



Digital Capabilities survey

Executive Summary

The UCISA User Skills Group conducted a survey during summer 2014 investigating how UK higher education (HE) institutions are developing and supporting staff and student digital capabilities. A total of 156 HE institutions in the UK and Ireland were invited to respond via an online questionnaire containing quantitative and qualitative questions. 63 responses were received; a response rate of 41%.

Digital capabilities are *those that fit an individual for living, learning and working in a digital society*¹. This definition also includes the infrastructure and digital environment in which individuals live and work, and a range of other capabilities including information literacy, digital professionalism, ICT skills, digital scholarship and electronic collaboration and communication.

We have used the term *digital capabilities* rather than other terms such as digital literacies or digital competencies. This reflects that digital capabilities are more a condition to attain than a threshold to cross², and they are role specific, ever changing, and should be embedded into the curriculum or role. We looked at the situation regarding staff and students, and considered a range of relevant areas as defined by the Jisc Digital Student project³.

The survey follows much work on digital literacies/capabilities by organisations such as Jisc, the Higher Education Academy and the National Union of Students, and comes at a time of increased competition within the HE sector, where there is much focus on improving the student experience and producing highly employable graduates.

Key findings and recommendations

Section 1: Defining digital capabilities

There was a great degree of similarity in the definitions and descriptions of digital capabilities used by individual institutions. Common themes included the ability to choose appropriate technologies, embedding digital tools into teaching or research, and ensuring that infrastructure and support are adequate. Some comments acknowledged that digital capability requirements vary between roles and subject areas.

¹ bit.ly/digistudent

² Doug Belshaw (2011) 'What is 'digital literacy'? A Pragmatic investigation' Chapter 10 – Conclusions. Durham University: UK. www.neverendingthesis.com/index.php/Chapter_10_-_Conclusion.

³ digitalstudent.jiscinvolve.org/wp/students-expectations-and-experiences-of-the-digital-environment-phase-1-study/

Recommendation 1: UCISA should work with other agencies, such as Jisc, to adopt a standard definition of digital capabilities. We recommend institutions use this definition where they have none.

This shared definition would make benchmarking easier and enable the sector to share resources and exemplars. Specific competencies and baseline measures could be developed from this, either sector wide or institution specific, to enable competency or fluency to be demonstrated in specific roles or disciplines.

Section 2: Strategic direction

Factors driving strategy

The most important factors driving or enabling the development of student and staff digital capabilities were *student expectations and requirements* and the *student experience survey*. The development of *innovative pedagogic practices* was ranked as the third most important factor driving staff digital capability development, reinforcing the message that the digital capabilities of teaching staff positively influences students' digital capabilities.

Support from suppliers was considered the least important factor driving the development of both students and staff digital capabilities, and use as a marketing tool was also considered unimportant overall. However, a valuable unique selling point could be provided where digital capabilities are specifically enhanced in a course.

Internal strategies

The most important internal strategies for driving development included the *Teaching, Learning and Assessment strategy*, the *Library/Learning Resources strategy*, and the *Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICT) strategies*. The *Estates and Staff Development strategies* featured mid table, and the marketing strategy was least important overall. There was general recognition that the digital capabilities agenda impacts across the organisation.

Recommendation 2: Institutions should adopt a whole institutional approach and embed digital capabilities into all strategies, including Estates, HR, Finance, as well as Library, IT, Academic Development etc.

External strategies and senior management support

The most influential external strategies and reports included the NUS Charter on Technology in HE for students, and the Jisc infoNet *Developing Digital Literacies* infoKit for staff.

Almost all institutions had a strategic direction for digital capability development, but it was not possible to ascertain how far this extends. Few institutions set a baseline of digital capabilities when recruiting or subsequently developing staff. This could be an expedient driver and benchmark.

Only eleven institutions expressly cited a member of their senior management team as having responsibility for digital capabilities, but roles across a range of sections and grades were identified with this responsibility.

Recommendation 3: Institutions must obtain active senior management sponsorship to drive the successful embedding of digital capabilities throughout the organisation.

Section 3: Delivery, implementation and practice

Activities and processes

The most frequently cited methods for supporting the development of student and staff digital capabilities were face to face and online training.

Emerging practices in developing **student** digital capabilities included curriculum based initiatives, and integrating digital capabilities into learning outcomes and handbooks; and extracurricular activities, including using students as change agents and digital champions.

Emerging practices in developing **staff** digital capabilities included integration into recruitment, induction and annual appraisals, managing a digital profile, and digital scholarship practices.

The least common practices supporting **student** development included providing graduate awards and mentoring opportunities.

The least common activities supporting **staff** development included integration into promotion or financial reward, providing time off in lieu/backfill of time, and relevant secondment opportunities.

Recommendation 4: Institutions should develop digital capabilities through a range of opportunities and emerging practices which motivate and reward students and staff and positively change culture. Impact can be maximised through the sharing of resources and working in partnership.

Training, development and accreditation

Mandatory training for students included that on Virtual Learning Environments (VLEs) and plagiarism software (primarily Turnitin), IT and Library inductions, and some course specific embedded training. Mandatory training for staff included systems training before access was granted, IT induction and mobile learning/VLEs. Most universities offered online training, optional sign-up sessions and helpdesk support as their main methods.

Training needs for students and staff were most often identified through discussion (e.g. recruitment, induction, development reviews, meetings), but students overall were offered greater variety by more institutions than staff.

