UNIVERSITY OF LEEDS

TAUGHT STUDENT EDUCATION BOARD

Digital Strategy for Taught Student Education

Executive summary

This strategy covers all aspects of the digital experience for taught students at the University of Leeds. It sets out the University's expectations for the provision of digital technologies and services across the institution to enhance the quality of the student experience. This is an aspirational document and investment to realise the benefits of this strategy will necessarily be subject to prioritisation and available funds. This overarching document covers the digital technologies and services to be provided for all students at the University and therefore describes the target expectations to be realised by 2017. Faculties and Schools will provide additional (and complementary), discipline specific digital technologies and services, aligned with this strategy, which support their local strategic aims.

Call to action

This document is provided for all stakeholders responsible for the delivery of student education and student support services across the University of Leeds. This includes Faculties and Schools, Student Education Service, Facilities Directorate, IT Service, and the Library.

All stakeholders will develop local strategy documents, including performance targets, aligned to this overarching strategy.

1. Vision

By 2017, students and staff at the University of Leeds will make use of a consistent suite of digital technologies and services, which support learning, inspire students to reach their full potential and enhance the student experience.

This means that:

- Digital technologies and services will support the academic mission and values of the University;
- Digital technologies and services will be user focussed and integrated, to support learning and enhance the student experience;
- Digital technologies to support interaction and communication between learners, teachers, support services and external partners will be accessible, effective and efficient;
- Students and staff will consume and interact with digital content in multiple formats and utilise appropriate technologies to enhance learning;
- Personal, social and formal learning spaces will be configured to facilitate and encourage learning and professional development.

Appendix A describes a vision for a student view of an exceptional digital student experience. **Appendix B** describes a vision for a staff view of an exceptional digital student experience.

2. Strategic alignment

This strategy aligns with the University strategy and priorities, the Library strategy and the One IT strategy in the following areas:

- Contribute to the delivery of a distinctive, inspirational and exceptional student experience;
- Recruit and support high quality applicants from all backgrounds;
- Develop standardised, efficient and effective processes;
- Drive quality and efficiency in support and administration by delivering effective and integrated IT supported processes (One IT);
- Drive a reduction in the number and cost of IT systems (One IT);
- Innovate with virtual environments to support services for teaching, learning and research as well as access to resources (Library Strategy)
- Ensure all students have convenient access to their essential learning materials (Library Strategy);
- Develop flagship study spaces tailored to the varied needs of all our students and staff (Library Strategy)

3. Benefits of implementing a digital strategy for student experience

a) The University will meet the expectations of applicants, current students, staff and external partners in relation to use of technology to support learning and service provision;
b) The University will maintain parity (as a minimum) with competitor institutions who are moving forward rapidly in this area;
c) There will be opportunities for the University to have a distinctive edge over its competitors through providing a consistent, user focussed and high quality digital experience;
d) There will be opportunities for staff and students to experience efficiencies in time and improved working practices and user experience;

e) There will be opportunities for students to increase their knowledge and understanding and improve their academic performance;
f) Our graduates will meet employer expectations of essential core digital skills for employment;
g) Our students will have the opportunity to practise and develop key high level digital skills whilst at the University, preparing them for work in technologically advanced jobs;
h) Recruitment of high quality UK/EU and international students will be enhanced;
i) Information about the University will be consistent, appropriately timed and targeted, and be accessible via multiple channels;
j) Students and staff will be able to make effective use of powerful and rapidly evolving mobile devices to enhance learning, communication and impact.

4. Principles

All digital technologies and services which support learning and enhance the student experience at the University of Leeds should:

a) support the University's commitment to blended learning;
b) extend and enhance learning from face-to-face interactions;
c) meet a defined student education need;
d) be user focussed;
e) offer a consistent and equitable experience;
f) be standardised across the institution;
g) be integrated with one another;
h) offer a standards based provision;
i) be based on a reliable and accurate common data set;
j) be available on a wide range of mobile devices and platforms as well as desktop computers and laptops;
k) be implemented using pedagogic evidence;
l) encourage interaction between learners, teachers and support services;
m) be paperless, where practicable and appropriate;
n) be customer driven, and tailored to individuals;
o) offer efficiencies and benefits to all users;
p) evolve with changes in technology.

