news.

- Before the discussion you will get a screen name which you can use, so you don't have to use your real name in the discussion.

- This online discussion will be about **how you use technology, particularly your experiences at university since joining**.

- The forum is similar to an instant messenger conversation. There will be times when you might be asked for your personal feedback, and other times when anyone in the group can respond.

This guide contains prompts which will be uploaded in advance. These are underlined. There will also be a series of questions the moderator will type, just like an ordinary discussion guide the moderator will choose which to suggest.

MODERATOR INTRO

Welcome to the online forum. We are waiting for some more people to arrive but will be starting the forum shortly. Thank you for your patience.

I'm interested in what you have to say about a number of questions and ideas, but you can also ask me or other members questions at any time you want

Please try to take it in turns, and if someone else is typing, wait until they have finished.

If you feel there is anything you didn't get to say that you wanted to, we have created a post-discussion board, so that you can leave comments there for us at the end of our discussion.

As you can see on the screen below there are three main areas we are going to be discussing today. We will spend around ten - fifteen minutes on each, then we will spend about ten minutes summarising. I will let you know when we are moving on to the next stage.

Can you please introduce yourself to both me and the group by telling us which university you are at and what you are studying.

Now can you all click on the 'Social and Personal' box below

Learning	Social and Personal	Teaching

For each area we upload prompts on the computer to use as and when appropriate and as often as we want.

Why is that important for you?

Is that how you expected it would be?

Have your expectations changed since school/college?

Has your use of technology/ICT changed since school/college?

How do you feel about that?

Why do you think that is?

In what ways?

Please can you explain a bit more about this?

Why not?

How?

Can you explain what you mean by…?

Could you expand on that?

And for each section, specific questions will be asked

LEARNING 15 mins

Aim of section: to understand what technologies students perceive of being of value in supporting their learning – are these university required technologies, ones they choose or a mixture?

I want you to think about technology – by this I mean a wide range of things, anything from Virtual Learning Envronments - VLEs (eg WebCT, Blackboard or Moodle) to mobile phones to emails and internet, to wikis and mash-ups

PROBE FOR THE WIDER PICTURE, NOT JUST SPECIFIC ASPECTS OF TECHNOLOGY

How much did you have to use technology as part of your learning at school/ college?

How much choice did you have?

How did you have to use technology?

In terms of the technology you are expected to use, how does your university compare to your school / sixth form college / college? What are you required to use as part of your course?

Is that just more technology or different technology than school/college? Or are you using the same technology but in a different way? How so?

If different, how?

How do you feel about that – was it a surprise, or did you expect it?

Does this style of learning suit you more or less than the type of learning you had at school? And why?

Describe how you use technology for learning at university?

Describe how you use technology for the following: …

- working with others
- sharing ideas
- helping with coursework
- contacting tutors
- accessing lecture notes
- supporting yourselves and others
- submitting assignments
- accessing course information and materials
- using library services
- What else do you use technology for?

PROMPT FOR TYPE OF TECHNOLOGY USED e.g.

- Virtual Learning Environment (e.g. Blackboard, Moodle, WebCT)?
- Podcasts?
- Blogs
- Social sites
- Media sharing sites
- Online lectures / modules?
- Online essay deadline countdown?
- Interactive whiteboards?

Are you **required** to use this, or is it **optional**?

How much choice do you have in terms of what technology/ICT to use?

Do you tend to use what's expected of you or do you look into what else might be easier or work better for you? How do you go about finding these technologies to help with your learning?

Why do you choose to use these?

Is there anything you'd like to be able to use but can't? Why can't you?

Which aspects of technology don't you like? Why?

How **useful** do you find this technology in helping you learn? Why?

How do you access this technology? Through devices of your own (laptops, mobiles etc)? Through devices provided by the uni?

How easy do you find it to access this technology? If difficult – what makes it difficult?

What technology / ICT is around you on a daily basis that you <u>don't</u> get involved with? Why, why not?

When given an assignment for university work, where do you usually begin? *(prompt if they don't suggest)*

- Online search engines – google, ask etc?
- Scholarly search engines (e.g. Google Scholar)
- Recommended reading list?
- Library – online or physically?
- Journals (online?)
- Anywhere else? Please explain.

Why do you begin research there? If / when you use the internet for university work related information, do you check the quality of information you are getting? How?

Do you feel confident doing this sort of thing? How good do you think you are at researching/finding information using technology? Are your friends good at it? How can you tell if you're good at it or not?

Do you feel that using technology makes university work easier / harder for you? What do you feel are the benefits of using technology in learning? Any pitfalls?

How much time would you say you spend using technology for learning / studying at university?

Where do you tend to use technology for study purposes? Library, home, elsewhere? How does the location affect how you use it?

