Students’ expectations and experiences of the digital environment

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Executive Summary

This study, commissioned by the Jisc co-design programme under the student innovation strand (August-October 2013), looked at what we know about students’ expectations and experiences of ICT at university. Developments in mobile technology, web and social media trends, and the widespread use of technology in schools are all changing the expectations of arriving students. At the same time the graduate employment market is generating new demands on the curriculum and changing the skills required of recent graduates. Universities often feel caught between the need to provide robust systems for all, and the need to accommodate a diversity of devices, services and subject-specific innovations. Universities are also unsure how to understand, manage and meet the expectations of arriving students.

Approach

Our approach was informed by previous work we have undertaken in this area. Previous findings relevant to this study, and the work informing them are detailed in the Background document. Briefly these findings include:

» Students entering university have a wide variety of digital and learning practices. They have indistinct ideas about how they will learn at university and what constitutes legitimate learning practice – especially digital practice – in a university context.

» Universities need to be pro-active in managing students’ ideas and expectations about their university experience, including expectations of the digital environment for study.

» Horizon-scanning and the collection of evidence about students’ current and likely future digital needs are activities that need to be carried out both nationally (e.g. through studies of this kind) and locally (e.g. through institutional surveys and student engagement activities).

In accordance with these points, our approach encompassed several distinct elements.

» We analysed existing research into students’ ICT ownership, practice and expectations. In addition to publicly available reports and research studies, 12 institutions provided their own findings - on a confidential basis – to support our analysis.

» We briefly examined current and likely future practice in schools, and in graduate employment contexts, and concluded that more work is needed to understand how the incoming experiences and future learning/workplace needs of students are evolving.

» We undertook original interview/focus group work with students, institutional actors and a range of stakeholder bodies, and analysed these findings on a thematic basis.

» We investigated what universities are doing to gather information in this area and to engage students in ongoing conversations about their ICT needs and expectations.

These approaches are described in more detail in the methodology sections of the reports on each of the component studies, i.e. the stakeholder interviews, institutional interviews, student interviews and student focus group.

Our findings and draft recommendations were subject to consultation by a group of learning and teaching practitioners (convened by Jisc in October 2013) and by a group of students (convened by the NUS in November 2013). However, they must be considered preliminary findings and draft recommendations at this stage. Jisc is proposing to fund further work under the Digital Student programme to consult more widely among stakeholders and to gather more evidence where there are gaps in our understanding.
Preliminary findings

Student expectations
Incoming students are essentially uncertain about the technologies they will use for study. They continue to be unclear about how to legitimately use personal devices, services, networks and practices in academic contexts. Student expectations of ICT provision and of the access and skills they will need for success are highly course specific. They do not emerge fully until students have had considerable experience and opportunity to compare their experience with that of other students. Individual students’ experiences and expectations also vary widely, with factors such as school experience, national culture, and family background playing a role.

However, the majority of students now expect:

» Ubiquitous free-at-the-point-of-use access to the whole of the web
» Robust and ubiquitous wifi across campus locations
» Consistent use of the VLE for course administration and course content
» Teaching staff with the ICT skills to operate effectively in a digital environment
» The capacity easily to connect their own devices to the university network and to have (e.g. helpdesk) support in using their own devices and services on campus

» Access to a range of learning spaces with robust wifi, storage facilities, desk space, power sockets
» Access to institutional devices alongside their own, especially desktop computers and printers
» A university web site with reliable and detailed information about their (prospective) course of study
» Course-related information and personal updates (e.g. timetable, deadlines, library loans) to be accessible continuously via their preferred device/service
» An institutional email address and that email will be the primary form of communication with their course and institution
» Access to personal/social web services on university networks (but are divided on whether they prefer these to be integrated with institutional services)
» Explicit instruction in using institutional systems (library catalogue, VLE, assessment system) and specialist technologies required for their course
» Technology incorporated into their teaching/learning in ways that are relevant to their academic success
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Preliminary findings

Student experiences
As with expectations, student experiences with technology are very diverse on entry and continue to be diverse even within the same course of study, due to the fact that so much digital practice (especially information seeking and collaboration) is informal. However, we can say with some confidence that the ICT capability and know-how of teaching staff has the strongest positive impact on students' experience of using digital technologies for study.

