

UCISA REPORT

2018 Survey of Technology Enhanced Learning for higher education in the UK: case studies



Universities and Colleges
Information Systems Association

Contents

Introduction	1
About the sample	1
Case study questions and format	2
Executive summary	2
Aberystwyth University	7
Anglia Ruskin University	12
City College Norwich	17
Glasgow Caledonian University	20
The London School of Hygiene and Tropical Medicine	24
Loughborough University	27
Royal Central School of Speech and Drama	31
University of Derby	34
The University of Northampton	40
University of Reading	45
York St John University	49
Appendix: Case study questions	52



Universities and Colleges
Information Systems Association

University of Oxford
13 Banbury Road
Oxford OX2 6NN

Tel: +44 (0)1865 283425
Fax: +44 (0)1865 283426
Email: admin@ucisa.ac.uk
www.ucisa.ac.uk

Introduction

This publication presents a series of case studies on institutional approaches to the management of Technology Enhanced Learning (TEL) services and is intended to serve as a companion report to the **2018 UCISA Technology Enhanced Learning Survey Report¹**, which captures TEL developments across the UK Higher Education (HE) sector. This publication builds on the series of case study interviews, which accompanied the previous four UCISA TEL Survey Reports in 2010, 2012, 2014 and 2016.

The rationale for conducting the interviews is based on the feedback we received for the 2008 TEL Survey Report, which highlighted the need for clearer lines of interpretation for certain areas of the data that we were presenting on. The case studies enable us to probe themes in the data and shed light on TEL trends through the eyes of representative institutions, offering context to the findings. The interviews also enable us to explore themes which cannot be captured effectively through responses to survey questions, such as organisational structure and cultural approaches to TEL developments.

About the sample

Upon completion of the 2018 TEL Survey instrument, responding institutions were invited to volunteer as case study institutions to share their approaches to TEL developments and support provision. Out of an initial list of 29 volunteer institutions (from a population of 108 which completed the 2018 TEL Survey), interviews were arranged with 11 institutions.

The sample group is broadly representative of the UK higher education population, with all institutional types (Pre-92; Post-92; Other HE providers) covered, although we acknowledge that no institutions from Northern Ireland are represented. Eight of the selected institutions have featured in previous case study publications, namely: Anglia Ruskin and York St John in 2012; City College Norwich, Derby, Glasgow Caledonian, Northampton and Reading in 2014; and Aberystwyth in 2016. Their continuing presence is intentional, enabling us to present a longitudinal narrative to TEL developments, whilst fresh institutional perspectives are presented by Loughborough University, London School of Hygiene and Tropical Medicine and the Royal Central School of Speech and Drama which all feature for the first time in this year's publication.

Institution	Type	Country	Mission group
Aberystwyth University	Pre-92	Wales	Unclassified
Anglia Ruskin University	Post-92	England	MillionPlus
City College Norwich	Other HE provider	England	Unclassified
Glasgow Caledonian University	Post-92	Scotland	MillionPlus
London School of Hygiene and Tropical Medicine	Pre-92	England	Unclassified
Loughborough University	Pre-92	England	Unclassified
Royal Central School of Speech and Drama	Other HE provider	England	GuildHE
University of Derby	Post-92	England	Unclassified
University of Northampton	Post-92	England	Unclassified
University of Reading	Post-92	England	Unclassified
York St John University	Post-92	England	GuildHE

¹ Walker, R., Voce, J., Jenkins, M., Strawbridge, F., Barrand, M., Hollinshead, L., Craik, A., Latif, F., Sherman, S., Brown, V. and Smith, N. (2018). 2018 Survey of Technology Enhanced Learning for Higher Education in the UK. Oxford: Universities and Colleges Information Systems Association (UCISA). Available at: <https://www.ucisa.ac.uk/bestpractice/surveys/tel/tel>

Case study questions and format

We are most grateful to members of the UK Heads of e-Learning Forum (HeLF)² for reviewing the question-set for the 2018 TEL Survey and for suggesting areas for further questioning – a focus for the follow up case study interviews. In response to these recommendations, the case study interviews explored the new theme of staff development and digital capabilities, looking at the training programmes, rewards and recognition that institutions put in place to help staff make effective use of TEL tools. However, the main question themes were retained from 2016, 2014, 2012 and 2010 to enable comparisons with previous years. These questions focused on the institutional context for technology management, looking at TEL strategy and TEL governance models, as well as provision of TEL services to staff and students. Following on from 2016, 2014 and 2012 the interviews also focused on distance and open learning provision, and the focus on the Teaching Excellence Framework was also retained from the 2016 question-set.

Each interview was based on a common template of questions, which is set out in the Appendix to this document. The interviews were conducted between July and September 2018 by members of the UCISA Digital Education Group, and the questioning was therefore informed by the key findings of the 2018 TEL Survey Report, which were first presented to the UK higher education community at the Association for Learning Technology's annual conference in September 2018³.

Executive summary

The case studies looked at the following key areas of TEL strategy and support development for institutions:

TEL strategy

The 2018 TEL Survey data revealed that there has been a further reduction in the number of institutions with dedicated TEL strategies informing the development of their learning technology services, down from 48% in 2016 to 34% in 2018. Dedicated strategies have become less common since the high watermark of the 2008 TEL Survey, when the majority of higher education institutions had developed one. Our findings from previous case study interviews have shown how TEL is now being incorporated within broader institutional strategies as an enabling or component part of the institutional vision, rather than as a sole focus (e.g. as part of a capacity building initiative). This may reflect the maturing of TEL provision within institutions as learning technologies become an underlying feature of teaching and learning practices and course delivery.

The University of Reading's experience captures this journey, transitioning from a stand-alone vision of TEL in 2013 to the embedding of TEL concerns within its current teaching and learning strategy, with digital practice now seen as part of *normal business*. This is the picture reflected in many of the other case studies in this year's publication, with TEL embedded within information and learning and teaching strategies (e.g. Aberystwyth and City College Norwich), and positioned as part of a wider digital campus approach that promotes a seamless learning experience based on integrated TEL services (e.g. Anglia Ruskin, Northampton and York St John).

In contrast, Derby and Loughborough have developed dedicated strategies, which are being used to drive forward digital provision and practices at their respective institutions. Derby is using its strategy as a way of drawing attention to the importance of digital practice and its objective to transform all parts of the curriculum and the student experience, enabling enhancements to be made to digital capability and infrastructure across the University.

² The Heads of e-Learning Forum (HeLF) is a network of senior staff in institutions engaged in promoting, supporting and developing technology enhanced learning across the UK HE sector. For further details on HeLF, please see their webpages at: <http://helfuk.blogspot.co.uk/>

³ Latif, F., Voce, J., Walker R., & Jolley, T. (2018). TEL Family Fortunes – we asked 99 institutions to name... ALT Annual Conference 2018, University of Manchester. <https://altc.alt.ac.uk/2018/sessions/tel-family-fortunes-we-asked-99-institutions-to-name-18-81/members/>

TEL drivers

Improving student satisfaction and meeting student expectations are confirmed again as the leading drivers for the development of TEL after *enhancing the quality of learning* in the 2018 TEL Survey results. The importance of the student experience to higher education institutions is clear and acts as a key driver for TEL development. This is reflected in all of the case studies, with institutions such as Loughborough recognising that engagement with technology is a key way of appreciating and understanding the student experience. The embedding of technology usage within the curriculum is one way of realising this aim, as reflected in Northampton's active blended learning approach and Glasgow Caledonian's focus on engagement-led learning and authentic problem-solving, which is supported through the use of technology. Derby's baseline expectations on technology usage, and York St John's auditing of VLE course sites through the use of an exemplary course rubric, both aim to deliver a compelling and engaging student experience.

Employability and academic skills development also act as key drivers in supporting TEL adoption. Northampton's graduate employability (ChANGE) project recognises the need to enhance students' digital capabilities through pedagogical approaches and curriculum design and this initiative is one component of a broader institutional commitment to develop lifelong learning skills. Anglia Ruskin and the Royal Central School of Speech and Drama adopt a similar approach in highlighting their responsibility to develop students' digital capabilities within their teaching programmes; in the latter case, it is seen as a way of supporting skills development whilst at the same time mirroring the practices of the performing arts industry, which requires the School to deliver an industry-standard appropriate level of digital provision.

Other drivers that are referenced in the cases relate to the contribution that TEL can make to student recruitment and the introduction of enhancements to administration and management practices. London School of Hygiene and Tropical Medicine sees the expansion of distance learning provision through the use of TEL as a way of overcoming physical space constraints in central London, which otherwise limit the scope to grow the student population on its programmes. Anglia Ruskin and Loughborough view TEL as valuable in supporting automated workstreams and efficiencies in teaching, learning and assessment activities. Aberystwyth also references these drivers, whilst noting the contribution of TEL in other areas, such as in supporting the collaborative development of Welsh language resources.

Departmental and institutional take-up of TEL

Whilst all of the institutions that we interviewed share a commitment to embedding digital practices within their programme delivery, there is a recognition that the uptake of TEL still varies greatly by faculty, department and even at an individual level in moving to the *new normal*. Institutions are adopting a range of measures to address the variable levels of take-up. TEL champions have been identified in most subject areas at York St John to assist colleagues in their digital practice. Reading's TEL team liaise directly with directors of teaching and learning in each school to support their practice. Glasgow Caledonian and Anglia Ruskin University have developed templates which encourage teaching staff to adopt appropriate digital learning design principles and practices, with dedicated learning technologists available in each school at Glasgow Caledonian to support the adoption and implementation of digital practices.

Top down requirements are another way of addressing this challenge, with Aberystwyth introducing a required minimum presence for the use of technology in teaching, relating to the adoption of the VLE, lecture capture and the electronic submission of coursework. York St John has introduced minimum expectations with clear criteria governing the use of the institutional VLE. Derby requires each programme team to develop an action plan, detailing how learning technologies will be used to support teaching, learning and assessment activities.

TEL provision

The 2018 TEL Survey results revealed a common set of institutional TEL services supporting course delivery across the sector, including the virtual learning environment (VLE), text matching tools, provision for the electronic management of assignments (EMA), reading list software and lecture capture provision. The case studies confirm this picture, but also highlight other emerging areas of provision, such as interactive lecturing tools, which have been rolled out at Anglia Ruskin and are being introduced at York St John and Loughborough. Other common centrally supported tools that are referenced in the case studies include media servers, e-portfolios and assessment software.

Over half of respondents to this year's Survey have chosen an external hosting model for their VLE service provision, with cloud-based software as a service (SaaS) provision doubling since the last Survey. This transition to cloud hosting is reflected in the case studies, with City College Norwich, Glasgow Caledonian, Northampton and Reading all opting for Blackboard's managed hosting service in favour of locally hosted services. Of the other VLE platforms in use, Royal Central School of Speech and Drama is migrating to Brightspace and London School of Hygiene and Tropical Medicine is using an externally hosted Moodle environment. Anglia Ruskin has adopted a cloud-first strategy and has migrated to a new Canvas environment. Of the 11 institutions that we interviewed, only four (Aberystwyth, Derby, Loughborough and York St John) are still committed to supporting a locally managed VLE service.

The case studies also reflect the high level of TEL systems review activity that is going on across the sector. Loughborough has completed reviews of lecture capture, electronic voting and module feedback systems. Royal Central School of Speech and Drama has just completed a VLE review and Northampton is about to follow suit with its own review in the near future.

TEL governance and structures

Training and end user support for TEL services appears to be most commonly embedded within centrally managed learning and teaching units, with IT Services managing the technical running of these services. Derby, Northampton and Reading all follow this model and have the largest TEL teams with ten or more staff supporting TEL services within learning and teaching support units, as well as learning technologists located within schools. At the other end of the scale, Royal Central School of Speech and Drama has one dedicated post to support its VLE implementation and to offer pedagogical support, although TEL support responsibilities are also provided by the library and the IT helpdesk to students.

Aberystwyth operates a different model with its E-Learning Group embedded within Information Services (IS). The Group Manager reports directly on TEL developments to the IS Head of Department, but also has a link to the Pro-Vice-Chancellor for Teaching and Learning, who chairs the University's TEL Steering Group. City College Norwich follows a similar approach in terms of location and reporting lines, although the TEL unit is actually line managed by Norfolk Educational Services, which also supports other educational providers in the region.

York St John has moved its central TEL team from the Academic Development directorate and positioned it within the Innovation and Growth directorate to sit alongside information services, as well as with learning and estates. The rationale behind this move is to support a whole-institution approach to the digital agenda. Glasgow Caledonian operates a different model altogether, with no dedicated central TEL unit in use. Instead, the Academic Quality and Development unit has a pedagogical management role in overseeing the institutional VLE, but learning technologists in three academic schools offer pedagogical and practical support to staff and students.

In terms of governance, Aberystwyth, Anglia Ruskin, Derby and Glasgow Caledonian have all established their own E-Learning/Digital Strategy/Digital Experience Groups to oversee technology developments across the institution. Derby has established a three tier governance model with a digital experience governance board overseeing the work of a steering group and a working group. At Loughborough, digital strategy is managed by a programme management board, with sub-groups reporting to the Learning and Teaching committee and IT portfolio board.

TEL-specific policies

Aberystwyth, Loughborough, Northampton and Royal Central School of Speech and Drama all recognise the importance of ensuring consistency in the student experience by setting minimum standards for the presentation of VLE module sites with their policies addressing expectations and principles of digital practice. Derby and York St John express expectations over the way that teaching staff should use the institutional VLE in a different way. Derby has developed a digital practice programme baseline which is linked to TEF and NSS metrics, which programme teams are expected to use to self-review their progress. York St John has developed its own TEL quality framework and also makes use of Edinburgh Napier University's 3E Framework⁴ to guide the way that staff make use of the VLE.

However, not all institutions that we interviewed have an institutional policy on VLE usage. Reading is currently considering threshold standards for the VLE, but these are not yet in place. London School of Hygiene and Tropical Medicine, Glasgow Caledonian and City College Norwich have not opted for a minimum baseline approach and encourage staff usage of the VLE in other ways, such as through the use of baseline VLE templates and structures or a Course Award scheme.

The case studies also reveal other areas where TEL-specific policies are being applied. Opt out policies for the recording of lectures have been introduced at Aberystwyth, Loughborough and Northampton. Northampton and Aberystwyth have also introduced policies on requirements for the online submission and marking of coursework.

⁴ <https://staff.napier.ac.uk/services/vice-principal-academic/academic/TEL/TechBenchmark/Pages/overview.aspx>

Staff development and digital capabilities

This new theme looked at institutional support to staff in the development of their digital capabilities. A range of online guidance and training opportunities are cited in the case studies with a common reference made to Jisc's digital capability framework. Aberystwyth, Anglia Ruskin, Derby and Glasgow Caledonian all highlighted their use of the digital tracker tools to inform the provision of guidance and support to staff and students. In Aberystwyth's case, the use of the tracker has been directed to administrative staff in a major effort to support their engagement with TEL services. Helping staff with professional accreditation is another way of addressing digital capabilities, aligning workshops and training to professional standards. Reading, Northampton and Loughborough all support UKPSF accreditation in this way, whilst York St John has developed staff support around SEDA accredited awards. Other support methods that are mentioned include the running of a TELfest conference at Reading and the establishment of a network of student digital champions at Derby.

Teaching Excellence Framework (TEF)

The interviews reveal a mixed picture of institutional engagement with the TEF. It has not impacted on the TEL team at City College Norwich and with London School of Hygiene and Tropical Medicine being a postgraduate-only institution there is no engagement with the TEF. As a Scottish institution Glasgow Caledonian has chosen not to engage as yet, but is aware of it and has a declared interest in learning analytics, which it is intending to develop for internal reporting purposes. At the other end of the spectrum of engagement, the Heads of TEL at Reading and Northampton were involved in the writing up of their own institutional TEF submissions, with TEL having a prominent place in these accounts. There have been two major outcomes out of the TEF writing process, namely that the role of TEL in supporting student learning has been reinforced within the institution and the requirement to evidence the impact of TEL services on the student learning experience has also been highlighted. At Reading this has flagged the need for TEF-relevant evidence to be built into project plans to show what difference TEL is making to student learning.