5. Objectives and Outcomes

Prospective (where appropriate) and current students and staff at the University will be able to:

Objective 1: Communicate and interact effectively using a consistent set of tools and principles which offer flexibility and efficiency, recognising the evolving nature of communication, user support needs and skills.

Outcomes: We will provide:

- online collaborative tools (e.g. virtual classrooms, mobile voting solutions etc.) to allow students and staff to interact, communicate and share learning materials;
- multi-functional, device/platform agnostic, tools (e.g. video conferencing, messaging, online chat, customer relationship management system etc.) which allow communication and interaction between students, teachers and staff in student support teams (e.g. student education service, careers, library);
- platforms for social learning which are secure, interlinked and supported.

Objective 2: Seamlessly create, access and consume digital content in multiple formats, using integrated, user-focussed tools.

Outcomes: We will provide:

- unified processes for seamless access to all digital content (e.g. learning materials, library resources etc.) on all devices/platforms from on- and off-campus in a consistent and efficient manner;
- tools and services to create and store multi-format digital content to support learning and professional development (e.g. event capture systems, software solutions, multimedia services);
- services to allow publication of digital content to internal and external facing channels.

Objective 3: Make full use of integrated, customer focussed online services which support and enhance learning, professional development and the student experience.

Outcomes: We will provide:

- Device and platform agnostic digital tools (e.g. learning environments, library, collaborative learning tools, multimedia systems, third party tools etc.) to support face to face learning and digital assessment and feedback;
- Digital tools and services to encourage understanding and development of study, professional and employability skills (e.g. transition resources, digital training, Leeds for Life);
- Digital tools, information and services to interact with prospective students, applicants, graduates and alumni, illustrating our distinctive and effective use of technology to support the student experience throughout the student journey.

Objective 4: Benefit from use of multi-functional, consistent and adaptable physical and virtual learning spaces for personal, social, informal and formal learning.

Outcomes: We will provide:

- Flexible physical learning spaces where students and staff can make full use of PCs, laptops and mobile devices for communication, collaboration and presentation;
- Physical spaces configured for personal, social and informal learning, providing digital technologies allowing for and encouraging individual or group based learning;
- Virtual learning spaces for individual or group based activity, for communication and/or collaboration and for storage and use of learning objects, assignments or professional development assets.

Objective 5: Make full use of digital technologies and services to realise the potential of technology to enhance learning, support development of skills and to fulfil academic potential.

Outcomes: We will provide:

- User focussed, flexible and consistent digital technologies and services to support staff and students;
- Comprehensive and flexible training programmes for students and staff;
- Opportunities for students to develop and practise their digital skills within their curriculum.

6. Actions needed to realise this strategy

In order to realise these outcomes across the University, the following enabling actions will be required. This is general in nature, and linked to specific capabilities (see Appendix C):

a) Investment in institution-wide digital technologies and services to support the digital strategy for student education.
b) Investment in infrastructure to ensure all students and staff can make full use of mobile devices to access internet based services across all campus and non-campus locations (See Appendix C).
c) Staff development to ensure that all staff have the technical skills and confidence to make effective use of technology to support learning.
d) Comprehensive and appropriate ongoing training and support for all staff and students to help them make the most effective use of digital tools and services.
e) Policies and procedures in support of all uses of digital technologies and services associated with the student experience.
f) A clear institutional position on the provision of mobile devices to support student education, and/or advice on which devices / platforms will be supported.
g) Rigorous assessment of all digital technologies and services to ensure they meet statutory and University requirements for accessibility.
h) Alignment, as appropriate, with Student Education Service systems development to ensure consistent, anytime/anywhere and paperless systems wherever possible (see Appendix C).
i) Ongoing institutional and local evaluation and review of use and perceptions of digital technologies and services to ensure they are meeting student and staff expectations.
j) Faculties and Schools should ensure that the use of digital technology is embedded into curriculum design (initially through the curriculum enhancement project) and use aligned with programme and module learning outcomes.
k) Faculties and Schools should ensure that digital technologies are adopted to support all aspects of students' teaching, learning and assessment (except where pedagogically inappropriate), within taught classes and during informal learning (See Appendix C).
l) Faculties and Schools should ensure that students' use of digital tools and services are aligned with the development of employability skills.
m) Realising the Digital Strategy for Student Education should be the responsibility of a central team, working closely with all stakeholders to coordinate digital technologies for learning.
n) Investment to support the University's engagement with MOOC platforms.