Is the use of technology at your university as you expected it to be? How about the amount and quality of the technology available? Are you personally more up to speed with technology than your university, or less? Give me some examples.

Do you feel that the way you use technology socially has helped in terms of learning at university? In what ways?

TEACHING 15 mins

Aim of section: to understand how lecturers/tutors use technology/ICT in teaching and what students think about that – differences from school, usefulness etc

In what ways do lecturers / tutors use technology at your university?

PROMPT WITH:

- Encourage you to learn/collaborate with others on course?
- Contact you via email / text?
- Upload materials for you to use?
- Use websites like Second Life or media sharing sites (e.g. Flickr, Youtube) for teaching purposes?
- Use social networking sites like Facebook for teaching or giving you information about teaching?
- Online forums?
- Anything else? Please explain.

Why do you think they use these? Does it work well?

Are your university lecturers technically competent? Could they be more so? How? Is this important for you?

How different from school/college? How do you respond to (all) these new technologies/practices? Are the ways they use technology helpful to you? Would you prefer to be taught differently?

Do you feel confident about using the technologies they ask you to use? Do you have the support if you need it?

Do your friends on other courses have to use technology much more or less than you do? Which ones? Why do you think this is?

What do you think about your lecturers / tutors using this technology?

In our last survey, the majority of students said that they felt that the quality of teaching at university is more important than ICT provision. Do you agree with this? And how important is it that ICT is used in teaching?

Do you feel your university supports you in using technology/helps you get the best out of technology available for learning? What does it provide? Do you feel this is adequate? Do you know where to go if something goes wrong?

How far is it the university's *role* to make sure you can work with technology? Why do you say that?

SOCIAL AND PERSONAL 15 mins

Aim of section: To understand technology use other than for work – in terms of administration and organising as well as social use

What do you use technology for <u>other than</u> work? Thinking about things like social use, organising things, accessing university's administration systems etc.

How much do you use this? Why?

What's the most important aspect of all this technology for your social use? What would you miss most if it weren't there?

Do you use any technology/devices that aren't your own, at university or anywhere else e.g. library computers, hired or borrowed equipment?

How confident would you say you are using different forms of technology? Do you feel you are better / worse / same as your friends in terms of using technology?

How much time would you say you spend using technology for social use in your everyday life? Is there anything annoying about using technology? How do you get round it? Where do you go if something doesn't work?

What do you mainly use technology for personally?

- Contacting people – MSN messenger / skype etc?
- Personal email?

- Social network sites – facebook, Bebo, myspace etc?
- Information?
- Buying / selling goods?
- Blogging?
- Games?
- Studying?
- Anything else? Please explain.

How typical are you compared with your friends in your social use of technology?

Where do you tend to use technology for these purposes? Home/halls? Library? Internet café? Elsewhere?

Students in our last survey expected unrestricted access to websites from their university. Is this the case for you?

To what extent would you say technology is a part of your routine / administration tasks at university i.e. finding out what's happening around campus, rent payments, involvement in university clubs and societies, anything else? What do you think about the technologies/systems the university gives you to use for these types of things?

Does technology make these tasks easier / harder to complete? In what ways?

What would make you use technology more?

Our first survey showed that students expected to be able to use their own equipment on university systems. Are you able to do this?

Are you able to complete these tasks without using technology, or is it compulsory? Is this a good or bad thing?

Why do you choose to use technology for these tasks?

Does your university provide only technical support for things it wants you to do or support for types of things you want to do or a mixture? What kind of support? Do you feel this is sufficient? Our first survey showed that students expected a certain level of technical support for using these systems – has this met your expectations?

SUMMARY **15 mins**

In general, how good would you say your university is? Would you recommend it to other people? Why?

How good would you say the **technology** at your university is? Is it of a high standard? (*moderator to prompt to encourage group to compare with each other*) Do you feel other universities are of a better / worse standard when it comes to technology? Why do you think this is? Is having good ICT something that makes a good university? Would it influence whether you would recommend it to others?

Do you feel there is support around the use of technology for students at your university? Is that enough or should there be more?

In terms of technology, would you say your university has **lived up to the expectations** you had before you started? Do you feel those expectations were realistic?

PROMPT WITH

- Needing own equipment
- Unrestricted access to internet
- Use of online journals
- Use of online lecture materials
- ICT enhancing learning

Is there anything about how you used technology at university that has really surprised you? What?

We're working on behalf of JISC – the body which supports higher education institutions in using technology the best way they can. They are interested in what young people's experiences are of technology at university.

Any final advice for JISC to give to universities**?**

Thank you very much for taking part in this online discussion. As I mentioned earlier, we have set up a post-discussion board, so feel free to continue any discussions or post any comments that we've not covered on there. You can access this at <LINK>

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