At Derby, Northampton and York St John the TEF has prompted an investigation of learning analytics solutions as a way to evidence the use of key TEL systems such as the institutional VLE. Anglia Ruskin reports that it is already drawing on VLE data to inform and further enhance the development of an institutional student engagement dashboard.

Distance learning and Open Learning

The 2018 TEL Survey results revealed that institutions are actively exploring ways of expanding their fully online provision through the creation of dedicated distance learning units and collaboration arrangements with external/commercial partners. Distance learning is of obvious importance to the London School of Hygiene and Tropical Medicine given the physical constraints of its campus and it has a strategic objective to grow its distance learning provision. This ambition is shared by a number of the institutions that we interviewed, including Northampton and Glasgow Caledonian, which is also actively engaged in transnational provision. Anglia Ruskin and Derby have their own dedicated distance learning units supporting online and distance learning provision, extending from short courses to MOOCs. Anglia Ruskin's portfolio also includes a number of degree apprenticeships, which are designed around a combination of online work based and face to face delivery.

The most common form of collaboration arrangement with external partners that institutions mentioned is through partnership with FutureLearn. London School of Hygiene and Tropical Medicine, and Reading use this platform to deliver MOOCs and Anglia Ruskin has recently signed up with FutureLearn.

The delivery of MOOCs accounts for the most common way in which institutions are addressing open learning. Derby reports that its MOOC provision serves as a pathway for students to enrol on accredited courses. There is less evidence of institutions actively promoting the development of open educational resources. Aberystwyth is perhaps the most active in this respect, developing and sharing Welsh language resources, a cause championed by the Welsh Assembly.

Future challenges

Anglia Ruskin and Loughborough both focus on systems issues relating to the implementation of their digital strategies in their planning for the future. Anglia Ruskin is concentrating on the effective implementation of systems, business processes and workflow, whilst Loughborough's attention is on the provision of *good data* from its systems to help inform staff about student engagement with learning. For other institutions, such as Glasgow Caledonian, Derby and York St John, the focus is more on improving and developing the digital capabilities of their staff, which will lead to enhancements in the curriculum and innovations in programme delivery. Northampton and Reading identify the related challenge of maintaining adequate capacity in staffing levels to support TEL developments across their institutions. These findings corroborate the data in the 2018 TEL Survey, which identified staff development and investment as the primary ways in which higher education institutions are addressing the key learning technology challenges facing them in the coming years.

Acknowledgements

We would like to thank the institutions which took part in the interviews. The case studies were written and compiled by the following members of the UCISA Digital Education Group:

Melanie Barrand, University of Leeds

Athina Chatzigavriil, London School of Economics

Laura Hollinshead, University of Derby

Martin Jenkins, Coventry University

Sarah Sherman, Bloomsbury Learning Environment, University of London

Fiona Strawbridge, University College London

Persefoni Stylianoudaki, University of Dundee

Julie Voce, City, University of London

Richard Walker, University of York (Editor)

Aberystwyth University

Overview

Aberystwyth University is a research and teaching institution with just under 8,500 students across its three academic institutes. The student population is comprised of approximately 7,300 undergraduates and 1,200 postgraduates. The University offers more than 300 undergraduate courses from Accounting and Finance to Welsh and Celtic Studies and also provides a range of postgraduate taught and research programmes, as well as three major distance learning programmes in Information Studies, Law & Criminology, and Sustainable and Efficient Food Production.

The University has also established an overseas campus on Mauritius to support the delivery of a range of undergraduate and postgraduate degree courses. Most recently, the University has launched a portfolio of validated degree programmes through franchise agreements with partnership colleges.

Kate Wright, E-Learning Manager at the University, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

Aberystwyth does not have a *stand-alone* TEL strategy; rather TEL forms part of their Information Services Strategy and the accompanying Information Services Strategic Plan (2014–19⁵). The Plan commits the University to building an integrated online learning environment for students, addressing the following objectives:

- establishment of a strong, flexible and extensible IT infrastructure for TEL including close integration with the student record and other central systems;
- continuous monitoring of the educational technology environment, being innovative and introducing new technologies here clear benefits can be identified;
- development of support and training for staff and students in the use of TEL – encouraging uptake across the institution;
- assistance in the development of media rich learning materials to support on-site or distance learning;
- identification of opportunities for funding in support of TEL projects.

TEL themes will also be embedded within the new Learning and Teaching Strategy, which is currently under development.

The University's recent TEF submission drew on the substantial investment in TEL services that it has made in recent years. This investment was recognised by the TEF panel in its decision to award the University with a gold rating and underlines the strategic importance of TEL services to teaching and learning activities. Consequently, decision making on TEL developments and service management is now subject to much greater scrutiny. Notably a change in annual rollover procedures in favour of a blank course copy policy for VLE module sites went to Senate for approval and was examined in great detail by that committee. This shows how important decisions on the institutional VLE have become to the University – a platform that all academic staff are expected to use in their teaching. The rollover policy was subsequently approved and all first year undergraduate course sites within the VLE were created with a blank template this year; second and third year undergraduate sites were rolled over from the past academic year to the new one, but will be created blank in future years.

Drivers for TEL use

The student experience is the biggest driver for TEL adoption, with a focus on extending learning and motivating individuals – e.g. through the use of analytics. Consistency in the use of TEL tools is one of the biggest requirements from students. The University is keen to promote and embed TEL tools across the curriculum, with a twin pronged strategy of encouraging innovation and creativity in teaching methods through the Exemplary Course Award scheme⁶ whilst supporting baseline standards in course administration, such as through the online submission of student work. Academic staff are required to receive, grade and return feedback to students via the VLE for all text based word-processed assignments, as approved by Senate in March 2015⁷.

⁵ <https://www.aber.ac.uk/en/is/about/strategicplan/>

⁶ Exemplary Course Award: <http://nexus.aber.ac.uk/xwiki/bin/view/Main/AU+Exemplary+Course+Award>

⁷ E-submission policy: <https://www.aber.ac.uk/en/academic/e-submission/>

The minimum standards that VLE module sites should meet are outlined in the University's Required Minimum Presence (RMP) policy⁸, which was approved by Senate in June 2013. These standards are publicised to students, so that they know what to expect to see in each VLE module site that they engage with. Guidelines on how to develop an *Enhanced Presence* through the use of the VLE are also available for staff to review, encouraging module convenors to go beyond minimum standards in providing their students with an excellent online learning experience.

Efficiency savings also act as another important driver for the adoption of TEL; this has been particularly important to the University in the context of an organisational restructure that has been taking place this year, which has led to a reduction in staffing. One recent efficiency initiative has been the automated transfer of marks from the VLE to the student records system (SRS). Previously marks had been manually entered into the SRS through a double-entry system, and the automation of this process has saved a lot of time and effort. There has been a big push to ensure that all departments adopt this process, so that there is a consistency in mark entry across the institution.

Welsh language provision requirements also contribute to the uptake of TEL services. The national funding council HEFCW has underlined the importance of Welsh HEIs working together, and to this end has invited Jisc to review the HEFCW strategy for TEL and look for evidence of maturity in TEL practices across the sector.

Departmental and institutional take-up of TEL

The University has a Required Minimum Presence (RMP) for the use of technology in teaching. This encompasses use of lecture capture and electronic submission of student work, with both of these services hosted within the institutional VLE, which staff are also expected to use in support of their students.

In line with the policy, all lectures involving the transmission of information from staff to students are expected to be recorded. Mixed sessions involving discursive elements are also deemed to be suitable for recording, with the introductory didactic part of the session captured, but not the ensuing discussion between the lecturer and students. All text based word-processed assignments are expected to be submitted electronically for marking. The University is aiming in the future to move to electronic marking for other pieces of assessed work (e.g. physical objects such as sculpture items), with all marks and feedback on student work stored within the VLE and then transferred to the student records system.

It is the responsibility of institutes (schools) and departments to enforce this policy, although this is currently under review. The central E-learning Group has a part to play in the implementation of the policy and can monitor the number of assessments and submission points that a department has created, but is not in a position to judge how the VLE is being used by academic staff and whether materials have been uploaded to the right place and a logical navigation structure exists for students to follow. The E-Learning Group reports to the University's TEL Steering Group on e-submission and lecture recording activity, and this enables any problems at the beginning of teaching semesters to be rectified, such as lecture recordings not taking place.

The minimum standards policy has led to a uniform take-up of core services by departments. The drive for standardisation of the student learning experience has been successful and students now recognise that they can use the same tools wherever they are. However, it is also acknowledged that the drive for consistency should not limit scope for academic creativity and innovation in the use of services, such as e-submission and lecture capture services, which may support distinct approaches by departments. This year's annual learning and teaching conference considered this theme – how do you innovate as well as keep a consistent approach to the use of core TEL services? This touched on how you encourage staff to take risks – particularly with innovations that may not work. The conference looked at initiatives such as *students as partners*, but also considered challenging innovations beyond VLE usage, looking at modifications to assessment and changing lecture methods. Now in its sixth year, the conference itself has been important in driving development of ideas and practice across the institution. It provides an excellent opportunity for staff to share ideas and reflect on their own practice.

⁸ Good practice guides for the Required Minimum Presence and Enhanced Presence: <http://nexus.aber.ac.uk/xwiki/bin/view/Main/RMP+and+enhanced>

TEL provision

There is a centralised e-learning group and centralised university model, which supports the following technologies:

- Blackboard – the Blackboard Learn virtual learning environment
- E-submission through Blackboard using Turnitin or Blackboard Learn’s Assignment tool
- Lecture capture through the use of Panopto software
- Helix media server – although this is being phased out and will be replaced by Panopto
- Box of Broadcasts for use of video in teaching
- QuestionMark Perception for online exams
- Qwizdom for interactive voting in class sessions
- STACK for computer-aided assessment for mathematics
- Xerte online toolkit for the creation of learning objects

Departments make use of centralised services and do not run their systems. The University does not have a Bring Your Own Device policy, but some software can be accessed through the use of mobile devices. Some departments are also making use of QR codes and encouraging mobile usage in this way.

The University is keen to see greater use of tablets in teaching and learning activities. Tablet usage has been the biggest growth area in terms of TEL adoption, and this is particularly the case for mathematics and science disciplines, with teaching staff using them as an alternative to writing on a blackboard. Five years ago in a revamping of teaching rooms across campus most blackboards were replaced by whiteboards and document cameras, enabling staff to make use of tablets and project the screens on to the whiteboards. A session on the use of tablets at a recent learning and teaching conference was very well received by staff.

There has been no systematic review of the University’s TEL systems over recent years, although the E-Learning Group does keep an eye on technology developments. The key development has been the decision to move to a cloud hosted version of Question Mark Perception for online exams from a self-managed service. Decisions on cloud-based services are considered on a case by case basis, with cost playing a big part in the investigation.

The key focus though is on the consolidation of the existing TEL services, supporting the rollout of lecture capture and e-submission across the institution. The University has also signed up to the Jisc’s Student digital experience tracker⁹ for the third time to monitor how these services are being used by students and are contributing to their learning. The key message from students has been that they don’t necessarily want more TEL tools to be made available to them, but they want better quality. The onus is on the E-Learning Group to do what they do really well – therefore, consolidation of service management and delivery has been the priority over the last couple of years.

TEL governance and structures

The E-Learning Group is responsible for managing TEL services and is located within Information Services, a department combining library and IT services. The E-Learning Group comprises the Manager and four staff members who undertake advisory services in support of academics focusing on teaching interventions and the pedagogic appropriateness of TEL tools, as well as providing technical guidance on tools to staff. There have been some changes in the Group, but broadly it remains the same as before.

The Group Manager reports directly to the IS Head of Department and there is also a close relationship between the Group and the Pro-Vice Chancellor for Teaching and Learning, who chairs the University’s TEL Steering Group.

TEL-specific policies

The drive for consistency in the student learning experience has been supported by the Required Minimum Presence (RMP) policy, which covers lecturers’ use of the VLE and lecture recording services. This also incorporates the e-submission policy, which was introduced four years ago, requiring staff to receive, grade and return feedback to students via the VLE for all text based word-processed assignments. The blank course copy policy has also recently been approved and will come into force for the 2018–19 academic year.

Each institute at the University has a Director of Learning and Teaching or Director of Undergraduate Studies and it is their responsibility to ensure that these policies are being implemented correctly and consistently across taught programmes. Students will also play a part in ensuring that the implementation is a success, such as by highlighting any lecture recordings which do not have adequate audio to accompany the capture.

⁹ <https://www.jisc.ac.uk/rd/projects/student-digital-experience-tracker>

The E-Learning Group will assist each institute, as required, supplying statistics on VLE sites, assignment submission points and lecture capture recordings and their availability to students. The Group also assists academic staff in training them to use the VLE and Panopto systems.

Staff development and digital capabilities

The University has also signed up to pilot the Jisc's teaching staff tracker (2017–18¹⁰) and the aim is to solicit information on what staff think and what they think they need in terms of their digital training and support needs. There is also a lot of training going on over the summer. This has mainly been directed towards supporting administrative staff in their use of TEL systems and has been driven by the organisational restructure and the need for greater efficiencies in use of these systems, helping administrators to engage effectively with multiple systems.

Teaching Excellence Framework

The University was awarded a gold rating by the TEF panel. Preparations for subject-level TEF are now underway. It is too early to judge the impact of the TEF on technology adoption and usage across the University, but it has given TEL high visibility within the institution and reinforced the importance of its role in supporting teaching and learning activities. The TEF has also been helpful to the E-Learning Group in encouraging thinking on how to track TEL developments and measure impact, such as the development of themes discussed at the annual learning and teaching conference (e.g. growth of tests hosted on the VLE). This has acted as a spur to the Group to keep better statistics and develop case studies of good practice, as well as to draw upon existing tools, such as the student digital tracker and the Information Services annual user survey, which goes back 15 years in terms of data collection.

There is also an interest in learner analytics, and the development of an institutional service is currently under review. This has grown out of the information requirements that personal tutors have identified to support their students, such as data on class attendance and log in frequencies to the VLE. The University does provide information to students about class attendance, use of the VLE and lecture recordings that goes on their student record, but discussions are ongoing about what data should be made available to students during the course of their studies. Aberystwyth University will be involved in HEFCW Learning Analytics Cymru project¹¹ and they anticipate significant benefits from taking part this innovative cross-Wales collaboration.

Distance and open learning

The University currently offers three major distance learning programmes in Information Studies, Law and Criminology, and Sustainable and Efficient Food Production. There is no active plan to expand distance learning provision beyond these current programmes.

The key change has come instead in the establishment of a portfolio of validated degree programmes through franchise agreements with partnership colleges based in the UK and overseas. These programmes are delivered at the partnership colleges and are not aimed at distance learners, but they do make use of the VLE for teaching and assessment (e-submission and feedback) and require the E-Learning Group to support VLE activities, including online examinations, remotely at these sites.

The University encourages academic staff to create open education resources and although the CADARN project has come to an end, this work goes on in various guises. There is a strong national interest in developing open educational resources through the medium of Welsh – and there is an on-going collaboration in the development of Welsh media education resources. Aberystwyth has not yet get engaged with the development of MOOCs and this is not a current priority for development.

¹⁰ *Jisc staff tracker (2017–18)*: <https://digitalstudent.jiscinvolve.org/wp/data-service/studentlearner-digital-experience-tracker-guidance-for-pilot-institutions/guidance-for-teaching-staff-tracker-pilots/>

¹¹ <https://www.jisc.ac.uk/news/wales-buys-into-jisc-learning-analytics-11-jul-2018>

Future challenges

Data from the Jisc's Student digital experience tracker has revealed that student connections to TEL systems via desktop and mobile devices are now at similar levels. This raises challenges over the readiness of institutional systems to support mobile access effectively and there are concerns about Turnitin in this respect. The E-Learning Group needs to ensure that guidance and support are made available to students for the submission of work via mobile devices. Taken as a whole though, the tracker surveys have been very useful and the Group will look to build on the key findings and develop their support services accordingly.

Another big challenge for the Group next year is getting ready to work with software vendors supplying cloud-based TEL services. This will change the nature of the work that the E-Learning Group will do in managing key services, but will not necessarily lead to a reduction in the number of tasks that they will need to undertake. This will require someone from the Group to liaise with these vendors and oversee the service management and support relationships for these cloud-based systems.

