Digital Futures

a strategy to shape the future of Blended, Open and Online Learning at Ulster University

EXECUTIVE SUMMARY

DigitalFutures2015-18@ULSTER

June 2015
Executive Summary

1. **Institutional Sustainability Indicator S2.2** from the 2014/15 corporate plan requires the University to:

   “deliver a Digital Learning Strategy underpinned by agreed pedagogic and business principles, and to provide prioritised recommendations for its implementation and evaluation, to include infrastructure development, academic development and governance.”

2. **Strategic Alignment** of Digital Futures is with the Learning and Teaching Strategy 2013/14 – 2017/18. It also takes cognisance of the emerging principles of the Student Experience. (see section 3.1 of the Digital Futures paper)

3. **A Digital Moment** is presented by the GBD and new buildings on the Coleraine and Magee campuses. This is an opportunity to rethink the classroom, to standardise the online environment, to rebalance online content and interaction, to refresh and to innovate. Seizing the digital moment from 2015-2018 is an opportunity to transform the extant online learning management system into an online digital academic ecosystem. This will mean: Blended Learning for all; Open Learning for innovation; and fully Online Learning for premium educational markets.

4. **Digital Futures is an ODCM/LTSE Transition Project** with defined governance through the new Digital Learning Sub Committee of the Learning and Teaching Committee and consultation using a number of working groups and ad hoc advisory groups. (See Part D of the Digital Futures paper). The Set Up phase has been completed, including a critical pathway in which SET approved the concept of institutional resourcing of a digital learning platform and extended technology. The Digital Futures strategy paper and the MOOCs and Open Learning report both represent key deliverables for the Establishment phase along with delivery of the supporting virtual learning environment.

5. **Open Learning** is new in direction and institutional academic culture. Accordingly, significant research and wide consultation on this strategic element has been undertaken by the Ulster MOOCs and Open Learning Working Group and its final report has been accepted by the Learning and Teaching Committee. The vision, aims objectives and recommendations of this report are taken into the Digital Futures paper for implementation. The full report is enclosed.

6. The general concept and direction of Digital Futures has been consulted upon and reported through the various aforementioned working groups and advisory groups. A dedicated workshop involving more than 70 of the joint membership was held in January 2015.

7. Part A of the Digital Futures paper reviews the external and internal drivers and trends in digital learning; it provides a key reference bibliography and evidence base for the proposed new directions, technologies, policies, pedagogies and best practice in digital learning design. This will also inform wider consultation and implementation.

8. **Enablements** such as Policy and Academic Development will be developed and consulted upon once the strategic direction of this paper is validated. Similarly, impact measures for institutional and distributed ownership require development.

9. Part B of the Digital Futures paper contains draft, high level statements of Vision, Principles, Scope, Objectives and Blueprint for Digital Futures. These are reproduced below for endorsement. Second tier Definitions, Principles, Aims and Objectives for Blended, Open and Online Learning are either provided in the Digital Futures paper or are left open for consultation.
10. Vision - *DigitalFutures2015-18@ULSTER*

A digitally adaptable academic ecosystem through which learning is vibrant, pedagogy is sound, and the prospectus of blended, open and online is comprehensive, accessible and flexible.

An ecosystem for our students that is high in expectation and encouraging of reciprocity, cooperation, and active learning and research for a more personal 'Ulster' experience.

An ecosystem for our staff with authentic, agile and complementary alternatives to the classroom, through which they are supported and empowered to achieve their academic goals and innovations.

11. Principles - *DigitalFutures2015-18@ULSTER*

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<td>1. Adaptable</td>
<td>- Flexible to a variety of learning contexts and supportive of innovation - Scalable, robust and agile infrastructure and range of intuitive tools</td>
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<td>2. Academic Ecosystem</td>
<td>- Range of authentic learning and research interactions taking place - Analytics</td>
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<td>3. Vibrant</td>
<td>- High volumes of high order activity indicating rich student experience</td>
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<td>4. Interactivity</td>
<td>- Interaction with learning objects and internet - Multiple levels of dialogue evident - Personal device accessibility</td>
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<td>5. Pedagogically Sound</td>
<td>- Teaching informed by digital learning design when proportionate - Infrastructure tools are optimal for the pedagogy - Validation process; peer review of content where appropriate</td>
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<td>6. Comprehensive Prospectus</td>
<td>- All-modules presence - Defined standard module presence and functionality</td>
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<td>7. Blended, Open and Online Learning</td>
<td>- Each module will fit one or more of the three categories - Blended will the expected norm - Resourcing models</td>
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<td>8. Accessible</td>
<td>- Reliable system with intuitive interface - Robust and comprehensive Wifi coverage - Mobile responsive and BYOD compliant - Accessibility (assistive technologies and reasonable adjustments)</td>
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<td>9. Flexible</td>
<td>- Facilitates choice and innovation for the educator and learner - Hosted system for 24/7 resilience</td>
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<td>10. Personalisation</td>
<td>- Individualised feedback - Variety of learning styles - Facilitates peer collaboration, communication, social constructivism - BYOD and design for Mobile Education for practitioner subjects</td>
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<td>11. Authentic and Agile Tools</td>
<td>- Intuitive affordance of tools and end-point classroom technologies - Tools are pedagogically sound. - Systems and tools operate on Open API</td>
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<td>12. Complementary</td>
<td>- Digital complements classroom rather than being adjunct - Complement and releases time for learning gain</td>
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<td>13. Supported</td>
<td>- Academic Development Prospectus of support packages - Helpdesk</td>
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<td>14. Empowered</td>
<td>- Educator, course team chose the solution for their pedagogic need.</td>
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12. **Scope - DigitalFutures2015-18@ULSTER**