The majority of institutions offered no externally certified training to students, with the European Computer Driving Licence (ECDL) being the most popular qualification offered to staff, but only by just over a third of institutions.

Credit bearing training for students mainly comprised of teaching embedded into modules, content covering research methods and some aspects of digital capabilities, and that focused on postgraduate research students. Credit bearing training for staff was largely incorporated into teaching qualifications of one form or another. The vast majority of institutions did not offer this type of training to staff or students.

Recommendation 5: Institutions should create digital curricula which are holistic, relevant and innovative for students and all staff, i.e. academic programmes and development activities, to encourage effective study, work and digital citizenship.

Services and support methods

The Library, IT services, Academic study skills support and eLearning units were most heavily involved in supporting students and staff to develop their digital capabilities, and we expect to see this continue and strengthen. Library services seemed to be by far the most progressive, most often making use of new communication methods such as Twitter, social media and videos, in addition to established communications channels.

Drop in clinics/appointments and telephone/email/online chat were the most frequently cited methods of support offered by core services for students and staff. The use of videos was also widespread, particularly by eLearning units for staff, but a suite of options were made available to suit different needs and requirements.

Section 4: Supporting Bring Your Own

Access and restrictions

Easy and secure access to campus networks seemed to be largely available across the sector, and audio visual facilities were becoming increasingly flexible. Approaches enabling users to bring their own hardware, software and data vary across the sector.

Challenges remain around the flexibility of space and furniture, the provision of power to both permanently installed hardware and the use of personal devices (BYOD), wifi saturation and high speed broadband, accessible wifi printing, and the support provided to users.

Respondents cited administration rights restrictions to institution owned machines as a relatively frequent barrier to staff and students wishing to use their own software or hardware.

Largely, institutions seemed not to enforce policies such as data protection and security on personal and institutional devices, but may need to examine how this is done if other restrictions are lifted, alongside new and existing guidance from organisations such as UCISA.

Recommendation 6: National organisations should collaborate with heads of service and users to develop coherent policy guidelines for the use of personal devices. Institutions should review how to provide a robust and flexible digital environment to enable personalised ways of working.

Support for the digitally disadvantaged

Most institutions provided hardware loan or purchase schemes for staff and students, with more institutions providing schemes for students than for staff.

Support for digitally disadvantaged staff and students included loan schemes along with training and support. The emphasis lay on supporting disabled users, rather than enabling poorly skilled or resourced users.

Section 5: Supporting differentiation and inclusion

Open content

Some institutions indicated that all their teaching, research, institution and system websites are device friendly, but where institutions still need to implement device friendly sites, most are prioritising institution websites over others.

Strategies for providing open research content were more developed than those for teaching content.

Recommendation 7: Guidelines, tools and practices that enable the delivery of fully accessible open educational and research resources should be further developed and disseminated.

Accessible documents and software

Documents and software for students were generally more accessible and inclusive than those for staff, but it may be that software and platform suppliers limit control over this.

Recommendation 8: Institutions and organisations should collaborate to develop software specifications that can better direct development work by commercial systems suppliers. This will require coordination and information sharing.

Nearly as many institutions were working towards accessible and inclusive guidelines for the release of student created digital materials as were not. This is fraught with difficulties which may be difficult to resolve.

Section 6: Looking to the future

Barriers

Institutions overall seemed relatively positive about their ability to develop students' and staff digital capabilities over the next two years. However, the most notable barriers for future development of student digital capabilities were felt to be lack of money, departmental culture, competing strategic initiatives and institutional culture. The most important barriers for future development of staff digital capabilities included competing strategic initiatives, institutional culture, lack of money, and departmental culture.

Least important factors for both staff and students included inappropriate policies and procedures, and changing administrative processes.

Projects and initiatives

Key initiatives being implemented, scoped or investigated in the next two years included developments and reviews of teaching and learning systems, and a range of digital literacy related projects. Infrastructure and training and development projects were also frequently identified.

Agents of change

The most important departments for effecting change included IT services, Academic development/Learning Technologies, and the Library, with most institutions citing between one and eight different services, departments or groups. A small minority of institutions listed job titles or units that specifically feature digital literacy. It will be necessary to involve academic staff and students in this development too; working together effectively within institutions and across the sector will continue to be beneficial and essential for driving this agenda of change.

Recommendation 9: Institutions should encourage staff-staff and staff-student partnership to co-create digital resources and experiences in learning, teaching, assessment, research and administrative practices.

Section 7: Concluding remarks

The challenges of collaborating and sharing ideas and information across large institutions were felt to be difficult to surmount but will result in positive outcomes for individuals, teams and institutions if successful.

Recommendation 10: Institutions should establish more effective mechanisms for sharing good practice. Managers should make staff aware of existing resources such as those from Jisc, the HEA etc.

Keeping pace with the pressures arising from the rapid development of technology requires innovative responses.

Clearer descriptions of skills and competencies required for roles and disciplines will help frame and focus activities and provide motivation and direction for culture change, employability and competitiveness.

Few institution led projects were cited, although some localised initiatives embedding digital capabilities into curricula or job roles were mentioned.

Notes

This is the final version of the Executive Summary and there are some slight differences between this and the version published on 3 December 2014.

We would like to extend our thanks to all those who have contributed to the development and completion of this survey, especially those that took the time to collate and return their institutional response.

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