Anglia Ruskin University

Overview

Anglia Ruskin University¹² (ARU) is a Post-92 University with four campuses in the UK in Cambridge, Chelmsford, London and Peterborough. It is a teaching-focused institution with eight research institutes; it has over 39,000 students worldwide. Of the four UK campuses Peterborough has a mainly nursing focused provision and the London campus (Anglia Ruskin London¹³) is run by a private entity and offers Business, Law and Healthcare related undergraduate and postgraduate degrees.

There are currently five faculties (soon to be reduced to four as the result of a recent restructuring exercise):

- Arts, Law and Social Sciences (ALSS)
- Lord Ashcroft International Business School (LAIBS)
- Medical Science (FMS)
- Science and Technology (FST)
- Health, Social Care and Education, (FHSCE)

The University Research Institutes are:

- Cambridge Institute for Music Therapy Research (ALSS)
- Policing Institute for the Eastern Region (ALSS)
- Story Lab (ALSS)
- Anglia Ruskin IT Research Institute (FST)
- Global Sustainability Institute (FST)
- Positive Ageing Research Institute (FHSCE)
- Veterans & Families Institute for Military Social Research (FHSCE)
- Vision and Eye Research Unit (FMS)

The University has also just established a Centre for Innovation in Higher Education as part of Anglia Learning and Teaching¹⁴. Funded initially for two years it will have a focus on establishing an educational laboratory model, enhancing pedagogic research and scholarship, contributing high quality research outputs including to the REF, enhancing ARU's learning and teaching profile, developing and embedding stakeholder engagement via key partnerships, and creating revenue streams. It has been established based on ARU's teaching and learning reputation – ARU has one of the highest levels of academic staff with teaching and learning qualifications (76%), including 107 Senior and 29 HEA fellowships in the UK.

Sharon Waller, Head of Anglia Learning and Teaching, and **Uwe Richter, Academic Lead: Distance and Online Learning**, Anglia Learning and Teaching, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

At ARU TEL is embedded within the University Strategy (Designing our Future 2017–2026¹⁵) and Education Strategy 2018–2023. The integration of TEL into the wider University strategies reflects a view that TEL supports learning, teaching and assessment and that it is part of a wider digital campus approach. The Education Strategy combined with a Digital Strategy, which has an IT focus, collectively aim to develop a seamless learning experience and integration of services. A core part of this strategy has been the move to a new VLE, Canvas, introduced in academic year 2017–18, which is acting as a catalyst for wider TEL developments.

¹² <https://www.anglia.ac.uk/>

¹³ <http://lca.anglia.ac.uk/>

¹⁴ <https://www.anglia.ac.uk/anglia-learning-and-teaching/centre-for-innovation-in-higher-education/about-cihe>

¹⁵ <https://www.anglia.ac.uk/about-us/strategy-and-leadership>

Drivers for TEL use

There are a number of key drivers for TEL provision at ARU, which include:

- Improving retention and attainment;
- Assessment and feedback (especially formative);
- Enhancing students' digital literacy and other graduate attributes;
- Student expectations and satisfaction;
- Higher automated workstreams and efficiencies in the background (administration/management);
- More and better student engagement data;
- Sector expectations.

Identification of these drivers is informed by strategic priorities and they are evidence-informed, drawing upon key data from the institution and supported by active research. They have formed the basis for strategic learning and teaching projects which have had TEL implications. For example, to enhance student engagement the University has adopted a focus on team-based learning – incorporating flipped design with active collaborative learning approaches – which has influenced core tools that are used in the University (e.g. Poll Everywhere) and this has led to significant investment in appropriate active collaborative learning spaces.

ARU has had a four year initiative on enhancing the student assessment and feedback experience, in which the use of Turnitin GradeMark was significantly developed across the institution. Its use was driven by a range of factors, namely: shortcomings of the old SharePoint VLE for online submission; a large proportion of the student population commuting to campus so reducing the need for on-campus submission; student voice (SU and NUS), improving efficiencies in the submission and marking process including challenges caused by multiple campuses. As a major cultural change the introduction of online marking was evaluated and benefits clearly communicated to staff, who were provided with appropriate equipment as necessary – for example, larger and multiple screens.

Departmental and institutional take-up of TEL

All modules, both undergraduate and postgraduate at ARU have a site on Canvas following its rollout in September 2017. Usage has been supported by an extensive staff development programme. Staff user evaluation shows that in this early stage of the Canvas implementation that while the majority of use was limited to the uploading of documents indications are that staff are also making use of more functionality than in the previous VLE – this is particularly the case in faculties that have introduced content templates which emphasise the use of online activities and guidance to increase student engagement. It has been ARU policy for the majority of text based assignments to be submitted online, with marking and feedback also online for several years. However, assignments containing non-text based components (i.e. text plus multimedia or a physical artefact) continue to be submitted in *hard copy* to the iCentre until a digital alternative becomes available.

TEL provision

The University moved to Canvas in 2017–18 from a SharePoint based VLE. Integration of tools and services plus access to learning analytics information were key drivers in the move to and choice of the new VLE. Canvas has been rolled out to ARU's Cambridge, Chelmsford and Peterborough campuses. The London campus has its own VLE provision. Canvas will be rolled out to international and UK partners, hosted by ARU, through the 2018–19 academic year. The move to Canvas also reflects an increasing move to cloud-based hosting of tools and services.

ARU is a major user of Poll Everywhere. It was originally piloted across two faculties with funding from Anglia Learning and Teaching. Following the evaluation, which confirmed the positive impact on student behaviour, it has been adopted across the University. Its use is integral to team-based learning, which utilises a high level of multiple choice questions – both formatively and summatively. The use of Poll Everywhere has also extended to use in Library workshops and as part of Open Days. ARU's experience is that there is an expectation from students for the use of such tools to support engagement and active learning. Its use is being continually evaluated, most recently to determine the extent to which it met the University's business requirements for a polling tool as part of phase 2 of the Canvas implementation programme. As a result, Poll Everywhere is to be integrated into Canvas for the new academic year.

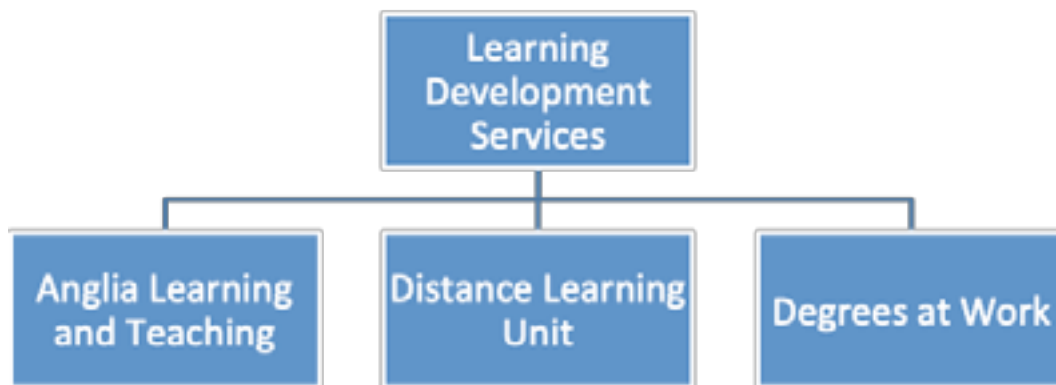
The second phase of the new VLE implementation, entitled Learning, Teaching and Assessment Transformation, is evaluating tools that will be integrated with Canvas. As part of this project there are different work streams, involving both academic and professional services staff, evaluating potential tools for assessment, e-portfolios, collaboration, media, learning analytics and digital badging/micro credentialing. It is expected that decisions on the central provision of tools for e-portfolio, collaboration and media will be made by the end of the academic year 2017–2018. Other tools currently used by ARU include Questionmark Perception (online), Talis Aspire, Echo360 (lecture capture), Medial (media library software) and Adobe Connect.

TEL governance and structures

The current governance structure was established to help facilitate the VLE Review in 2016. It was designed to be as inclusive as possible and so engage with multiple stakeholders. The structure is being updated, recognising that there needs to be a focus on TEL more broadly and not just the VLE. The new structure will have a Digital Strategy Delivery Group (DSDG), overseeing the delivery and implementation of the Digital Strategy. The DSDG is a sub-committee of ARU's Corporate Management Team and will report to the Senate Education Committee. Reporting to DSDG will be a new Learning and Teaching Technology Governance Board, which has been created to ensure that learning and teaching factors have primacy in decision making for the introduction of new institutional TEL tools.

A VLE User Group meets every week and is run as an open forum allowing all stakeholders a voice. It is recognised that this presents challenges as local issues are raised and need to be balanced with institutional priorities. It does, however, provide a valuable forum for engaging a broad range of stakeholders.

TEL support is available both centrally and through faculties. The latter employ local learning technologists, who provide hands on support and training, and Directors of Learning, Teaching and Assessment (DLTA). DLTAs are also involved in supporting international partners delivering their respective faculty's programmes. Core central TEL support is provided through Anglia Learning and Teaching (ALT) and the Distance Learning Unit, both located in Learning Development Services. The Learning Development Services structure is shown below.



- **Anglia Learning and Teaching** – includes academic and professional services staff providing academic-focused support, guidance and professional development. While several members of the team provide support for TEL in some way, there are two academic leads for TEL (Learning Technologies and Digital Media; Distance and Online Learning). Within ALT there are also two learning technologists/media specialists. ALT provides central guidance and professional development for the use of TEL and also coordinates support for major projects. For example, for the implementation of the new VLE a consistent approach was required – consequently ALT developed the training materials, which were delivered by ALT staff and also by faculty Directors of Learning, Teaching and Assessment and learning technologists.
- **Distance Learning Unit** – provides different services, which faculties can buy into and are charged for, namely: outsourcing the content production; building online courses in the VLE; online tutoring; and facilitation/support. Overall responsibility for the quality of online/distance courses remains with faculties. Online tutoring and facilitation is provided in recognition that appropriately trained and experienced staff, with dedicated time allocation, are required to provide this role. This unit works closely with the Degrees at Work team.
- **Degrees at Work** – acts as a unit to develop markets for employer-led online/distance work-based provision including a growing number of Degree Apprenticeships.

ALT staff work with other professional services staff who provide IT related support; these include the Library Student Helpdesk supporting students and IT Services who train staff in the use of desktop tools such as Microsoft Office and classroom technologies.

TEL-specific policies

ARU are developing a One IT policy, aiming to centralise decision making around the choice and acquisition of TEL and IT services generally. The move to Canvas, which will act as the central hub for tools to be integrated with, is a major strand in this approach, as are the work streams tasked with identifying enterprise solutions. The aim is to provide a core set of tools that are centrally supported, in this way contributing to a consistent and seamless user experience. Academic staff will be strongly encouraged to use these core tools, but are not restricted from using other tools. However, central support will not be available for non-core tools, so staff will need to assume responsibility for managing their use. All staff have been through GDPR training to ensure that they are aware of issues, if using external tools.

ARU have established a three-stage minimum requirements policy for the use of the VLE: Baseline, implemented in 2017/18; Enrichment, to be implemented in 2018/19 and Transformation (student-centred). By having different levels the policy acknowledges that staff will be at different levels and sets aspirations for development, moving to more active and transformational uses of the VLE. The baseline level sets an expectation for a consistent user experience. Application of the policy is monitored through the LMS Steering Group, with faculties having to report on the percentage of courses, which have met the requirements for that year. Auditing is undertaken by faculty based learning technologists.

Providing a consistent experience was an objective for the introduction of Canvas, informed by and responding to student feedback. Rather than a university-wide approach ARU has developed faculty specific templates in recognition of their different cultures and needs. Templates were developed through a consultation exercise with students and staff.

Staff development and digital capabilities

ALT have developed a digital literacy framework¹⁶ and digital literacy barometer informed by the European Digital Competence Framework¹⁷ and Jisc's Digital Capability Framework¹⁸. The barometer is a self-assessment tool allowing staff and course teams to consider the TEL requirements for their respective discipline contexts, and it is supported by a programme of workshops and resources¹⁹. Support for TEL activities includes sharing of practice²⁰, online resources²¹ and an annual DigiFest event²². Examples of good practice are identified through applications for HEA Senior and Principal Fellowships, teaching reviews and the local knowledge of learning technologists and DLTAs.

The implementation of Canvas was supported by an extensive professional development programme led by ALT. Resources were developed and delivery devolved to faculties for a consistent approach.

Teaching Excellence Framework (TEF)

As a teaching-focused university, ARU considers the Teaching Excellence Framework (TEF) to be very important. Institutionally, learner and learning analytics are being explored more strategically and this was a driver in moving to a new VLE. Data from the VLE will inform and enhance the further development of ARU's Student Engagement Dashboard, which currently draws on data from the VLE, library access, attendance monitoring and student assessment results. The Dashboard is available to both students and staff. Looking forward, TEF is encouraging a focus on embedding employability into the curriculum including the development of digital literacy skills. Pilot projects are planned for the digital badging of these skills within the curriculum.

¹⁶ <https://www.anglia.ac.uk/anglia-learning-and-teaching/good-teaching-practice-and-innovation/technology-enhanced-learning-and-teaching/digital-literacy>

¹⁷ <https://ec.europa.eu/jrc/en/digcomp>

¹⁸ <https://www.jisc.ac.uk/rd/projects/building-digital-capability>

¹⁹ <https://www.anglia.ac.uk/anglia-learning-and-teaching/good-teaching-practice-and-innovation/technology-enhanced-learning-and-teaching/canvas-lms>

²⁰ <https://www.anglia.ac.uk/anglia-learning-and-teaching/good-teaching-practice-and-innovation/good-teaching-exchange>

²¹ <http://www.lta.anglia.ac.uk/TELMenu>

²² <https://www.anglia.ac.uk/anglia-learning-and-teaching/cpd-opportunities/events/digifest-2018>

Distance and open learning

Distance and open learning is a strategic priority for ARU to support increased flexibility in provision and growth in a space-constrained environment. ARU's institutional strategies (Designing our Future 2017–2026, Education 2018–2023 and Digital Strategy 2017–20) clearly articulate the University's vision to move towards more flexible modes of delivery, allowing learners to study on-campus or online. ARU currently offers 42 distance learning programmes. A significant proportion of work in this area is currently supporting Degree Apprenticeships²³; 12% of ARU's student population are on Degree Apprenticeships which combine online work based and face to face delivery. This proportion is expected to grow to at least 20% within the next 12 months. Degree Apprenticeships are developed through the Degrees at Work unit and supported by the Distance Learning Unit. In addition, some faculties deliver distance learning undergraduate and postgraduate degrees.

ARU have recently signed up with FutureLearn and plan to use this platform, initially, for the delivery of CPD, pre-registration induction courses and taster sessions.

Future challenges

The short and medium term challenges for ARU link to the implementation of the Digital Strategy, ensuring the integration of IT systems and business processes including the efficient management of data, with the latter informing their wish to make better use of learning analytics. The introduction of Canvas has been valuable in enhancing access to student engagement data, but has also highlighted issues in interpreting the data generated as well as data and process gaps that need to be addressed. ARU has identified the need to map workflows and business processes to achieve seamless user journeys and accurate comprehensive user and usage data.

²³ <https://www.anglia.ac.uk/study/degree-apprenticeships>

City College Norwich

Overview

City College Norwich was founded in 1891 and is one of the largest further education (FE) and higher education (HE) colleges in England. The College's main campus is located close to the centre of Norwich, with a separate site in the heart of Norwich where higher education courses are delivered. Last year Paston College joined City College Norwich, making three main sites in total. Furthermore the College has a partnership with the International Aviation Academy-Norwich. The College is part of the TEN (Transforming Education in Norfolk) Group, a group of institutions which includes four Academies, one junior school, and a University Technical College.

The bulk of City College Norwich's provision is dedicated to the delivery of FE courses for learners aged between 16 and 18 years old, offering BTECs, Diplomas and Apprenticeships. However, the College also has a large Higher Education School offering access courses, foundation degrees, honours degrees, and postgraduate and professional qualifications, which are awarded by the University of East Anglia with whom the College enjoys Associate College Status.

