**Students expectations and experiences of the digital environment**  
Consultation day, Glasgow Caledonian University, June 10 2014  
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**Key ideas**

1. IT services/support need to understand the importance of innovation and openness in academic systems, as well as security.

2. There is concern about how we manage (and support staff/students in) the grey area between fully supported, institutionally owned/operated systems and software, and the wild world of everything that is available to them. Possibly we need an 'onion skin' model – core provision, recommended software/services, permitted practices on the network, not permitted practices on the network. Support changes as one moves from core to periphery. UCISA are also thinking through how IT support needs to evolve in this more complex and layered landscape.

3. Students need to know how to access free and open versions of software, particularly to use off campus and after graduating – but also to value what they are being provided with by the university, and to get value from it.

4. Students are often using old devices and browsers – it is not about access as such but about appropriate, functional and useful access. This is one reason universities still need to provide cluster computers, printers, etc etc.

5. Individuals might be technically mobile i.e. able to use their devices in a variety of locations, but not socially mobile i.e. not able to move easily between contexts with different codes and rules of engagement.

6. Different disciplines have different cultures about where and how to work e.g. design studio, lab, field, library, in groups, alone... The picture of 'spaces and places' of learning is nuanced just as the picture of student expectations and needs is nuanced, with subject/discipline being a key factor.

**Risks to institutions:**

**Consequences of failing to meet students’ digital expectations and needs**

1. May affect student attainment (depending on how they are assessed); it will certainly affect their employability.

2. Students lose faith in institutional systems and support, so their communication and collaboration will go ‘underground’ e.g. messaging, facebook, third party services. [Students establishing their own support systems using social media is obviously a good thing – but not if this is the only resource they perceive is available to them. So, how to encourage mutual support and self-sufficiency while ensuring students feel appropriately supported by the institution?]

3. Staff and students will lose confidence and resilience – they will not be pushed beyond their comfort zone, will not be encouraged to try new things, to fail and recover from failure. Their capacity to cope in a fast-changing digital environment will be compromised and they will fall further behind.

4. Institutions will lose reputation and students will choose to go elsewhere [we need to know more about the relevance of the digital environment to student choice of course and institution].

5. Problems with retention and progression, if digital infrastructure is not in place and digital experience is not satisfying or challenging enough. In Scotland, for example, the Curriculum for Excellence will raise expectations among Scottish students coming from school. Institutions that fail to meet these will lose credibility.

6. Students will give negative feedback on surveys, and even appeal or sue.
Risks to institutions:
Factors making it harder to meet students' digital expectations and needs
1. Online experiences are raising the bar of student expectations e.g. high quality MOOCs, online courses, digital content, TED talks, etc. Against this background, harder to manage expectations.
2. Lack of leadership and strategic direction – essential if staff are to raise the bar and meet the challenge of students' high expectations.
3. Funding cuts for key digital resources and services, e.g. e-journals (which students rate highly at the end of their academic journey), software licenses. These make it much harder to meet student needs.
4. Lack of digital skills may become difficult to diagnose as students try to hide it or find work-arounds. Shame may make it difficult for students to admit they need help in this area, if there is no explicit programme of assessment, progression and support.
5. Technology may not always work effectively or robustly, or may be 'locked down' – putting off people who try to innovate.
6. BYO may actually make it harder to ensure parity of resources and delivery. Not everyone will have the same kind of access, though everyone does need to have the same level of service. For similar reasons, tracking of student progress may be compromised.
7. Differences between subject areas in terms of digital requirements will need to be carefully explained if students are not to feel short-changed when they compare their experiences.

Opportunities for institutions:
Benefits of meeting students' digital expectations and needs
1. Better digital footprint/reputation of students and of courses of study – feeding into institutional reputation in a positive way.
2. Easier to give external stakeholders e.g. schools/colleges access to the digital learning environment and 'taster' experiences, which helps to break down barriers.
3. Digital environment makes learning (and teaching) more fun! Students are more motivated and engaged.
4. Students are better prepared to be digital innovators and leaders in the workplace, and to be digital citizens and community leaders.
5. Opportunities to reach out to students globally, expand student markets, attract a wider variety of students e.g. work-based.
6. Opportunities to work across the curriculum, to develop cross-curricular learning opportunities supported by technology and to blend formal and informal learning – so the learning experience for students is richer, more personally relevant, and more rewarding.
7. Better student engagement and feedback thanks to active digital communities and connections. Better links with potential students and with alumni e.g. thru email/web space for life, living CV.
8. Improved IT infrastructure supports learning communities and interest groups within the institution and enables external partnerships, bringing into the curriculum e.g. employers, community stakeholders, researchers, students at other institutions.
9. Increased confidence of staff to use technology for academic and professional purposes: better outcomes for students, more innovation is possible in the curriculum, staff have the confidence to try new things because they can find work-arounds and recover from failure.