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<th>Blended Learning - All provision, digital modernisation for accessibility, flexibility, standardisation, quality standards, adaptive and collaborative models of teaching, flipped classroom models of learning (inter alia), efficiency of academic administration, supporting the research-teaching nexus, sustainability in the curriculum, enhanced student experience and personalisation. (Core business model)</th>
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<td><strong>Open Learning</strong> - Sharing externally, students as partners, altruistic provision and outreach, research-teaching nexus, research collections, open educational resources, open publication, communities of digital practice, MOOCs in partnerships. (Reputational and scholarship business models).</td>
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<td><strong>Online Learning</strong> - High quality digital production for fully online distance learning to new targeted and distributed educational markets. (Commercial business model).</td>
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13. **Objectives - DigitalFutures2015-18@ULSTER**

- i. Transformational change enabled through digital innovation in the classroom and beyond.
- ii. To lift the institutional VLE beyond learning management to become an academic ecosystem with students at the heart of the system.
- iii. To facilitate inspirational teaching and exceptional student engagement with learning.
- iv. To enable an institutional shift, where appropriate, from didactic (transmissive) to dialectic (discursive) pedagogies.
- v. To enable an accessible and flexible Research-Teaching nexus.
- vi. To extend educational outreach.
- vii. To develop the capacity and capability of academic staff in digital learning solutions and pedagogies.
- viii. To encourage outward facing perceptions and networks.
- ix. To digitally modernise and embed appropriate and standardised digital learning functionality in all taught programmes.
- x. To ensure an institutional approach to and adoption of digital learning systems, tools, standards, support and learning design.
- xi. To support efficient, effective and agile academic administration and learning management.
- xii. To optimise demands on physical space through appropriate use of digital environments and pedagogic practices.
- xiii. To target and resource bespoke digital development of new niche premium provision
- xiv. To support educational partnerships.
- xv. To enhance the reputation of the University.
### Digital Futures: Blueprint for Digital Futures - DigitalFutures2015-18@ULSTER

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<th>Digital Futures</th>
<th>Technology</th>
<th>Pedagogy</th>
<th>Policy</th>
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| **Stage 1** Infrastructure | • Digital Learning Environment  
• Educational technology suite | Pedagogic and epistemological anticipation informed by:  
• Learning & Teaching Strategy  
• Student Experience Principles  
• Learner Analytics  
• Learning Design | • Institutional Resourcing  
• IT Prioritisation  
• Procurement  
• Recognised technologies  
• Linked systems | • Systems Administration  
• Business Continuity & Disaster Recovery Planning  
• Usability Design |
| **BLENDED** (Provision) **Stage 2** Repository & Informational | • Lecture Capture  
• Media Streaming | As above plus epistemology choice:  
• Didacticism  
• Constructive Alignment  
• Objectivism  
• Information transmission | • Programme Support Areas  
• Copyright  
• Digital Learning Standardisation and Standards  
• Digital literacy | • Academic Development Prospectus  
• Helpdesk  
• Navigation Templates |
| **BLENDED** LEARNING **Stage 3** Transactional | As above plus:  
• Authenticity testing (eg Turnitin)  
• Automated assessment  
• Annotated feedback (eg Grademark)  
• ePortfolio | As above plus:  
• Competency-based Learning  
• Behaviourism  
• Cognitivism | As above plus:  
• Blended Learning  
• Online Assessment & Feedback  
• Plagiarism  
• External Examiners access | As above plus:  
• Digital Learning Healthcheck  
• Digital Learning Wiki |
| **BLENDED** LEARNING **Stage 4** Dialogical | As above plus:  
• At-desk production  
• Webinar studios  
• Synchronous tools  
• Asynchronous tools  
• Subject specific tools  
• Open Courseware  
• Attendance Monitoring  
• Ubiquitous internet and WiFi | As above plus:  
• Constructivism  
• Connectivism  
• Social constructivism  
• Inquiry-based Learning  
• Collaborative Learning  
• Flipped Classroom | As above plus:  
• Digital Learning Healthcheck  
• Research-informed teaching  
• Open Education Resources  
• Social Media & Learning Environments  
• Open Learning | As above plus:  
• Digital Learning Design  
• Digital Learning Webinars and Blogs  
• Special projects call  
• e-Learning Resource Agreement  
• Jorum/equivalent support  
• OpenTexts support  
• Open EdCasting support |
| **OPEN** LEARNING **Stage 5** Bespoke Access or Civic | As above plus:  
• Creative media  
• Open platform | All of the above | As above plus:  
• Resourcing model  
• Digital Design Validation Criteria  
• Transnational Education  
• Production Standards  
• Mobile Education  
• Educational Partnerships | As above plus:  
• Online prospectus  
• Production out-sourcing  
• iTunesU/MOOC administration |
| **OPEN** LEARNING Bespoke Premium | | | | |