The College employs around 800 staff, roughly equally split between teaching and support staff, and between 10,000 and 12,000 students are enrolled on its courses. All support staff are employed by Norfolk Educational Services (NES), who provide support across the different institutions in the TEN Group.

Chris Boon, Senior TEL Support Analyst at the College, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

Although there is no dedicated TEL policy or strategy, TEL is referenced at a high level in the TEN Group IT Strategy. The strategy focuses on provision of software, platforms and related training and support. This is delivered by IT Services and the Technology Enhanced Learning (TEL) team.

There is no single senior staff member responsible for driving the TEL agenda; the TEL team lead on TEL planning, receiving guidance from various areas of senior management and reporting to the Director of IT Services/Deputy Managing Director. The College is currently undergoing a restructuring programme, but at present the Senior TEL Support Analyst (who leads the TEL team) works closely with the Assistant Principal of Teaching, Learning and Assessment and other senior staff.

Drivers for TEL use

In general there are no formal requirements for staff to use TEL; instead there is a culture of encouraging, supporting and celebrating good practice. Only in the Higher Education School is there mandatory use of TEL; here an Achievement Tracking System is used to manage the electronic submission of assignments.

An annual Blackboard Course Awards scheme has been in place for over eight years. Although not a formal scheme, it has support from senior management. Staff are awarded Gold/Silver/Bronze awards based on a combination of usage statistics and, new last year, quality of course content. The TEL team review individual courses, assessing structure, tool use, visual impact and available resources. This information, combined with usage statistics, determines which award they receive. In general, 10–20% of courses receive an award, with the Gold award reserved for typically five or six exceptional courses that use technology innovatively or display exemplary practice in supporting learning. The scheme is very successful with staff enthusiastic to receive an award.

Students enjoy the flexibility to access content online. For some courses this is essential; for example, students on placement and apprenticeships make use of the VLE to access course materials and online TEL tools for writing reflective journals.

Departmental and institutional take-up of TEL

Departmental culture has an impact on TEL uptake across the College. For example, areas focusing on manual disciplines, such as construction, have lower uptake whilst the Business School has a higher uptake, with staff putting most of their resources online. This can in part be explained by staffing. In manual disciplines staff have often been at the College for a long time with some being more reluctant to use technology and share materials. Even in departments with traditionally high usage, enthusiasts can leave and the ethos of a department can quickly change.

TEL provision

There are three core supported TEL systems at the College. The main system is the VLE (Blackboard) which is supported by the TEL team. Planet eStream is used for streaming media and is integrated with the VLE. Finally, the bespoke and internally developed Achievement Tracking System is used in the School of Higher Education for electronic submission. The College also supports Office 365, which is used increasingly for TEL activities, with the TEL team delivering training on tool use and advising on usage for TEL activities.

There is no specific institutional policy to favour self or managed hosting of TEL systems. Instead, hosting considerations are considered on a product by product basis as part of the business case.

Planet eStream and the Achievement Tracking System are both hosted locally, Office365 is in the cloud and the VLE is supported through managed hosting (by Blackboard). The College transitioned from the VLE being locally hosted to managed hosting in 2016. This decision was taken primarily due to managed hosting being more economical for the College. Moving to managed hosting has been a positive step. When locally hosted, the Senior TEL Support Analyst was responsible for the system administration of the VLE, which meant a large proportion of his time was spent on system upgrades and troubleshooting. Now that this work is done by Blackboard it has freed up his time to concentrate on other aspects of TEL support and development at the College.

Keen individuals make use of other, typically cloud-based, TEL tools but these are not formally supported (locally or centrally).

There has been no formal review of TEL services or tools over the past two years. The College is reaching the end of its multi-year licence deal with Blackboard, but at present there is no strong appetite for a thorough VLE review. Licence options will be considered, with other Blackboard products such as Collaborate and Ally possibly of interest to the College. They will also investigate whether a move to SaaS would be advantageous.

TEL governance and structures

The TEL team is not directly line managed by the College as administrative and support staff are employed by Norfolk Educational Services, with most staff also working for other educational providers in the area. However, the TEL team work mostly for City College Norwich.

The Senior TEL Support Analyst manages the TEL team and is responsible for TEL systems and advocating their effective use through promotion, support and training. In addition to the Senior TEL Support Analyst there is a TEL Support Assistant and these roles work together closely to support use of TEL across the institution.

Recent restructuring has resulted in the TEL team gaining five new members over the last year:

- One Digital Library Officer who manages the library management system, digital library resources and subscriptions;
- Two Digital Learning Designers who create eLearning packages, imagery, videography to support learning and teaching;
- Two Digital Learning Designers Apprentices who have similar roles to the Designers whilst taking an apprenticeship.

Although part of the same team, the Senior TEL Support Analyst, TEL Support Assistant and Digital Library Officer are all part of IT Services, whilst the Digital Learning Designers are all part of the Teacher Development Unit.

The Senior TEL Support Analyst leads on TEL initiatives in general, but for large projects – particularly those that need financial investment – direction is sought from the College's senior management. Although the Senior TEL Support Analyst reports to the Head of IT Services, he enjoys a strong working relationship with the Assistant Principal Teaching and Learning and other senior academic staff.

The TEL team used to be located in the IT Service Desk but now have a separate office with staff coming directly to the team via email/phone or via the IT Service Desk using a helpdesk management system. The Team have found this change to be beneficial as when behind the IT Service Desk, the team were seen as just an escalation point for VLE problems. The new location and structure helps promote that the team are there to help with TEL and have an understanding of pedagogy. Since the Senior TEL Support Analyst reports to the Head of IT Services, strong links with IT have remained despite this change. This is beneficial as IT issues with TEL systems can still be escalated quickly.

TEL-specific policies

As previously mentioned, there is no dedicated TEL policy at the College. The College prefers to instead encourage VLE use and celebrate good practice through their Course Awards scheme.

Staff development and digital capabilities

A range of support is offered to staff, in person the team offer one to one support, staff training tailored for a specific departmental need and training sessions available to all staff.

IT and TEL is covered in staff induction sessions with new teaching staff strongly encouraged to book an individual VLE induction session. Online guidance is provided on the VLE; the team have created short videos on how to use TEL tools at the College with help sheets also available. The VLE landing page has a panel displaying Learning Technology news with training and support, new TEL features or under utilised tools featured.

The College has no department-based specialised TEL support, instead the TEL team keep in touch with all Departments and support them as required.

Teaching Excellence Framework

The introduction of the TEF has had no direct impact on the TEL team thus far. However, since the College do have some HE programmes this may have an impact in the future.

Distance Learning and OER provision

The College has no aim to develop distance learning provision, nor is there an institutional desire to provide MOOCs or open educational resources. The College's focus is very much on delivering its provision to on-site students and providing flexible learning opportunities to support students on work placements and apprenticeships.

Future challenges

There are currently many TEL projects in progress at the College. The VLE has been rebranded with new colours/theme and navigation. This year the TEL Team have made changes to VLE processes, asking lecturers to create new course areas on the VLE for individual cohorts rather than re-use the same space as they have typically done previously. This is to address an issue where reports on course usage include user accounts which have been set to disabled, meaning usage statistics are unreliable. On the VLE they have also introduced new templates for new course areas; default menu items are created with instructions and example content included.

Budgets for the FE sector have been static for eight years and although there has not been a significant impact on TEL at the College yet, there is a concern that any price rises for licences could present challenges. However, in general, the TEL team enjoy support from management and the College Principal and are able to progress TEL initiatives as required.

Glasgow Caledonian University

Overview

Glasgow Caledonian University (GCU) is a teaching institution ranked in the world's top 150 universities by Times Higher Education magazine. It runs two campuses across Scotland and London and a further three outreach campuses in New York, Oman and Bangladesh with just under 17,000 students. It is the first foreign academic establishment to be granted permission to award degrees in New York State²⁴. The University comprises three academic schools offering approximately 781 courses from engineering and midwifery to surveying and vision sciences. The majority of the student population studies for an undergraduate degree. The University also offers a range of postgraduate courses and the postgraduate population is close to 3,500 students. Research programmes are also available as are professional doctorate degrees. The University works closely with 7,000 student volunteers and 2,400 parents to improve access to higher education.

Sheila MacNeil, Senior Lecturer (Digital Learning) at the University, provided the information for this case study, alongside her colleague **Jim Emery (Lecturer in Digital Learning)**.

TEL strategy and drivers for TEL

TEL strategy

Glasgow Caledonian University does not have a stand-alone TEL strategy but rather a strategy for learning with a particular goal of *transforming lives through education*, that runs up to 2020, in which TEL is also embedded. The University's 2020 Strategy works towards building an integrated student experience action plan (yet to be published), which sets out to:

- provide an outstanding student experience;
- innovate for social and economic impact;
- enrich cities and communities through research;
- engage globally and align for the common good.

The heart of the strategy is being taken forward by staff and students who are embracing a new role of collaboratively working together, in this way developing knowledge and problem-solving skills. The Strategy for Learning (2015–2020) has been developed via a consultation process involving staff, students and partners. The main goal of the strategy is to aid students throughout their studies and upon graduation to be “proficient in their discipline, enterprising, responsible and capable of fulfilling leadership roles in different organisational and cultural contexts”. The Strategy's main areas of focus address:

- Digital learning
- A transformative approach to learning
- Learning and teaching excellence
- Flexible learning pathways and partnerships, particularly with colleagues

Consequently, the University thrives in promoting a culture of staff development that encourages learning. As such, the Academic Development team is working closely with Schools in promoting numerous learning and teaching activities. The Academic Development team also advises University Senior Management on operational and core activities on learning and teaching. Glasgow Caledonian University is working closely with Academic Quality and Development and the Directorate of Learning and Student Experience teams in order to ensure quality assurance, evaluation of research and academic development. These teams inform strategic development and evidence of impact, aiming to promote scholarly activity and research throughout the academic schools.

²⁴ “US campus given degree rights”. *BBC News*. 13-06-2017. Retrieved 13-08-2018. <https://www.bbc.co.uk/news/uk-scotland-glasgow-west-40267650>

Drivers for TEL use

There is no separate TEL strategy for GCU; instead the GCU 2020 Strategy is aligned with the Strategy for Learning and its main priorities (which are guided by the Scottish Funding Council, Quality Assurance Agency and the National Student Survey) are communicated via informal and formal ways. The key enabler of the Strategy for Learning is the enhancement of the student experience using digital learning. As such, it focuses on a distinctive approach to engagement-led learning, authentic problem-solving which promotes opportunities of co-creation and personalised learning. Furthermore, the GCU Strategy for Learning encompasses eight curriculum design principles and eight enablers that are embedded across all programmes, both undergraduate and postgraduate level (see Figure 1).



Figure 1: GCU Strategy for Learning Curriculum Design Principles

The implementation of the GCU's Strategy for Learning is supported via an integrated approach that aligns it with the GCU's 2020 Strategy and University initiatives – e.g. the Student Experience Framework. Its effectiveness is evaluated through an Annual Programme Analysis process and Programme Enhancement Plans and communicated by the Academic Policy Committee (APC). GCU has developed a Curriculum Development Template to support staff in implementing the design principles in their own context-specific areas. The template includes a number of design principles including the current and future application of digital learning and/or technology in the curriculum. It also encourages staff to think of specific areas for enhancing their practice whilst constructing engaging learning.

The focus is on innovative learning and teaching across the University and assisting staff to increase their confidence and digital capabilities in order to deliver a student-centred teaching and learning experience. The use of technology across GCU is not the main driver nor a fixed pedagogy across the institution. Instead, an institutional culture that promotes adaptability, diversity, choice and creativity in teaching methods is encouraged, as is the sharing of good practice.

Departmental and institutional take-up of TEL

TEL is embedded across various GCU departments and every module is automatically set up with a site within the University's VLE platform. There are no minimum standards for VLE usage, however the introduction of the Curriculum Development Template ensures consistency as it encourages teaching staff to use suitable design principles and adapt their modules employing appropriate digital learning practices. Each School has been allocated a learning technologist to ensure appropriate implementation of digital technologies within VLE module sites. Learning technologists work collaboratively with the Academic Quality and Development department and have regular meetings to discuss TEL issues.

GCU has not got a lecture capture platform although the University is looking into this. Blackboard's Collaborate Ultra webinar mechanism is used to capture recorded webinars or lectures, which later become available via the University's VLE platform.

A new online submission policy for all undergraduate modules was introduced last year, and its main aim is to increase online feedback provision. The policy requires online submission of all suitable coursework via Turnitin. Meaningful feedback is provided using Turnitin's Feedback Studio and Blackboard's Grade Centre.

TEL Provision

Blackboard is the institutional virtual learning environment (VLE), which is externally hosted but the decision to upgrade the servers lies with the University. A paid helpline service is available 24/7 to all staff and students. A number of other core systems are supported by Information Systems including Maplesoft, which is a numeric computing environment, Campus Pack for blogs and wikis, Codio for computer coding, and a number of library systems which are integrated within the VLE. Tools such as clickers and Padlet are also used. At times, staff may trial a tool and using such an experimental approach, it allows them to advise on the appropriateness of it. If and when a tool is deemed to be appropriate, then a proposed institutional rollout is likely to be considered; e.g. this was the case for the Lynda online video courses. The University has already set up a group to look at the implications of the General Data Protection Regulation (GDPR) policy on tool usage and its implications across all campuses.

GCU has not yet formalised a Competition and Markets Authority (CMA) strategy but they are currently reviewing this as part of their policy procedures and any subsequent consequences there may be for institutional TEL service provision.

Support for devices

Although GCU does not have a Bring Your Own Device (BYOD) policy, there has been an increase in students accessing content using mobile devices. The VLE content is accessed via the app. However, due to integration issues content is mostly accessible via the web browser, so there is still room for improvement. The University has developed a number of guidelines for staff on what is acceptable use, how to make resources flexible, acceptable use of social media, data protection etc., in order to improve the student experience. Staff have been provided with laptops and with an improved wifi access across the University campuses, which demonstrates the ongoing commitment to address issues that were raised in recent years.

TEL governance and structures

GCU does not have a dedicated TEL unit as such, but the Academic Quality and Development department has a pedagogical management role in overseeing the institutional VLE. This department works together with the Directorate of Learning and Student Experience to meet the evolving institutional learning and teaching needs which are aligned towards the effective implementation of GCU's 2020 Strategy and Strategy for Learning. The Blended Team, which is part of the Academic Quality and Development department, works collaboratively with the learning technologists from across all three academic schools, offering pedagogic direction and practical support. The Academic Quality and Development department offers support on matters around digital learning and liaises closely with the Information Management group as well as with staff from the Library, Information Services, Quality and Governance.

Alongside these working partnerships, the need for a new group called *Digital Learning Implementation group* emerged, and its primary responsibility is managing operational communication amongst participating groups and committees. Operational plans, which are supported by the Directorate of Learning and Student Experience and the Academic Quality and Development department, are approved by the University Senate.

TEL-specific policies

GCU does not have a TEL-specific policy nor a set of minimum requirements for staff to meet. However, instructors are encouraged to develop learning assets for students by using a baseline VLE structure for the creation of new modules, which is combined with a plethora of resources on curriculum and module design. There is an informal expectation from students that staff will use the VLE to support learning activities, although this is not enforced by the University.

Regarding the withdrawal of the Disability Support Allowance (DSA), the reforms to DSA do not apply to students who reside in Scotland and are funded by Student Awards Agency for Scotland (SAAS). Given that GCU has got a small number of students from England, Wales and Northern Ireland, the reforms to DSA in England have had minimal impact at the University so far.

Staff development and digital capabilities

GCU runs a digital capabilities survey to solicit information on the training needs of teaching staff and areas where they can provide appropriate support. The Academic Quality and Development department runs CPD courses for educators on developing digital capabilities, using Jisc's Digital Capabilities Framework²⁵ and Diagnostic self-evaluation tool²⁶. These courses have been well received by staff and introduce them to digital capabilities and how they can be applied in their learning and teaching with greater efficiency.

Teaching Excellence Framework

The Teaching Excellence Framework (TEF) is optional in Scotland and GCU has not participated in this assessment exercise, although is aware of it. The University is very interested in learning analytics and is currently looking into this area. The data is going to be used for internal reporting (in the first instance for staff use) in order to gain a meaningful insight into student engagement, student demographic information and Higher Education Statistics Agency (HESA) reporting. GCU is currently undertaking a major digital assessment and feedback project which aims to improve student feedback on assessment as well as enhance assessment provision to wider audiences.