Opportunities for institutions:
Factors making it easier to meet students' digital expectations and needs
1. Better prepared students: Curriculum for Excellence (in Scotland) and enhanced uses of technology in schools generally will enhance students' capacity for independent and peer learning with technology. This in turn will generate demand and require a response from the institution and from teaching staff.
2. Technical affordances: easy-to-adopt and use devices such as iPads will force the pace of
educational change.
3. Curriculum change: digital experiences and activities are more motivating and engaging when embedded into courses of study in an authentic way. More agile curricula can support this.
4. Professional services (esp student facing) work together more effectively: accessibility, student support, writing centre, careers, IT support (etc) integrated through signposting and diagnostics → better, more targeted, more effective student support.
5. Students co-creating materials for use by learners and staff e.g. Xerte, e-resources, guidance materials, e-books, videos. Efficient use of talent and resource as well as developmental for students.
6. Digital showcasing at institutional level – MOOCs, iTunesU etc – creates a more open learning environment, helps to build reputation and supports good choices among potential students
7. In a more digitally capable environment, institutions can manage their knowledge assets better e.g. by-passing some costs associated with print publishing, providing students with access to a wider range of quality open resources

**Actions for institutions**

**Strategy and leadership**
1. Develop strong leadership and vision in the area of digital strategy. Join up IT strategy with L and T (and research?) strategies – IT should be fit for purpose in an academic setting.
2. Understand digital capability as critical to realising the value of investments in infrastructure, and to progressing other institutional priorities e.g. employability, sustainability, inclusivity, professionalism.
3. Focus on value/use of existing infrastructure and IT resources before investing further: invest only after extensive, meaningful consultation with users, including students
4. Invest in teaching staff – reward, recognition, training, funding. Address skills gaps and raise confidence and motivation.

**Organisational development/organisational culture**
5. Recognise that courses of study demand different digital access and capabilities. Help staff and students to understand this too. Focus on how digital technologies can support academic success.
6. Build staff-student partnerships for developing the digital environment, recognising what digitally confident students can bring to academic life. Consider supporting some staff-student activities/groups and running staff-student events at which all are equally welcome.
7. Support informal learning/communities of practice e.g. show and tell sessions, open plan office sessions, informal SIGs etc.
8. Embed digital environment and experience into QA/QE, especially curriculum development/review.
9. Include digital issues in dialogue with employers. Employers have insights into what they need from graduates in the short term but institutions have long-term insights and can push boundaries of practice: 'this is what our digitally able graduates can do for you' as well as 'what do you want from us?'
10. Undertake regular surveys of student digital practices, views on the digital environment, and digital aspects of students' experiences and outcomes. Follow up with focus groups and/or other participative techniques. (Be seen to) respond to the findings.
11. Have an ongoing institutional forum for student ideas – which different professional services, depts and initiatives can tap into or take over to explore specific issues

**Digital environment**
12. Consider how a more open data/information environment could support innovation and enable varieties of practice, within the need for a secure infrastructure.
13. Cloud/third party computing: outsource services and support where there are clear gains, but do not lose institutional branding and identity: focus support and guidance on the educational use, value and meaning of available technologies

14. Work towards parity of digital resourcing/provision within the institution e.g. across depts and campuses – which does not mean providing exactly the same but supporting varieties of practice as appropriate

15. Consider 'onion skin' approach to IT investment. At the 'core', resource technologies so that they just work: focus investment to achieve this.

16. Break down walls where possible: allow digital collaborations inside/outside the institution using whatever means are appropriate (e.g. partnerships with employers, bringing external stakeholders into the curriculum, supporting projects across departments and campuses).