7. Measures of success

The following indicative measures will be used to determine whether the digital strategy for student experience, once implemented, has been successful:

- Scores and feedback on student satisfaction surveys (e.g. NSS, Programme Survey, Postgraduate experience survey) in relation to quality of resources, services and experience. Success in this area might look like:
    - Over 92% satisfaction in NSS for quality of learning resources
    - Improvements in NSS scores for Assessment and Feedback
    - Improvements in NSS scores for Organisation and Management
- Judgements and comments from internal and external quality assurance exercises (e.g. QAA Institutional review; internal QA reviews; External Examiner reports). Success in this area might look like:
    - Exemplary ratings on quality of digital content, services and resources

- Staff and student awareness of digital technologies and services (e.g. staff / student surveys of use and perception; records of staff professional development activities). Success in this area might look like:
    - Over 80% of staff aware of all digital technologies available to enhance student education
    - Over 90% students aware of digital technologies and services available to support their experience
- Usage statistics and feedback on use of institutional digital technologies and services (e.g. Multimedia repositories; event capture systems; digital content services; digital technology services; online student support services). Success in this area might look like:
    - Over 50% student education events captured and provided to students
    - All programmes making use of digital technologies and multimedia content
    - Excellent feedback from staff on ease of use

APPENDIX A: **A student view of an exceptional digital student experience**

If this digital strategy is realised, the following user scenario, from the perspective of a student at the University, would become reality:

Georgina is a second year undergraduate student studying an Engineering degree. She owns a laptop, a smartphone and a tablet device and she lives in private accommodation. Georgina has a young child who goes to the University nursery for four days a week. Georgina, like many students, has to juggle her studies with her personal and family commitments.

Georgina attends the vast majority of her lectures in person, as she values the opportunities to interact with her classmates in the session, during problem solving discussions. However, all of Georgina's lectures are captured, so a video of the lecturer talking, synchronised with the presentation materials and his/her on-screen drawings, can be accessed remotely as a recording is made available via the VLE soon after each session. Georgina is also able to ask questions of her classmates and teachers via the app on her tablet device, both in class and during private study; these 'chat'-like discussions are a valuable source of information and help with her learning. Georgina also attends classes in the Engineering workshops, where she undertakes mini-research projects; she accesses class instructions (e.g. video guides) and records her results on her tablet device, which is linked to her private virtual learning space. Georgina can also search for and store details of journal articles relevant to her research on her tablet device; these are also automatically available on her laptop when she returns home. Georgina attends some online tutorials using the interactive classroom accessible via the VLE; she is able to interact synchronously with her tutor and classmates and shares learning materials via the online tool. As these sessions are all recorded, she can revisit them after the session to review important discussions.

Due to Georgina's personal circumstances, she often studies late at night, and appreciates the rich and varied online learning resources available to support her studies, all of which can be accessed from her tablet device or laptop. She regularly listens to relevant lectures and research seminars from Leeds on iTunesU, and searches for animations and videos on the Leeds YouTube education channel to enhance her understanding. She is able to access digital copies of all library resources, including journal articles from a wide variety of publishers, through a single location, after only signing in to her Leeds account once.