Distance and open learning

GCU currently offers a number of online distance learning masters degrees and is actively looking to expand its online provision. It is also involved in transnational education (TNE) partnerships arrangements with companies and colleges, such as the African Leadership Foundation.

During the Commonwealth games (2014) GCU developed a three week open and online event *GCU Games On*, to celebrate, explore and share the experiences of the Commonwealth games. This online event was an alternative format to promote online engagement, without calling it a MOOC, and enabled participants to experience online learning²⁷. GCU is not actively looking to expand the development of MOOCs, as this is not a current priority.

Future challenges

GCU is providing support to all staff who are willing to improve their digital capabilities and acquire the digital confidence to enhance the wider student experience, as addressed by the Student Experience Action Plan. Although the Academic Quality and Development department does provide help to staff and students and appropriate support in order to enhance their digital capabilities, the ultimate challenge is financing such services and acquiring appropriate resources.

There is an ongoing project on assessment and feedback as well as a new project on upgrading the VLE's design and functionality features. The Academic Quality and Development team hopes that these two projects combined will increase the impetus amongst staff to develop their own digital practice.

²⁵ JISC Digital Capabilities Framework <https://www.jisc.ac.uk/rd/projects/building-digital-capability>

²⁶ JISC Diagnostic and Self-evaluation Workbook <https://www.jisc.ac.uk/guides/embedding-bce/diagnostic-and-self-evaluation-workbook>

²⁷ Open and online but not a MOOC, GCU Games On – an alternative model for online engagement? 17-07-2014. Retrieved 18-09-2018. <https://altc.alt.ac.uk/blog/2014/07/open-and-online-but-not-a-mooc-gcu-games-on-an-alternative-model-for-online-engagement/>

The London School of Hygiene and Tropical Medicine

Overview

The London School of Hygiene and Tropical Medicine (LSHTM) is a small, research-intensive postgraduate institution based in Bloomsbury in central London. Most programmes are Master's level and the large majority of students (3,500 of 4,000) are on distance programmes with just 500 students studying on campus. In addition to the Bloomsbury campus there are now research partnerships with institutions in Uganda²⁸ and Gambia²⁹.

There are three faculties:

- Epidemiology and population health
- Infectious and tropical diseases
- Public health and policy

Graeme Hathaway, Head of Technology Enhanced Learning (TEL), provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

LSHTM currently has neither an education strategy nor a TEL strategy, and so the main source of strategic direction is the School Strategy and related action plans. Departments have their own local plans. This can make supporting education provision challenging, but a clearer articulation of what is unique and important about education at LSHTM will come through a planned strategic curriculum review process.

Drivers for TEL use

The main driver for TEL use at LSHTM is student recruitment. This is related to the need to expand distance provision in the light of physical space constraints in central London, and the institution's need to expand education rather than research activities for economic reasons. Enhancing the student experience is another driver.

Departmental and institutional take-up of TEL

In terms of the effect of institutional or departmental culture on engagement with TEL, there tends to be more differences at an individual level rather than departmental level. This is a challenge facing all research-intensive universities where there can be tension between research and teaching duties. External tutors are often used for distance education provision and this can reduce the development of TEL know-how from core institutional staff; development can then depend on personal interest in professional development.

TEL provision

LSHTM is part of the Bloomsbury Learning Environment (BLE) consortium, which negotiates licences and coordinates support for some of the main TEL tools. The BLE provides the virtual learning environment – Moodle – which is externally hosted by Cosector, and Blackboard Collaborate Ultra – which is cloud-based. The institution doesn't have an outsourcing strategy as such, although this may change as there is soon to be a new IT Services Director in post.

LSHTM uses Panopto (internally hosted) for lecture capture, and also makes some use of Office365 tools such as Office Online, Sway as an alternative to PowerPoint, and Forms for quizzes. Currently Endnote is supported for bibliographic management, but this will be superseded by Mendeley, so that students have access to their references post-graduation, without having to personally subscribe.

²⁸ Medical Research Council/Uganda Virus Research Institute and London School of Hygiene and Tropical Medicine Uganda Research Unit

²⁹ Medical Research Council Unit The Gambia at the London School of Hygiene and Tropical Medicine

There can be a risk for distance students that, if all resources are available online at the start of a course, that they download everything in one go and don't re-engage subsequently. This is an historical approach to learning design with emphasis on content over socialisation, collaboration or construction. Again, it is hoped that the curriculum review resolves this as has been seen in other institutions

Internal reports including a strengths, weaknesses, opportunities and threats (SWOT) analysis have been produced for senior leaders, but no formal TEL reviews have taken place since the creation of the TEL team in 2016–17.

TEL governance and structures

There was an Educational Review in 2016, which proposed a new organisational structure for supporting educational development and TEL. The new structure envisaged that the TEL team and the Educational Development team would both report to the Pro-Director for Learning and Teaching. However, the present structure is different from this, with the TEL team reporting to the Academic Registrar, although the Head of TEL maintains a good informal working relationship with the Pro-Director for Learning and Teaching.

Until 2016 there had been just two staff in the E-Learning Team (as it was then) – one focusing on technology and one on pedagogy – but the new structure brought in learning technologists (LTs) who had historically been based in the Distance Learning team, to form the TEL Team. Now the Team comprises eight learning technologists and one MOOC and Open Education coordinator, all of whom report to the Head of TEL. The Distance Learning team now has an administrative rather than TEL support function.

There are staff in IT Services who provide technical support for TEL tools, and requests for help from students and staff may come to them from the service desk. Often requests are then filtered back to the TEL team for second line support.

The TEL team also work with Library colleagues, mainly on distinct projects as opposed to on the provision of services.

There is a TEL Forum which commissions and reviews initiatives, and reports into the Digital Steering Group, chaired by the Chief Operating Officer and whose remit includes the institutional web presence as well as TEL. This, in turn, reports to the School's Management Board – a senior decision making committee, which allocates budget to institutional initiatives.

TEL-specific policies

LSHTM has no TEL-specific policies, although it is possible that the forthcoming curriculum review will change this.

Staff development and digital capabilities

The TEL team now has a strong focus on digital capability development for staff and for students. Until 2016 team members had delivered around three formal training sessions per year but have ramped things up dramatically and now deliver weekly sessions – usually fully online. The training is divided into three categories:

- Technology Enhanced Teaching – for those teaching, e.g. pedagogic innovation.
- Technology Enhanced Research – for those wishing to use technology within their research, e.g. data visualisation, artificial intelligence.
- Technology Enhanced Transferable skills – technology that can be applied to a range of scenarios, e.g. online meetings, presentation, video creation/editing.

All of the learning technologists are involved in delivering the sessions, which are run and recorded through the use of Collaborate Ultra. All student training sessions are run face to face at present due to demand from London based students; online training for distance learning students will be piloted in November. This aspect of the learning technologist role is new to some of the staff who were originally more focused on instructional design and user support in the Distance Learning team – this is felt to be developmental for them. Each LT sets objectives annually for how many sessions they will do to formalise the expectation. The evaluation of the impact of this training is taken seriously and the team is using the Kirkpatrick model, with post-course feedback forms followed by an assessment of impact three weeks later. Initial indications are positive and the uptake is good – especially for the student courses.

Teaching Excellence Framework

As a postgraduate-only institution neither the TEF nor the NSS are a concern.

Distance and open learning

As a predominantly distance learning institution with 3,500 distance learners on 80 modules, this area has a strong institutional focus. The intention is to grow distance learning provision. Whilst the School had been an early adopter of TEL because of its dependence on distance learning, provision has historically been content-based with students expected to use self-paced materials. As thinking in TEL has matured across the sector with more expectation that students will interact with academics and each other, the School is at risk of being left behind. However, the School will be running a major curriculum review activity next year and it is hoped that this will allow improvements in online pedagogy to be recommended to curriculum teams.

Distance programmes are assessed using traditional handwritten exams, which are held in assessment centres in students' home countries. Again, there is scope here to introduce more diverse and authentic forms of assessment.

As already noted, a single TEL team now supports both campus-based and distance education, and the Distance Learning team is an administrative team.

The School has a growing portfolio of MOOCs on the FutureLearn platform – eight at present with three more planned. Some – in areas of institutional priority - receive central funding; some are funded by research grants where the MOOC is a means for disseminating research outputs. All of the MOOCs carry certification, although academic credit and professional development endorsement is at an early stage of discussion.

The institution also runs a second instance of Moodle as its Open Study platform. This houses open-access courses, open educational resources, and open data/research outputs. There is some overlap with the FutureLearn courses which the TEL team is currently trying to unpick and rationalise.

Future challenges

The main issue is the need for a TEL strategy, which is interwoven with the educational direction of the School. If this occurs, the Head of TEL is confident of scaling the potential created over the last 12 months. There is a need for evidence of the impact of TEL. This is being addressed in conversations with senior leadership.

The strategy also sets targets for increasing student numbers and having a greater international perspective. All these will create challenges for how the institution will make effective use of TEL. In the context of a small specialist institution, maintaining staff capability, issues of time and sharing practice will be significant challenges.

Loughborough University

Overview

Loughborough University is a Pre-92 research and teaching based institution of just under 17,200 students, studying across 10 academic schools and 24 discipline areas. The student population comprises approximately 13,000 undergraduate and 4,200 postgraduate students. Although the University is research intensive, the student experience plays a key role in enabling students to reach their full potential and as a result, Loughborough ranked first in the Times Higher Education Student Experience Survey 2018. Loughborough also achieved gold in the Teaching Excellence Framework.

The University has two campuses, a 440 acre site in Loughborough offering both undergraduate and postgraduate courses and a second campus, opened in 2015, at the site of the Queen Elizabeth Olympic Park in London offering 25 full and part time masters programmes.

Sarah Williamson, Assistant Director (Technology Enhanced Learning), provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

Loughborough primarily works with a university-wide strategy, which encompasses learning and teaching within it. However, in March 2017 the Senate approved a Digital Strategy for Learning and Teaching which was developed to help drive forward the provision and practices at the University. The strategy is closely aligned to the overall University strategy, which highlights blended learning as a key approach in learning and teaching at the University.

The new Pro Vice Chancellor (Teaching), appointed in 2016, led the creation of the strategy for Learning and Teaching, helping the University to focus on long term projects to enhance TEL practices at the institution. It was developed through a series of consultation events involving staff and students from across the University including academic, administrative and management. This helped to bring together those staff involved in using and developing the University's core systems such as the student record system, the virtual learning environment (VLE) and the personal tutor system.

Drivers for TEL use

The University already had high quality engagement and interaction with the VLE from both staff and students prior to the development of the strategy. They also had a successful history of developing in house systems to support teaching practices. One of the first drivers for the strategy was to deliver a series of quick wins which would help to streamline systems and processes, making it clear where the support for different aspects of learning and teaching sits – in this way helping staff to access the information they need without having to login to several different places to find it. This initial work has allowed the University to be able to move on and look at the more interesting ways TEL can support learning and teaching.

TEL culture is driven from the top down, as the Vice Chancellor at Loughborough is a keen advocate for the use of learning technology and this can be seen in the monthly newsletters, which highlight areas of the Digital Strategy and the technologies that he has personally used in class. The Pro Vice Chancellor for Teaching has focused on enhancing the use of learning technologies and is keen to progress ideas and development to help move the strategy forward. One of the cultural drivers is that the University places great importance on appreciating and understanding the student experience and the need to engage with technology plays a key part in this. The introduction of new technologies, or enhancements to existing technologies, is often supported by the parallel development of policy through the Learning and Teaching Committee, which helps with the cultural change needed to embrace any new system or practice.

TEL provision

The University centrally supports the following systems:

- Moodle (*branded as Learn*) – VLE
- LUSI – students record system, developed in house
- Co-Tutor – personal tutor system, developed in house
- Turnitin and Grademark
- WebPA – group/peer assessment, initially developed in house
- Panopto (branded as ReVIEW) – lecture capture system
- Meetoo – voting system
- eXplorance Blue – bespoke module feedback system
- Potential.ly – for student employability

The central support is based around a consistent set of good quality core tools, as this makes it easier to create resources, deliver training and troubleshoot problems. The only devolved learning technologies are subject-specific tools where support exists for them within schools. All services are cloud-based other than Moodle, Co-Tutor and LUSI, which are hosted locally.

Within the last two years, a review was carried out on the lecture capture system, as part of an overall strategy of reviewing key learning technologies. Following a competitive tender exercise, the University moved to Panopto for their lecture capture provision and at the same time introduced an opt out policy to replace its existing opt in policy. To ensure a consistent experience for teaching staff, all teaching spaces were equipped with recording appliances in summer 2017.

Loughborough have also reviewed electronic voting systems, motivated in part by the increased demand for this type of technology and based on the impractical nature of handing out physical voting pads to students. The review consulted with staff to develop the specific requirements for an institutional voting system, particularly focusing on how staff interact with the technology, primarily through PowerPoint. Following a competitive tender exercise, the University has adopted Meetoo, which is being introduced in academic year 2018/19.

Another area reviewed was the module feedback tool, with the University looking to move away from the Moodle feedback activity. This had been piloted with eight out of ten schools but the reporting from the VLE required too much manual intervention. Following a competitive tender exercise, the University has purchased eXplorance Blue, which helps to encourage communications with students to keep the response rates up and to have more sophisticated reporting to help analyse the data that is collected.

TEL governance and structures

At Loughborough, there are two centrally-based teams which support TEL services at the University. The Centre for Academic Practice (CAP) and the Learning Technologies team within IT Services. In addition, there are three academic schools that have their own e-Learning support teams, namely Science, Mechanical, Electrical and Manufacturing Engineering, and Business and Economics. CAP is part of the department of Human Resources and Organisational Development.

The primary remit of the TEL area of CAP is to enhance the teaching and learning at the University through the use of TEL. This involves gathering good practice on the use of core technologies, delivering TEL projects, testing, trialling and evaluating the impact of TEL. Each of the learning technologists within CAP are assigned to specific schools and offer drop-in sessions as part of their support. The IT Services Learning Technologies team primarily operate as system administrators, providing technical help as well as developing systems and liaising with system vendors. There is a close relationship between CAP and IT and the two departments work on most projects together with the recent lecture capture review and move to opt out a good example of this.

The school-based e-Learning staff support queries and projects related to discipline specific technologies and practices, with one school focusing on the delivery of distance learning courses. To bring all these teams together there are termly e-learning network meetings, which offer an opportunity for school support and central services staff to work on joint projects and share good practice.

There are several layers to the governance structure related to TEL. The work on the Digital Strategy for Learning and Teaching currently has a programme management board with project management groups related to larger projects and policy sub-groups, which report up to this wider group. Elements of the Digital Strategy are also reported to the Learning and Teaching Committee. In addition, where Digital Strategy work forms part of IT projects, these also must report to the IT Portfolio Board.

TEL-specific policies

One of the main TEL policies at Loughborough is the Policy on the Use of Learn (the name given to the Moodle VLE). This has evolved over time with the University starting with a central VLE minimum presence policy and then moving to a devolved version within Schools. More recently, however, a VLE Strategy and Development Group has been created, which is chaired by one of the Associate Deans for Teaching, and one of its aims was to create a consistent approach to the use of the VLE. It has pulled together common elements within the school-based policies, helping to provide a series of expectations and principles of practice, which formed the Policy for the Use of Learn. These elements include the use of module noticeboards to communicate with students, availability of assignment and coursework deadlines and submission points, logical organisation of modules (templates), providing a range of resources in accessible formats and whole group feedback on assessments.

The other main TEL policy is related to the use of lecture capture³⁰ and was developed alongside the move to opt out and the introduction of the new lecture capture system Panopto. This sets out the strategic approach being taken at the University, addressing intellectual property rights, special circumstances where recordings might not be made and the alternative resources that must be provided and the technical support for the service – helping to set expectations around this.

Staff development and digital capabilities

Another key area that the Digital Strategy addresses is the digital fluency agenda and there are a series of initiatives around embedding the development of digital capabilities into existing course provision. CAP runs the taught course in Academic Practice, which blends digital capability within its delivery so that new teaching staff have this as an embedded part of their provision.