Other findings are:

» Students are largely ignorant of the range of services, software and support available to them at university

» Students are so used to seamless access they do not understand when they are crossing boundaries e.g. between institutionally-paid-for to free-on-the-open-web services

» Students rarely use technology for advanced knowledge-related activities or problem solving unless they have been required to do so by their course or tutor

» Students want more guidance on academically credible sources and academically legitimate uses of online content

» Students are familiar with aps, not applications. Academic software and specialist systems require structured introduction in the context of meaningful tasks.

» Students place a high value on experience with workplace technologies and research-like digital practices

» Students learn important and valuable digital practices from other students

Findings on engaging students in dialogue about their digital experiences and expectations
Among the forward-thinking institutions that we surveyed, it is now common practice to carry out a regular survey of students' digital access, confidence/capability, practices, preferences and attitudes. Most institutions triangulate or refine this data with other sources such as:

» Existing student satisfaction data (NSS, USS, ISB, PRES)
» Learner and course data
» Focus groups, interviews, participative approaches
» Social media data
» Ongoing student engagement/representation

Surveys are useful for gathering factual data about ownership and use, and scalar expressions of agreement or satisfaction, qualitative and open-ended methods are better for explaining findings, exploring practices, and surfacing attitudes. There are proven student engagement/satisfaction benefits to undertaking qualitative work which involves students in describing their own experience and contributing to solutions. Surveys, on the other hand, are not regarded by students in a positive light unless there is very clear evidence of concerns being quickly addressed. Survey fatigue is one factor, and explains why forward-thinking institutions are looking for ways they can adapt existing surveys rather than adopt entirely new measures and approaches.

Some students want to be involved in developing aspects of the digital learning environment such as:

» Developing usage policies which do not unreasonably penalise them for their digital behaviours

» Finding solutions to issues in the digital learning environment

» Developing student-facing aps that build on institutional data services
Conclusions

Digital technology is embedded into students learning practices both formally - with extensive use of the VLE, library services, assessment systems and subject specialist software - and informally through use of personal devices and aps/web services.

Students increasingly expect their digital capabilities to be enhanced by their university experience, especially in the area of workplace and research-like skills. At present, however, digital provision does not seem to be a strong positive factor in overall student satisfaction. Institutions do need to meet baseline expectations, as outlined in our findings. Beyond this threshold, investment in the ICT environment has yet to be proven to enhance student satisfaction with their learning experience. However, confident use of ICT is a factor in the quality of teaching which remains the most influential predictor of students’ satisfaction overall. Our study has also identified that universities could do much more to inform students about the digital resources, services and support already available to them, and to do so at points in their learning journey when they can use what’s on offer for meaningful academic tasks. Students we spoke to said this was considerably more important to them than further investment in ICT.

Universities have done much to ensure the student digital experience is a seamless one, for example by integrating personal and campus services, and ensuring click-through from personal search engines (google) to full-text journals available through library subscription. While this undoubtedly provides a better user experience, ironically it makes it harder for students to identify what the university is providing for their benefit, and it fails to alert students to important boundaries in the digital...
domain. Universities need to do more to educate students about these boundaries and the limits of free, unrestricted access that is their predominant expectation of networked technology. If done effectively - that is by developing students’ understanding rather than policing their behaviour – this will prepare them for the world of work, which is likely to be considerably more restrictive.

Institutions are discovering the value of better information and communication with students about their digital experience. As described, care is needed in surveying incoming students, particularly with closed questions, as their expectations may seem clearer than they are in reality. Student expectations evolve during their course of study. They need to be continually nurtured through dialogue, which on the institutional side must be proactive in describing the approaches to learning and teaching that take place in particular academic contexts, and the value that particular digital practices have.

Institutional practice in this area is ad hoc and often poorly coordinated. Opportunities to learn lessons across the sector and between different professional services are lost. There is an appetite for better sharing of data and research approaches/instruments between institutions and for better coordinated national research and horizon-scanning.

We have made detailed recommendations on:

» Enhancing the digital environment generally

» Enhancing the student experience of study in a digital environment

» Enhancing engagement with students around their digital experiences and expectations

and recommendations to the funders for further study and communication across the sector.

In all these areas we strongly recommend the involvement of students, who we have found to be articulate, committed and innovative actors in the development of their own digital learning experience.

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