Georgina also appreciates the pastoral support available at the University, particularly given her personal commitments. She has occasionally needed to seek urgent support from her personal tutor, School administrator and staff in the student advice centre; they were all instantly aware of her situation and could access information and advice offered by each other, via the customer relationship management system. Georgina was able to have a video conversation with a member of staff in the student advice centre via her laptop from

her accommodation and the notes from the meeting were available in her private virtual learning space.

Georgina has also received good academic support from her School; she submits all of her coursework assignments electronically (which is very useful when she is unable to get to the campus), and all feedback is also provided electronically, either as annotations on work, audio or video feedback. She receives notification of when marks and feedback are available via her mobile device, and all marked coursework can be accessed from her private virtual learning space. She shares these with her personal tutor, who offers advice for improvement during face-to-face and virtual meetings.

Georgina believes that the digital services available to her at the University are exceptional, and were one reason why she chose Leeds above other universities. Georgina was able to see digital tours and demonstrations of the digital resources available before she even visited the University, and this had a big impact on her decision. She also enrolled on a short Engineering course on the FutureLearn MOOC during her A-level studies, which helped her to improve her grades. The style of teaching and quality of the resources on FutureLearn impressed her and reinforced her decision to choose Leeds.

Georgina also believes that the integration of digital technologies and access to multimedia learning resources has helped her to learn better and will improve her chances of getting a better job after University.

APPENDIX B. A staff view of an exceptional digital student experience.

If this digital strategy is realised, the following user scenario, from the perspective of an academic member of staff at the University, would become reality:

Daryl is a Professor in the School of Law. He has worked at the University for 15 years, securing his personal Chair for his research excellence in Patent Law and his inspirational and research-based teaching activities. Daryl's teaching style has evolved over his many years of interacting with students in small, tutorial style classes and large group situations. He has conscientiously maintained his professional development in new teaching methods by regularly attending SDDU courses and Faculty training events. Daryl is a module and programme leader, a personal tutor and he supervises undergraduate and postgraduate research.

Daryl has been using a form of flipped teaching for many years; he provides students with a range of learning resources via the virtual learning environment (VLE) in advance of his classes, and uses the contact time for problem-solving, discussion and questions. Therefore, he doesn't deliver didactic lectures, knowing that the vast majority of his students have reviewed the course materials in advance and have been discussing questions to pose in class using the course's social media channels. Daryl uses the event-capture system to record his interaction with students in the classroom; as the system knows that he is scheduled to teach in a particular room at a certain time, it automatically prompts him to commence recording upon login. The system is highly automated and only requires him to decide whether to record the session and then whether to edit and/or publish to the virtual learning environment after the session. In the classroom, students use the time productively to discuss and analyse case law, referring to primary sources on their mobile devices, and recording their thoughts and ideas in virtual learning spaces. Daryl will read and comment on a selection of these later via his mobile device, so that the whole class can benefit from his general feedback. Daryl also makes use of the toolkit available on his desktop to design and deliver instant quizzes to test his students' knowledge in class, which can be answered on mobile devices, smartphones or with dedicated handsets. These quizzes are also automatically available within the VLE for students to use during independent study and scores are stored for later review.

Daryl often uses recordings from his teaching sessions in his online course offerings. As all of his learning resources are copyright cleared, he can confidently post materials to his course site on the institutional iTunes U area and store them within the institutional multimedia portal for future use in his MOOC on the FutureLearn platform. Daryl has offered iTunes U courses and MOOCs for 3 years and has taught over 60,000 individuals all around the world, through these platforms. His online teaching is renowned within his peer group, and his research grant success has benefitted directly from the evidence of his impact on society. Daryl has met a large number of individuals at undergraduate and postgraduate open day events who cite his online courses as a main reason for selecting Leeds as a place to study.