There is also Lynda.com, which provides a wide range of resources on how to use some of the standard software – e.g. Microsoft Office. This is useful for professional services who widely use spreadsheets in their role and require resources to assist them to become familiar with some of its common functions.

Loughborough recently started running an Introduction to Learning and Teaching at Loughborough event, which helps new teaching staff to the University – no matter how experienced they are – to understand what it means to teach at Loughborough. This includes information about the expectations there are around the use of the VLE and online marking, helping them to get a flavour of what it is like to teach at the University.

The University supports routes to fellowship of Advance HE from Associate to Senior Fellow through the taught courses and a portfolio route, which more experienced teaching staff can take where they provide evidence of where they meet the criteria set out in the UK professional standards framework (UKPSF). Recognition and project funding can also be sought through the University's Teaching Innovation Awards for staff who want to push the boundaries with learning and teaching approaches, and some of these projects involve TEL related activities.

CAP has a menu of workshops they deliver to academic staff about the use of TEL; these focus on why you would use a particular tool, best practice approaches to using it and how you use it, helping to provide the *why* as well as the *how*. Within the last two years online bite size training resources have also been developed including screen capture walk-throughs and case studies of good practice, all delivered through an area in the VLE. This has helped to personalise the support provided to Loughborough staff who can also access drop in sessions for schools, which provide bespoke advice and guidance, helping them to relate TEL practices to their specific contexts.

There is a requirement to provide better evidence to demonstrate the impact of TEL on learning and teaching, which is undertaken by CAP, and this has highlighted the need to ensure staff have good data literacy skills to be able to utilise learning analytics effectively. It is important they can understand the data they see in front of them and what this tells them about the impact their use of TEL has on the student experience. This links to the University's Digital Strategy and work on digital fluency.

³⁰ Loughborough University Teaching Event Capture Policy http://www.lboro.ac.uk/media/www/lboroacuk/external/content/services/cap/review/documentsandfiles/Loughborough%20University_Teaching%20Event%20Capture%20Policy_Approved%20Mar18.pdf

Distance and open learning

The University has a number of distance learning courses, with some delivered online. There is a Renewable Energy distance learning programme and this course has its own e-learning officers to support the running of this course.

Loughborough previously ran four Open Distance Learning courses through the FutureLearn platform; however, these courses are not scheduled to run again. There is a demand in some subject areas for open learning resources to help with public outreach or for teachers in schools, but these would be hosted by the University rather than on an external platform.

Future challenges

One of the main challenges facing the TEL team is to ensure that the University can provide good data sources to inform staff about student engagement with their learning. The data gathered by the different systems is not always used to best effect and it is important to think about how you can use this to evaluate impact and what further data needs to be gathered to fully understand the choices that learners are making. For instance, reports from systems like Panopto help to identify the top 10 modules for the most watched lecture recordings but there is a need to gather qualitative data to understand why they have viewed the recordings and whether they felt this activity was worthwhile.

It is important for the University to make sure that they are creating sustainable strategies for how learner data will be used in the future. As part of this work the institution is identifying and sharing good practice on the use of data within the institution and helping others to see how this approach might benefit them and their students.

Exploring TEL to support group work is also a current challenge, as group work is widely used across subject areas and in particular, managing aspects of group assessment can be difficult. Reviewing which TEL systems support this and the processes, which go along with this work will be important to support this going forward.

Royal Central School of Speech and Drama

Overview

The Royal Central School for Speech and Drama (colloquially known as *Central*) is a specialist college for the performing arts and offers a wide range of programmes from evening courses, diplomas and summer schools to undergraduate degrees, Masters and research programmes. The School's areas of specialism cover performance (acting, voice, movement), creative, design and production (theatre practice) and applied theatre. Rated Gold in the 2017 TEF, Central has been a member institution of the University of London since 2005; it received its royal title in 2012.

Approximately 1,500 students study at the main site in Swiss Cottage, London which is currently undergoing a significant building expansion of the North Block. Central opened a second campus, with five dedicated rehearsal spaces, at Central Bankside. The School is centrally structured as one institute and operates by programmes and courses within specific performing arts disciplines; therefore, the academic body is viewed as one collective. Central recruits a good number of international students and is currently investigating a top-up, online course for distance learners.

Katie Gardner, Lecturer in Digital Pedagogy and VLE Implementation Project Manager, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

Central is in the second phase of implementing a Digital Strategy Catalyst Project, which is directly derived from the Academic Strategy 2016–2021³¹. The first phase of this in 2016–17 provided small catalyst grants for five projects in which technology was used to enhance teaching and the curriculum. The current second phase seeks to identify how the teaching of discipline specific technology and digital innovation in learning and teaching can utilise new teaching and rehearsal spaces in the North Block development. Specifically, the key objectives are to:

- identify innovative activity for the building expansion;
- align digital enhancements to UK industry standards;
- develop interdisciplinary and cross-course activity in the area of digital innovation and literacy.

There is investment across the institution for these objectives, including significant support from the Deanery and Course Leaders.

Drivers for TEL use

Staff and students are important drivers of change at Central. For example, as part of the VLE consultation exercise in 2016–17, surveys were conducted which identified that technology in general was not meeting stakeholder needs. Another driver is the performing arts industry's exponentially expanding use of technology and innovation. Many courses are delivering lectures in partnership with external organisations, based on the use of technology in the performing arts sector. Therefore, the use of digital tools for both teaching *within* the curriculum and *supporting* teaching is vital for a leading conservatoire to achieve an industry-standard appropriate level of digital provision. Furthermore, the development of the institutional infrastructure is also paramount to a successful outcome in these times of rapid technological change.

Departmental and institutional take-up of TEL

Overall, the culture in the institution has been supportive and welcoming of the introduction of the digital strategy. This is, however, dependent on the specific disciplines, some of which are based on traditional, tactile practices – so technology does not necessarily naturally fit within the curriculum and in certain areas it never will. In general, however, introducing more digital practice at Central has not presented a cultural barrier since the majority of staff are engaged professionally in the industry and expect certain technologies to be in use.

³¹ <https://www.cssd.ac.uk/sites/default/files/Academic%20Strategy%202016-2021.pdf>

TEL provision

Central had been using Moodle as its institutional virtual learning environment (VLE) for some years but due to a number of challenges which had surfaced (including suitability and compliance with GDPR and other security requirements), a VLE project committee was convened to review its place at the institution. The conclusion was that D2L's BrightSpace satisfied the requirements much more closely than Moodle and so the institution is currently undergoing a VLE migration project; the new platform will be live from October 2018 and will be hosted externally. The configuration and implementation phase of BrightSpace is now complete and staff training will be conducted during the early part of the 2018–19 academic year.

Complementing the VLE, an instance of Mahara has been in use as the institution's centrally-supported e-portfolio tool. With the advent of the new VLE platform, Mahara will be phased out and BrightSpace's internal tool will be offered instead. Depending on the course and its pedagogical aims, some students are required to create their own websites or blogs both as a pedagogical and professional tool. Turnitin is also used for written assignments.

TEL governance and structures

Due to its size and specialist curriculum, Central does not have the typical TEL support structure seen in more traditional HE institutions. One permanent, part time member of staff was recruited in 2017 to address the TEL focus within the Academic Strategy (Prior to this, the driving force behind implementing the VLE and enhancing TEL outside of the digital curriculum was the Deputy Dean). The current post holder has the combined job title of VLE Implementation Project Manager (to implement and support the new VLE) and Lecturer in Digital Pedagogy. The former part of this role involves arranging staff training on the VLE and the innovative, pedagogical application of related tools (e.g. assessment tools and learning aids), delivered via one to one consultations. In the latter part of the role, the post holder consults with teaching staff regarding how best to utilise technology within their courses, solving pedagogical problems using technology and working on specific TEL-related projects across all courses. The post holder also lectures students across all relevant courses, both in her specific area of research (utilising technologies in dramaturgy and performance) and, when requested by other academics, the technical, pedagogic and innovative value of the e-portfolio. The post holder reports to the Deputy Dean in tandem with the Head of IT and heads of the various academic disciplines. A more technical counterpart to this role focuses on digital production as part of the practical, hands on training delivered to students.

In addition to these two roles, the institution has a Learning Skills service offered by the Learning Centre, which provide students with step by step support around how to operate technology and assistive technologies. The Library will also provide some element of support during the move to BrightSpace but the majority of operational and technical support for students and staff is offered by the IT helpdesk. There are aims to further support education development in the institution in the future.

TEL-specific policies

The institution has developed minimum standards for the new VLE, which did not exist prior to this. Monitoring of these standards will be introduced during the first year of BrightSpace's implementation. The standards were informed by various strands of research (needs analysis research conducted during the VLE review, a UK wide survey of minimum standards and research into digital literacy and digital exclusion) to ensure that each Central student achieves a suitable academic level, which is supported by using the VLE. A nominated VLE contact within each course will ensure that the agreed requirements are in place, maintained and that the appropriate standards are met. Oversight of this will be covered by the VLE Committee. Since Central only has around 30 discrete online learning spaces on the VLE, monitoring of the minimum standards is far more manageable than in a larger institution.

Work is planned to provide guidance around online submission of written work. The academic policy includes specific information related to plagiarism and the related use of Turnitin.

Staff development and digital capabilities

The priority for staff development in relation to TEL is for initial training on the new VLE platform, which will be delivered as tailored workshops for four main roles: general academic staff; academic staff on the BA in Theatre Practice; support staff and academic administrators; and technical production staff. Practical awareness raising activities will be conducted, such as BrightSpace training courses on the platform itself. HR plans to establish a *staff training hub* on the VLE to house training courses for staff such as GDPR training, sexual harassment awareness, unconscious bias, Prevent, etc. Following the training, termly *deep dive* seminars will be offered fully devoted to Brightspace functionality and associated tools (e.g. e-portfolios) in order to support the innovation of the curriculum using the VLE. Routine newsletters containing news, tips and training information will also be circulated.

One of the greatest challenges faced at Central is supporting staff digital capabilities more generally. Whilst some staff are technically literate within their disciplines, moving beyond this is difficult since it requires working with staff and providing support to them outside of their contracted teaching hours. When visiting lecturers are not teaching, they are most commonly performing or practising professionally in the industry, so arranging and scheduling staff development in this area is difficult.

Distance and open learning

In the past, distance learning had been offered in an *ad hoc*, lecturer-driven way. A distance learning component for the Master's in Fine Arts (MFA) courses will be offered from 2018–19, which will be housed in BrightSpace. Typically in the second year of these programmes, students are expected to take part in on-site projects or placements with theatre companies all over the world. This secondary unit therefore has to be undertaken at a distance, where web-conferencing will be used for meetings, discussions will take place in online forums, etc. The VLE Implementation Project Manager will support these courses alongside support technicians.

Future challenges

The immediate, short term challenge regarding TEL lies in the success of the new VLE implementation, its adoption by staff and ensuring that the activity is not just a migration of old pedagogical culture and the habits of Moodle use. The change in VLE is being viewed as a catalyst of innovation beyond simple adoption of the new platform – leading to reconsideration of instructors' own pedagogical frameworks.

The medium term challenge relates to the technical infrastructure and sustainability of TEL growth at a similar rate of technological change, which does not hinder the institution financially and supports students' opportunities to truly engage in their fields of study. The challenge of the campus expansion is ensuring that students are not limited by the types of platforms or software made available to them, and so making the right decisions about infrastructure is paramount. A secondary challenge regarding infrastructure decisions is to ensure that the VLE, academic, assessment and digital strategy catalyst committees are all focused on supporting the digital curriculum in parallel.

There is an embedded culture at Central for staff to be receptive to change; new staff coming into more senior positions are embracing technology and are very willing to try out and find new ways to embed innovation. Having this support from the top is a great asset for improving the opportunities of TEL at the institution.

University of Derby

Overview

The University of Derby (UoD) is located in the heart of England and builds on the region's heritage of innovation to provide industry-relevant, expert teaching. Rated Gold in the Teaching Excellence Framework (TEF) 2017 and a Top 30 UK University in the Guardian University Guide 2019, academic strength is backed up by practical experience to ensure that students are ready for a successful career.

Over the past 10 years, the University has invested over £200 million in facilities transforming their campuses in Derby, Buxton and Chesterfield into some of the best university facilities in the UK. In addition to the traditional face to face programmes, University of Derby Online Learning has offered distance learning to students all over the world since 2001.

The University of Derby's academic structure is based on the University of Derby Online Learning and the following Colleges:

- College of Arts, Humanities and Education
- College of Business, Law and Social Sciences
- College of Engineering and Technology
- College of Health and Social Care
- College of Life and Natural Sciences
- Centre for Contemporary Hospitality and Tourism

The Colleges collectively host a total of thirteen academic Schools and Departments, which provide taught and research programmes to approximately 16,500 higher education students based in the UK. Additionally the University has large numbers of students based at overseas franchised institutions and offers further education provision.

John Hill, Technology-Enhanced Learning Manager at the University, provided the information for this case study.

TEL Strategy and drivers for TEL

TEL strategy

The Learning and Teaching Strategy (2016–2020³²) sets out the priorities for the University's academic development, based on three pillars (Student Employability, Teaching Quality and Research in the Curriculum). The strategy received sector recognition, and it has been awarded the Teaching and Learning Strategy of the Year Award at the 2018 Times Higher Education Leadership and Management Awards (THELMAs). The Learning and Teaching Strategy is key to delivering the University's objectives. It is interlinked with the University's broader strategic objectives and other institutional strategies, including the Technology Enhanced Learning Strategy (2017–2021), developed to support and enable the priorities of the Learning and Teaching Strategy.

Drivers for TEL use

The University's TEL strategy places *digital practice as a central characteristic of the staff and student experience at the University of Derby*. UoD's position in terms of technology enhanced learning is a commitment to go beyond *pockets of excellence* and transform all parts of the curriculum and the student experience across the University. The TEL strategy promotes a holistic digital learning experience to provide transformative learning opportunities throughout the curriculum and to develop students' digital capabilities, preparing them for the digital economy.

³² <https://www.derby.ac.uk/media/derbyacuk/assets/organisation/about-us/learning-enhancement/documents/Learning-and-Teaching-Strategy.pdf>

Institutional support at executive level has provided a commitment for an ambitious TEL strategy. The University has taken the decision to have a distinct TEL strategy for a four year period to drive enhancements to digital practice, digital capability and the digital infrastructure. Previously UoD's TEL team have worked to operational plans and frameworks for the development of learning technologies. As part of the University's baseline expectations all programmes are now required to implement action plans to address their use of TEL. For UoD it is imperative and a requirement that all programmes and academics engage with digital learning. To fulfil the strategic ambitions of the TEL strategy, a number of enabling actions are defined, with most prominent the implementation of a Digital Practice Programme Baseline, which is discussed in more detail later on in this case study.

An equally important goal of the TEL strategy is the shift to research-informed pedagogies. Therefore the TEL team are also assessing the impact of the strategy, by carrying out a full review of the student and staff digital experience. Another department within the institution is conducting part of the research to provide an independent view of the impact. Moreover, the team is involved in blended learning research and working with sector leaders to explore their visions around the future of digital learning.

One of the challenges faced by the team has been the need for cultural change in moving away from *digital being optional* to *digital being the norm*. To address the variation in uptake and resistance across the Colleges, the TEL team is working through a number of enabling actions including the baseline approach. In addition, they raise awareness, and develop knowledge and confidence through a variety of staff development activities.

TEL provision

The University's Technology Enhanced Learning (TEL) team supports a comprehensive suite of learning technologies, deployed at an institutional level, in order to allow staff to meet the requirements outlined in the TEL Strategy and provide a consistent student experience.

The institutional self-hosted VLE (Blackboard Learn) is UoD's core learning technology, which integrates a large number of other tools within it, such as Blackboard Ally, Blackboard Collaborate Ultra, Panopto and PebblePad. There is a mixture of externally hosted services (e.g. Panopto, PebblePad, Poll Everywhere) and internally hosted services. Brightspace Desire2Learn is used for staff development, MOOCs and short course offerings at the institution.