**IT support**

17. BYO: gather requirements, benchmark, assess institutional and personal needs; balance basic provision with support for more advanced uses of tech as students develop self-reliance, resilience, new apps and approaches

18. Consider 'onion skin' approach to IT support. At the 'core', ensure all have functional access. On the periphery, provide on-demand guidance, well signposted. Drop-in workshops, buddies, IT champions and expert/interest groups to knit it all together.

19. Provide access to basic IT support on entry but make it safe for students to identify their needs at any point in their course.

**Curriculum**

20. Support student diagnostics and reflection at key points in the curriculum

21. Enable students to create or co-create materials for other students; support activities that provide digital outputs and a digital footprint.

22. Consider issues of inclusivity, both how digital experiences could enhance inclusivity, and how they might compromise it e.g. if students lack basic access and skills

23. Ensure hardware/software used is as far as possible of professional standard, but provide guidance on which free-to-use and open source alternatives are 'good enough'.

24. Ensure enough devices and software licences to cover student demand at key periods e.g. leading up to assessments; consider subject-based partnerships with external stakeholders to enhance provision.

**Ideas for institutions: student engagement**

1. Student representation: ask student body to consider appointing a TEL/digital officer – or work closely with L&T/Student experience officers around digital issues; ensure digital strategy/planning meetings include student reps; link up student reps e.g. library user groups, IT user groups, so they can learn from one another; involve students in working and steering groups that actually get things done.

2. Student consultation: quick and dirty consultations can work better than carefully designed survey process for short-term issues e.g. using Padlet or twitterfall; also undertake larger and longer consultations to provide more understanding of student experience as a whole.

   ▲ Acknowledge the importance of demographics, different experiences of students from different backgrounds, ensure a range of student groups included e.g. mature, users of assistive tech, work-based, overseas etc.

   ▲ Similarly acknowledge importance of subject/discipline focus – encourage local (faculty, school, dept) engagement and ensure voices from different parts of the institution are heard.

   ▲ Information from students needs to be accurate, independent, and of appropriate quality. Needs to be triangulated across a number of sources e.g. surveys, focus groups, data generated by IS systems...

3. Student participation: paid student interns create resources for use in courses – videos,
animations, etc – provides useful experience of employment as well as valued outcomes for dept/institution; students take on their own projects or work on those identified as important by dept/institution.

4. Student engagement in their courses of study (not really the subject of this consultation but some points were included): end of week questionnaire on course content and delivery – responsive teaching following week – feedback to students every four weeks; ensure use of industry standard software; role play in digital design/digital project teams.

Support requested from Jisc and partners

1. Develop guidelines for staff and students on effective uses of digital technology. This might include:
   - recommender site for (open source?) software and (open?) learning resources
   - support for BYO – choosing, using, skills and sources of support, responsibilities
   - support for inclusivity and enabling technology
   - help identifying and supporting informal practices and technology uses: enabling students to use their own devices and services, but clarifying their responsibilities
   - curriculum models and benchmarks for different disciplines
   - resources for understanding needs at different points in the student journey

2. Model policies (BYO, switch-on, e-assessment, staff development etc): a central point for sharing policies and strategies that gives a safe framework but allows organisational variation

3. Help institutions to gather robust, reliable, credible evidence of student needs; provide model surveys or survey questions; offer national collation and analysis of this information; find out more about impact of student digital expectations on their experiences and satisfaction.

4. Investigate the role of learning analytics – develop an understanding of the relationship between systems interactions and student performance/satisfaction more generally.

5. Central resource of case studies and good examples. Comments on case studies and examples by people who have used them already – what worked and did not work. [Much comment that case studies database a good idea but... tried many times, conflict between user and contributor needs, very resource intensive, difficult to sustain, and actually much harder to use well than it appears].

6. Support Principles, PVCs and VCs to develop their own institutional agendas while drawing on national evidence and good practice.

7. Embed digital considerations into quality systems nationally, whether that is working with QAA (an enhancement theme?), HMIE, or providing a digital lens on the UK PSF.

8. Provide advocacy at government level. [Who should Jisc partner with to do that in Scotland? SLIC, SFCs, ALT Scotland.]

9. Link Digital Student work with shared services agenda. [Scottish HE information directors group are looking at this issue – three universities and four colleges in five mile range in Central Glasgow - all could have a shared BYO policy, shared Eduroam.]

10. Run events for students along the same lines [as consultation events currently being run for staff with some student input]

11. Help institutions to benchmark and compare, assess their readiness and progress [a toolkit?]