Daryl supervises a number of taught Masters students' projects during each year. They are involved in related research projects, aligned to Daryl's interests, and he encourages them to work in a team. Daryl has established efficient and effective mechanisms for the students to collaborate, interact and share information and research data securely online via their mobile devices using University systems, and he is able to keep up with their progress and review their data from anywhere in the world, which is useful during his frequent international trips. He can also arrange and facilitate regular team meetings via the interactive classroom tools, which allow screen sharing, note taking, chat functionality, video conferencing and event recording. The recordings of these meetings, which are all available online to Daryl and his students, have proved useful for the students as a permanent record of agreed actions and responsibilities.

In his role as a personal tutor, Daryl makes extensive use of the University's digital services. Through a single interface available on his desktop or mobile device, he is able to track his students' academic progress on their programme, review their assignments, grades and feedback provided, comment on their reflective blog, arrange face-to-face or virtual meetings, review their professional development activities, construct, store and retrieve references for employers and access all personal information. As an extremely busy academic, Daryl often needs to access the student interface on his mobile device and appreciates the ability to be able to continue working on a task within the interface when he is out of the office. Daryl is convinced that the detailed information available within the system allows him to have more personalised, useful and focussed meetings with students.

Overall, Daryl is making full use of the University's digital services and tools to offer exceptional learning and teaching to all of his students and the feedback he receives is exemplary. Due to the interconnected nature of the digital services and tools available to him at the University, he is able to design and deliver his teaching to on-campus and virtual students efficiently and effectively. Whilst Daryl is clearly a busy person he feels his time is being spent very productively on his two passions, research and student education.

APPENDIX C: High level requirements and capabilities

The following table sets out the capabilities needed to realise this strategy:

Capability	Service(s)	Description	Alignment with strategy	RAG status
Unified student information system	Student Education Service / IT	Unified view of student information	Objectives 1, 2 and 3	R*
Event capture systems	Facilities directorate / IT / University	Provision of event capture systems for teaching spaces and desk-based capture	Objectives 1, 2 and 4	R*
Multimedia storage system	IT / University	Provision of a single multimedia storage system for all multimedia assets	Objective 2	R/A*
Multimedia channels	IT / University	Use of public facing content channels (e.g. iTunesU, YouTube) for educational purposes	Objectives 2, 3	R*
Mobile information / Mobile Learn	Library, Student Education Service, IT	Mobile app for Blackboard	Objectives 1, 2, 3, and 4	G
		UniLeeds app	Objectives 1, 2, 3, and 4	G
Seamless access to digital content	Library	Provision of seamless access to all digital content	Objective 2	G
Staff and student training programme	SDDU; Skills@Library; Faculties	Provision of comprehensive digital skills training aligned to digital strategy	Objective 5	A*
Student services	Student Education Service / IT / University	Provision of fully digital services for student education and student support (e.g. transactions)	Objective 1, 3	A*
Infrastructure enhancement	IT	Expansion of high quality Wi-Fi provision across campus	Objectives 1-5	A*
Video conferencing capabilities	IT	Provision of consistent and seamless video conferencing for staff, students and external partners	Objective 1, 3, 4	R/A
Provision of cloud-based	IT	Provision of wide range of software tools via cloud based	Objective 1,2,4	R*

software		systems for staff and student use		
Mobile voting systems	Blended Learning	Use of mobile devices to increase in-class interactivity	Objective 1	R
E-assessment and feedback tools	Blended Learning, Student Education Service, Curriculum Enhancement Board	Provision of tools for seamless workflow from esubmission to efeedback	Objective 3	R
Integration of mobile devices in student education	Blended Learning, IT	Integration of mobile devices into all aspects of student education	Objective 1-5	R
New student email system	IT	Provision of platform/device agnostic email system	Objective 1,3	R*
Virtual personal learning spaces	Blended Learning	Provision of virtual personal space for storing, sharing and collaborating	Objective 1, 3, 4	R
Re-purposing of physical learning spaces	Facilities Directorate	Provision of physical space for blended learning	Objective 4	A
Unified social learning tools	Blended Learning, Communication, VLE team, IT	Provision of secure, interlinked and fully supported social learning platforms	Objective 1	R

*Currently being assessed/progressed