Since 2016 there has been a big growth in the use of e-portfolios. The *e-portfolios review project* was partially initiated by PebblePad's new interface, which was seen as an opportunity for Derby to be an early adopter. PebblePad was launched through a structured and phased institutional deployment. Over two years, provision has expanded to over 5,000 active users. The TEL strategy ambition for *all students to build their own digital record of achievements, reflect, curate and showcase their learning journey* will see the service extended to all students.

There is a university-wide expectation for staff to make appropriate use of lecture capture, depending on their mode of delivery. TEL staff encourage active learning and the use of Panopto to facilitate flipped classroom approaches to learning. Panopto's capabilities are also used to support student video assignments.

Most recently, UoD reviewed technologies to support classroom practice. They opted for Padlet and Poll Everywhere licences, which enables a university-wide use of digital technologies in the classroom through a Bring Your Own Devices (BYOD) approach.

UoD is one of the first institutions to adopt Blackboard Ally to enhance accessibility and inclusivity of their digital learning provision. Blackboard Ally is a VLE application that automatically checks for accessibility issues and generates alternative accessible formats. It also supports the TEL agenda in terms of developing staff's digital capabilities, through specific feedback on how to improve the accessibility of their course content and alter future behaviour.

Figure 1 provides detailed information on the learning technologies that are available at UoD. TEL tools are core and aligned with the delivery of the Digital Practice Programme Baseline. The unsupported learning technologies are those that the University recognises but does not centrally support.

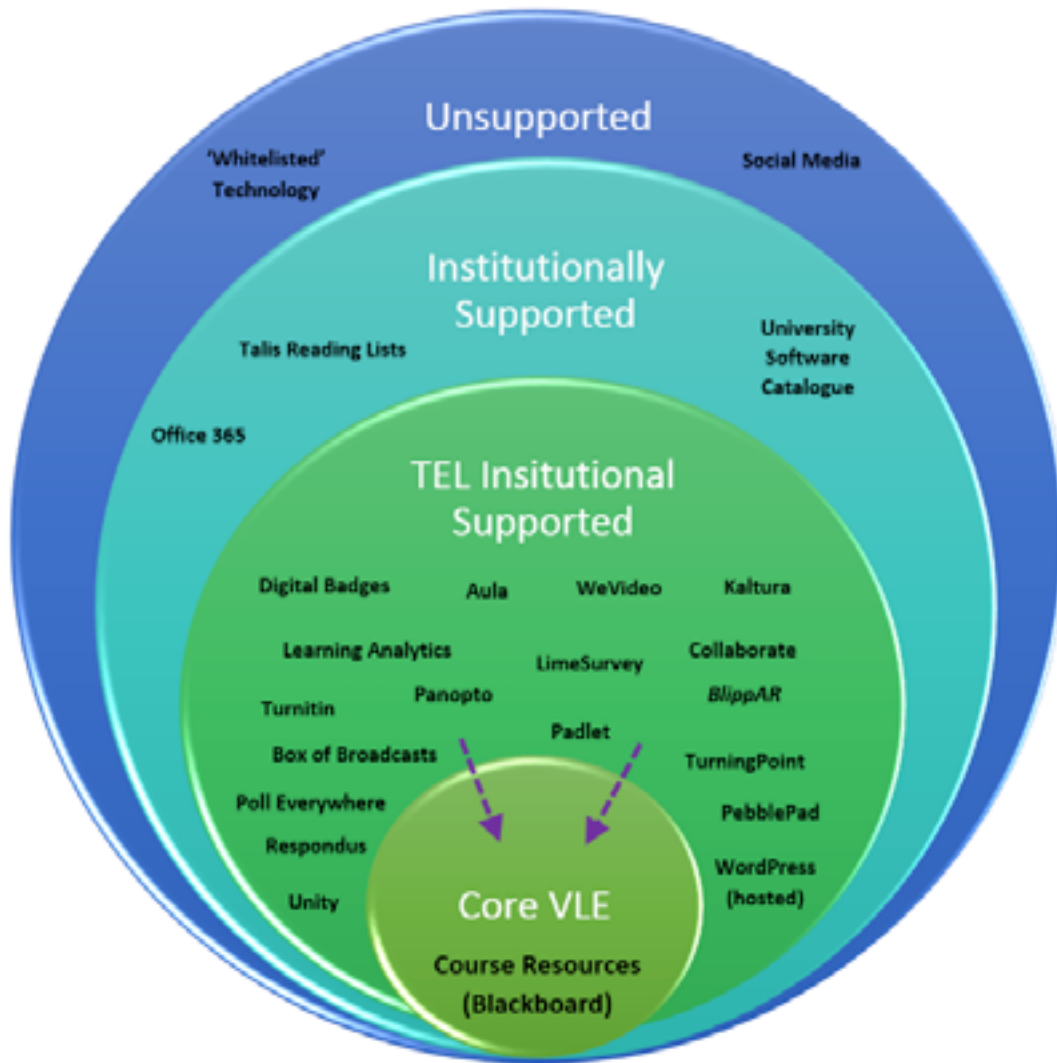


Figure 1: Learning technologies available at UoD and levels of support.
(The model is based on the work of Manchester Metropolitan University³³ and the University of York³⁴.)

TEL governance and structures

The TEL team is part of the Centre for Excellence in Learning and Teaching (CELT), and sits alongside the Learning and Teaching team.

The TEL team consists of:

- The TEL Manager – leading, developing and implementing university-wide strategies and policies that ensure students have the highest quality digital learning experience;
- Three Senior Learning Technologists as institutional leads for (i) digital practice developments across the curriculum, (ii) digital learning system enhancements and (iii) media and learning space enhancement and innovation;
- Five Learning Technologists leading projects and working with Colleges as named contacts supporting their digital learning development;
- Two Learning Technology Support Officers providing system support, development and training;
- Three Learning Technology Media Advisers providing media support and learning and teaching video production.

The new team structure was established in 2018 to align with the ambitions of the new TEL Strategy, redirecting resource from legacy development roles to a team positioned to have the greatest institutional impact.

³³ <http://jiscdesignstudio.pbworks.com/w/page/42510183/MMU-CorePlus-Model>

³⁴ <https://elearningyork.wordpress.com/learning-design-and-development/technology-enhanced-learning-handbook/york-tel-handbook-4-embedding-online-activities-within-a-module/4-5-tools-for-learning-activities/4-5-1-supported-and-unsupported-tools/>

A key role of the TEL team is to work with stakeholders across the institution to deliver the TEL strategic objectives. Key stakeholder activity includes partnership project activity with academic staff and students. Interdepartmental relationships are critical to delivering the TEL ambition through close working relationships with IT Services, Quality, University of Derby Online Learning (UDOL) and the Centre for Student Life (CSL) (including the Library and Student Experience Teams).

Beyond the informal working relationships, TEL is supported by a formal three tier governance structure that is in place to engage all stakeholders effectively at all levels in terms of enhancing and monitoring the digital experience.

The Digital Experience Governance Panel provides the top level governance (with an executive sponsor and representatives from the Senior Executive Team). The remit of the panel is to provide timely decision making in changes to digital infrastructure, strategies and policies.

At the second level, the Digital Experience Steering Group has a wider membership with representation from the Colleges and professional services teams.

The third level in the digital experience governance structure is the Digital Experience Working Group. This group includes membership of professional services staff that are dealing with operational issues.

The University's TEL strategy, organisational structure and governance were significantly informed by the eight-benchmark topic areas of the ACODE benchmarking process³⁵. The TEL Manager represented UoD in the first ACODE-UK TEL benchmarking Summit in 2017³⁶.

TEL-specific policies

The TEL strategy's Digital Practice Programme Baseline (outlined in the Digital Practice Handbook³⁷) provides a framework to annually benchmark practice and support enhancements to the student digital learning experience. This initiative is supported at all levels of the institution – having received input through extensive consultation with all stakeholders and through a number of committees.

The Digital Practice Programme Baseline is linked to TEF and National Student Survey (NSS) metrics and was developed as a progressive step forward from previous narrow VLE standards to encompass the breadth and the importance of the digital agenda in the institution. The impact on digital practice is measured through continuous monitoring processes. The Digital Practice Programme Baseline form³⁸ covers the following areas:

- Digital course material
- Inclusivity
- Assessment and feedback
- Communication and key information
- Employability
- Student voice

The rubric design of the Digital Practice Programme Baseline minimises the risk of a *tick box exercise* approach. Moreover, it allows academic freedom in terms of the tools to be used as long as it covers enhancements for the above areas.

The current academic year (2017/18) is the first institution-wide baseline exercise, with programme teams self-reviewing their practice. The results will be monitored by the Digital Experience Governance Panel with all programmes required to work through the baselines and develop their enhancement plans in line with their College KPIs. The rating system of the Digital Practice Programme Baseline is translated to the following ranking scheme:

- Gold
- Silver (Higher)
- Silver (Lower)
- Foundation (Higher)
- Foundation (Lower)

³⁵ <https://www.acode.edu.au/mod/resource/view.php?id=193>

³⁶ <http://www.open.ac.uk/acode-uk/>

³⁷ <https://digitalhandbook.wp.derby.ac.uk/>

³⁸ https://digitalhandbook.wp.derby.ac.uk/wp-content/uploads/sites/52/2018/04/digital_practice_programme_baseline_form.pdf

Staff development and digital capabilities

The TEL team are leading an institutional culture change around staff and student knowledge, confidence and development of digital capabilities. The team have led on a number of high profile initiatives, including aligning and working nationally with the Jisc digital capability framework³⁹.

Derby is one of the fourteen institutions chosen to collaborate with Jisc to pilot their Digital Capability Discovery Tool⁴⁰ in 2017 and have participated again in 2018. During the two pilot stages the Team attained over 470 completed audits from staff at the institution. The Team have also collaborated with Jisc to pilot the student version of the discovery tool and the Jisc Student Digital Tracker. The case studies about Derby's involvement in using Jisc's Digital Capabilities Discovery Tool⁴¹ and Student Digital Tracker⁴² pilots highlight the institutional impact and the potential benefits of the tools to the rest of the sector.

To encourage and support students to become partners and co-creators of the curriculum, the TEL Team have established a network of Student Digital Champions. Their remit is to work with staff and students to support digital capability development across the institution. As part of the development of student digital capabilities, the TEL Team produced an online Digital Capability Toolkit⁴³. The toolkit includes a series of videos developed through a co-creation project with students. The videos explain the key pillars of the Jisc Digital Capabilities Framework, which are a valuable internal resource, but also endorsed externally via Jisc: *the videos are brilliant resources and we will promote them widely*. The case studies about Derby's involvement in Jisc Digital Capabilities Discovery Tool and Student Digital Tracker pilots highlight the institutional impact and the potential benefits of the tools to the rest of the sector.

Teaching Excellence Framework

The University was awarded *Gold* in the Teaching Excellence Framework. While developing the University's TEL strategy and designing the Digital Practice Programme Baseline, UoD staff were mindful of the metrics associated with TEF and ensured that there was a clear alignment between them. UoD's TEF supportive narrative presented a number of TEL initiatives in terms of digital practice and digital learning which ultimately helped the University to receive the Gold status. Consequently, the University has found that the TEF Gold award has supported the implementation of the TEL strategy itself, by increasing the motivation of staff to engage with TEL activities.

The underlining rationale for the TEL strategy that *excellence cannot exist in pockets within the institution* and the commitment that the TEL strategy must have an impact for all students across all programmes in the institution, is really at the heart of the subject-level TEF. The combination of TEF and TEL strengthens the argument for more holistic curriculum development, with designated space and time to work with academic programme teams.

In terms of Learning Analytics (LA), the University has a history of engaging in LA activities, commencing with the Blackboard analytics service in 2014/15. During the last two years (2016–2018) the UoD was awarded funding through the HEFCE Catalyst Fund for a project titled *Applying learning analytics to measure the impact of digital practice enhancements on student engagement and digital capabilities*. The TEL team are in the process of disseminating findings around *machine learning* and *commuter students*. The project aided the development of learning analytics at UoD by capturing additional data sources into the University data warehouse (such as student attendance monitoring and library resources' usage). Current work involves further enhancement to the range of data sources to help illustrate students' digital journeys and engagement.

Distance and open learning

Since 2001 the University of Derby has offered online distance learning to students who required more flexible study options. In 2011, based on the increasing success of the distance learning courses, the *University launched University of Derby Online Learning (UDOL)* as a distinct division to ensure excellence in distance learning delivery.

UDOL is now a thriving distance learning division of the University of Derby. It has been incredibly successful over the years. UDOL has a dedicated team and department to support and manage the University's online and distance learning provision. UDOL is also responsible for the delivery of the University's short courses and MOOCs. Both short courses and MOOCs are pathways to University accredited online courses.

TEL and UDOL are working in partnership to have greater alignment between UDOL's online delivery and the traditional on-campus University delivery as active digital learning is developed across the on-campus curriculum.

³⁹ <https://www.jisc.ac.uk/rd/projects/building-digital-capability>

⁴⁰ <https://digitalcapability.jiscinvolve.org/wp/digital-capability-discovery-tool/>

⁴¹ <http://repository.jisc.ac.uk/6683/3/digital-capability-stories-derby-aug-2017.pdf>

⁴² <http://repository.jisc.ac.uk/6684/1/Jiscstudenttrackerbriefing17.pdf>

⁴³ <https://digitalcapabilitytoolkit.wp.derby.ac.uk/what-are-digital-capabilities/>

Future challenges

The TEL team's main challenge is the delivery of the TEL strategy's objective of transforming all parts of the curriculum. Part of the challenge is the support of academic staff to adopt digital learning and develop the necessary digital capabilities. It is of equal importance and challenging to also provide students with support that equips them for the shift to increased active digital learning. The University's commitment for digital education needs to provide the necessary student support to prepare them for the new digital learning pedagogies and support them to be the independent learners, as promoted by the strategies. Moreover, with students coming into higher education from a variety of socio-economic backgrounds – through the widening participation agenda – it is imperative that student support is in place to prepare all students for digital learning.

Another challenge is to develop the digital infrastructure and the physical learning spaces to keep pace with the vision and the strategy. The University's physical learning spaces, including the social learning spaces, need to represent the needs of active digital learning.

Finally, the Team have recently won the European Blackboard Catalyst Award for Teaching and Learning for the University's Digital Practice Baseline⁴⁴. The annual Catalyst Awards recognise innovation and excellence in the Blackboard global community of practice. Blackboard recognised the Digital Practice Programme Baseline framework as *an example of how digital platforms could increase flexibility and further learner and instructor effectiveness*. The team are also shortlisted finalists for the Association of Learning Technology's (ALT) Learning Technology Team of the Year award 2018⁴⁵.

⁴⁴ <https://www.derby.ac.uk/news/2018/technology-adviser-at-university-of-derby-wins-blackboard-catalyst-award-for-teaching-and-learning/>

⁴⁵ <https://altc.alt.ac.uk/2018/news/altc-learning-technologist-of-the-year-2018-awards-open-for-your-vote/>

The University of Northampton

Overview

The University of Northampton is a Post-92 teaching-based institution with just under 15,500 students across four academic faculties. The student population comprises approximately 12,200 undergraduates and 3,100 postgraduate students based in the UK. They work with around 30 partner institutions helping to deliver education to students around the world.

The University has recently moved to a new £320 million campus⁴⁶ in the heart of Northampton, which is designed and built to transform teaching and learning at the institution through active and blended learning.

Rob Howe, Head of Learning Technology, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

The University has undergone a significant number of changes over the past few years, both physically and virtually. This is reflected in the design and creation of an innovative new campus shaped by the University's commitment to active blended learning (ABL) as seen in the University's strategic plan 2015–2020, Learning and Teaching Strategy 2015–2018⁴⁷ and the Library and Learning Services Strategy, which all embed TEL and ABL as key elements within learning and teaching. With the development of the new campus, learning spaces have been created which move away from large scale teaching with rooms designed for active learning of groups of 30–60. This has led to large scale curriculum redesign with the use of TEL instrumental and critical to the delivery of this pedagogic approach and the institution's overall strategic goals.

Module and programme reviews are used to provide information on the help and support needs of students on their use of TEL. This is complemented by the information provided by the Jisc Digital Tracker, which has helped to identify places where TEL provision can be enhanced. The data is further analysed through focus groups with students to explore in more detail how the digital experience can be improved. The data has been embedded into the University's operational plans which have helped to set some of the targets going forward; for example, a focus on digital skills for employability by enhancing the information students have and the skill set they require as they move towards employment.

Drivers for TEL use

There is an increased focus on employability through the Changemaker Attributes at Northampton for Graduate Employability (ChANGE) Project⁴⁸, which works to enhance students' digital capabilities through pedagogical approaches and curriculum design. This helps students to develop lifelong learning skills to better equip them for work in the developing 21st century working environment. The project is also in response to a drive to improve rates of graduate level employment for students, rather than just employment generally.

Departmental and institutional take-up of TEL

One of the main challenges has been the need for academic staff to reconsider the teaching model they have previously used, moving away from information transmission to large groups and towards ABL in small groups as the *new normal*. This has been reflected in the variation of uptake within faculties, with most faculties having some subject areas who found the move more difficult and others where uptake was better in their use of TEL tools. This has often been reflective of an individual's influence within a subject area, with those with a larger sphere of influence impacting more on subject teams. Overcoming this when it has a negative influence has often focused on gaining an awareness of who the individuals are, understanding where their resistance comes from and where their interests lie.

There has also been a review of learning outcomes, which set out the need to reduce the number of programme and module learning outcomes – ensuring all of these are assessed. This was also a major change for a lot of subjects who had relied on the delivery of learning content to meet these outcomes, rather than through students completing assessed activities.

⁴⁶ Waterside campus <http://hellowaterside.northampton.ac.uk/#!scene=the-build&details=50>

⁴⁷ Learning and Teaching Strategy 2015–2018 <https://www.northampton.ac.uk/ilt/lt-plan/>

⁴⁸ <https://www.northampton.ac.uk/ilt/current-projects/change/>

TEL Provision

There is a centralised Learning Technology (LearnTech) team, which supports the following technologies:

- NILE Blackboard – Blackboard Learn VLE provided through managed hosting by Blackboard;
- Blackboard Collaborate Ultra;
- Turnitin;
- Padlet – institutional version;
- Xerte – locally hosted on local server – to enhance content delivery;
- PebblePad;
- MyProgress;
- CampusPress (WordPress);
- Kaltura – media streaming, recordings, video assessments and student feedback;
- WePresent (from Barco) – for wireless presentations to screens.

With all TEL systems there is a constant renewal process to ensure that they are fit for purpose and the University recently completed a portfolio review of TEL services, examining the core technologies (licensed) supported by the institution and the peripheral technologies that exist. Reviews of systems are driven by upcoming licence renewals, feedback from key stakeholders and developments identified by the LearnTech Team. This can be seen in the upcoming work around the renewal of the Blackboard licence with the University starting a VLE review looking at the current list of providers and what they offer. The University has also entered into a new partnership with Cisco⁴⁹ and as a result are looking at how the tools this vendor provides work alongside similar tools in Microsoft Office 365, helping to define what staff and students will use.

Several benefits were identified when the University moved to managed hosting of their Blackboard VLE, including improved up-time, easier and less stressful system upgrades and enabling IT to focus on integrations such as authentication. This has resulted in a model to outsource TEL services where possible and – although care is taken around how and where data is stored and managed – it has often resulted in reduced costs due to providers' licensing models. Xerte is still hosted within the institution and the management of this system often reflects the frustrations originally felt with services which were previously self-hosted.

With the creation of the new campus there are several technologies, which are still being trialled during the move to the new buildings. A significant step has been taken within these spaces to move away from lecterns and for teaching staff to be able to run sessions from anywhere within the room. To support this all teaching staff now have their own laptop and access to a wireless presentation tool called WePresent, where they can wirelessly cast their desktop onto the screens in rooms and allow students to do the same. It also provides them with the ability to allocate students to breakout rooms, helping them to work collaboratively and share their work more easily with the rest of the class. This has been supported through a series of staff development initiatives focusing on transitioning staff to use these tools and others like Padlet to support active learning within the new teaching spaces.

TEL has become so embedded within the University's institutional strategies that the LearnTech team structure and size has been resourced to reflect this. The team is now seen as an instrumental and critical part of the institution's drive towards its strategic and operational goals. This can be seen through the recognition received by the team, externally through the Blackboard Catalyst Award and as runners up in the ALT Learning Technology Team of the year and through an institutional award for Internal Change Maker. These achievements have been based around the excellent work the team has been doing around change management, by being directly involved in the institution's move towards active blended learning and achieving successful outcomes in this regard.

TEL governance and structures

The LearnTech Team sits within the centralised Library and Learning Services Department (LLS) alongside the Learning Development Team. Both of these teams have a close working relationship with the Institute of Learning and Teaching in Higher Education (ILT), which supports, promotes and researches effective and innovative learning and teaching practices. Both LLS and ILT are situated within Student and Academic Services alongside the Changemaker Hub which provides employability support. Governance of TEL activities comes from the IT Steering Group which approves all business plans for any purchases and the Student Experience Committee, which the Head of Learning Technology sits on, for general approval of TEL activities.

⁴⁹ Cisco case study https://www.cisco.com/c/en_uk/solutions/case-studies/university-northampton.html

There are 15 members of staff in the LearnTech team, comprising:

- Head of Learning Technology
- Learning Technology Manager
- Learning Technologist (x7)
- Learning Support Analyst
- Learning Designers (x3)
- Content Developer
- Multimedia Developer

The role of the learning technologist is primarily to serve as the interface between the academics and the technologies themselves. The learning designers are more pedagogically focused and are involved in module or programme design work or general teaching enhancements. Where these involve elements of technology they then work alongside the learning technologists. The material developers in the team help staff to enhance learning content, assisting them to consider how this could be delivered in an alternative format or made more interactive.

The TEL team works directly with the TEL suppliers, liaising with the IT department to work on account authentication to core systems and extract data. The work with suppliers also means having the ability to influence further product and service enhancements. This involves providing them with feedback about where they need to enhance their products as well as comparing them with other suppliers. This has recently focused on exploring how suppliers can support the peer assessment processes and digital assessment, which will involve reviewing tools and piloting them over the next six months.

Activities within the team tracking engagement with academic staff have been analysed and there has been a dramatic increase in the number of one to one and very small group support sessions which are being run. Formalised training sessions are delivered, but due to academic staff availability a lot of the academics are getting more value from smaller group sessions. Although this is more intensive to support and resource from the LearnTech team's perspective, more value is taken from these sessions by the academics who feel they can then go and share this practice and ideas with their wider teams.

TEL-specific policies

The University has established a minimum requirements policy⁵⁰ for the use of the Blackboard virtual learning environment. The creation of this policy was driven by students wanting consistency about where to find certain elements and materials within a VLE module site. Templates for module areas are now key to the delivery of this minimum standard, helping navigation through a structured blank template. This is refined each year with academic staff copying over reusable learning content as needed.

The Assessment and Feedback Policy⁵¹ outlines requirements for online submission and feedback and the Recording Guidelines policy sets an expectation that didactic parts of teaching sessions should be recorded, with recording not required when active learning is taking place. This recording policy is not as relevant now, given the University's move towards active blended learning and away from the delivery of lectures.

Staff development and digital capabilities

Most TEL staff development sessions are linked to the UK Professional Standards Framework (UKPSF), and this helps staff working towards Fellowship or professional accreditation to understand which sessions link to which elements of these standards and the evidence they can add to their individual portfolio. These sessions are delivered in a variety of ways, including lunchtime sessions, bespoke sessions, via Blackboard Collaborate and recordings. There is also a staff development team who deliver sessions on Office 365 and other tools which are not solely used for learning and teaching. The TEL team have found that there is a direct correlation between an academic's digital capabilities, knowledge and experience and the degree to which the students get a good experience of TEL use in their teaching and learning. Much of their time is spent ensuring that staff are skilled and competent in using learning technologies.

⁵⁰ Minimum Requirements Policy <http://blogs.northampton.ac.uk/learntech/2018/05/18/nile-2018-19-sites-now-available/>

⁵¹ Assessment and Feedback Policy <http://tundrasearch.northampton.ac.uk/results/searchresult.aspx?Search=&Title=&Description=TLAF+Assmt&submit=Search>

A tool called LibAnswers (Ask-Us) is now used to provide support materials, as it provides a superior search function and aligns with the general library provision, so that students can find help all in one single place, rather than having to go to multiple places to find what they need. In addition, online case studies have also become a useful resource to illustrate good practice in TEL and these receive a high number of views within the institution. However, it can be difficult to get academics to write up their examples as this can take a lot of time, but they are of high value to the TEL team and the academics themselves. A good source of information about practice also comes from the review of Fellowship applications. Senior Fellows on the assessment panel help to review how academic staff are using learning technologies within their teaching.

Teaching Excellence Framework

The University achieved gold in the Teaching Excellence Framework with the Head of Learning Technology helping to write the submission. As TEL and the role of the LearnTech team are embedded within the institutional strategies, work on the subject level TEF is reinforcing the importance of the team being involved in the writing and consultation process.

As a result of TEF, there is now a recognition within the institution that a learner analytics tool is required which can help draw together the important information needed for the TEF submission. There is currently an ongoing pilot with a learning analytics package helping to use data to predict the attainment and retention of students through patterns and trends seen in the previous cohort's data. Alongside this, work is taking place to make staff more aware of what learner analytics are currently available, with information about the interventions that might be adopted to support these students. Personal tutors, in particular, require an awareness of this data and are in a position to support and guide students on how to move forward with their studies.

Distance and open learning

The University sees distance learning as an important area and makes use of several technologies to support the delivery of these programmes. The University is looking to grow this provision, although it is not an aim to become a distance learning institution, but to have provision, which does lend itself to this type of delivery.

In relation to open learning and open resources there is a skills hub, one of the award winning tools within the institution, which provides learning support for students around a whole collection of learning related subjects. In addition, there is also an open module on study skills for academic success available to all students – helping link these to the academic provision at the University. There are also around 10 MOOCs available at the University delivered via Blackboard CourseSites, but again this is not a focus of provision for the institution.

The University does have several subject areas with part time students who will often study at a distance during their time with the University. An example of this can be seen on the Master's in Business Administration where more activity happens within the VLE, such as Blackboard Collaborate sessions and the use of other interactive tools. The delivery of the content is enhanced to make this more attractive and the tutors have a different delivery style helping them to meet the needs of students at a distance. The tools the University provides have been set up to support different types of activity and there is a comprehensive flexible toolkit to meet the needs of all students and academics on campus or at a distance.

Future challenges

One of the main challenges faced by TEL services at the institution is maintaining adequate staffing levels to support the requirements of the institution – with TEL now embedded within the University's strategies going forward. Expertise needs to be shared across the team to ensure that there is no single point of failure if a staff member moves on. This also involves working with the academic and support staff to make sure that they are equipped to deal with first-level TEL support, rather than having to redirect staff and students to the LearnTech team for help.

The resources of the team are in constant demand with requirements to maintain and support the tools the institution currently has, as well as developing these further. Several of the tools at the institution are purchased on a one year licence, which means that there is a regular cycle of having to gather evidence to justify the renewal of the tool. This is especially difficult because you are often evaluating the tool before there is enough evidence of engagement. There is therefore a challenge to encourage academic staff to use tools, which might not be available in the next academic year. There is a constant push to get that critical mass of use through promotion of the tool, engagement and writing up case studies, which then evidences the need to continue to pay for this tool going forward. The risk is if you don't do this well enough the tool disappears, you get demoralised staff and lose the respect of some of the people you have been working with. The next time a new tool comes along staff are more cautious about taking this up – meaning the maintenance of good will can be difficult to achieve when working in this way. However, the LearnTech Team has established good relationships with academic staff and has a good level of trust that they won't send them down a blind alley to use tools that will become unavailable in the short term.

Another opportunity and challenge is to try and harness the enthusiasm academic staff have for the range of tools available to them, as well as helping to manage their expectations around the use of these tools, getting them to consider the wider implications of this practice but without stifling innovation. Technologies appear and disappear quickly and developments and innovations which one staff member might implement, another staff member who inherits this practice might struggle to deliver this effectively. It is, therefore, important that academic staff recognise this and put steps in place to make this practice sustainable.

University of Reading

Overview

The University of Reading was founded in 1926 and is a research-led institution. However, it is important to note that a strong emphasis is placed on the role of teaching, as evidenced by the award of Silver in the 2017 TEF. Research at Reading is focused around five themes: Environment, Food, Health, Heritage & Creativity and Prosperity & Resilience. 19,000 students from over 150 countries study at the institution's 32 departments and 12 schools, based across three campuses: two in Reading itself and one in Henley-Upon-Thames (Henley Business School). Reading also has a global presence: a campus in Iskandar, Malaysia opened in 2015 and Henley Business School (South Africa) in Johannesburg. In addition, Reading manages a partnership with Nanjing University of Information Science and Technology (NUIST), a university in China specialising in meteorology. Together, they offer joint programmes across a range of undergraduate subjects with plans to expand into postgraduate areas in the future.

Vicki Holmes, Head of Technology Enhanced Learning at the University, provided the information for this case study.

TEL strategy and drivers for TEL

TEL strategy

Reading's *Vision for TEL* was published in October 2013 in line with the University's move to making TEL a strategic priority. It was developed by the TEL Strategy Group, which was chaired by the Pro Vice Chancellor (Teaching and Learning) and included input from the Head of TEL, an Associate Dean for Teaching and Learning and the Education Officer from the Student's Union. The Vision was created as part of Reading's involvement with the national *Changing the Learning Landscape* initiative⁵². The Vision sets out the position of TEL at Reading in that it *has a fundamental role to play in the delivery of the University's strategic objectives*. Prior to the publication of the Vision, it was felt that Reading was somewhat behind the TEL curve; while Blackboard was in place as the institution's VLE, there was no TEL strategy and insufficient resource for development, expansion and progress of TEL.

Five years on, much has changed and the institution has recently launched a revised Teaching and Learning Strategy⁵³, which incorporates and references TEL, both explicitly and implicitly. Contained within the first key strategic priority of the Teaching and Learning Strategy (*to deliver academic excellence through our new Curriculum Framework*), is specific reference to wider use of new TEL methods in evolving approaches to teaching and learning. The philosophy at Reading indicates that TEL is part of normal business. TEL related policy is embedded within University policy; it is not separate. This highlights that TEL has a prominent place and is a vital component of how the institution functions.

Drivers for TEL use

The Head of TEL has been a key driver and enabler to ensure that TEL is strongly viewed as a core part of University business. Its place is always considered during the development of new institutional goals or initiatives; e.g. the new Curriculum Framework and the expansion of student numbers. The contribution that TEL makes unquestionably supports the principles and values behind such projects. The overall primary driver for TEL is the student experience, and it has been a huge shift to successfully mainstream the role TEL plays institutionally.

Departmental and institutional take-up of TEL

Reading's academic departments differ in terms of characteristics and style, yet each has a positively open mind about the role of TEL and understands its strategic importance. For example, every school is engaging with the institution's three year Electronic Management of Assessment (EMA) Programme. The TEL team acknowledges departmental and disciplinary differences, concerns and culture by working as partners and through discussion, which supports genuine engagement. Each School Director of Teaching and Learning is assigned a member of the TEL team as their liaison point.

⁵² <https://www.lfhe.ac.uk/en/research-resources/resource-hub/cfl/>

⁵³ *University Teaching and Learning Strategy 2018–2021*: <http://www.reading.ac.uk/about/teaching-and-learning/t-and-l-strategy.aspx>

TEL Provision

The University of Reading has used Blackboard as the institutional virtual learning environment (VLE) for many years. The move from internal to external hosting (via Blackboard's Managed Hosting service) improved reliability and stability of the service and ensures that the VLE is kept up to date. There is no blanket institutional outsourcing strategy, but the hosting of the VLE was considered a best fit option.

Integrated within the VLE is Campus Pack by Learning Objects, which provides a suite of blogging, journal and wiki tools and offers a work-around for departments wishing to use e-portfolios. Wider discussions about an institution wide, dedicated e-portfolio system are occasionally raised, but currently no one system is likely to meet the differing needs that surface. Also integrated within the VLE is the conferencing tool Blackboard Collaborate, which supports a variety of pedagogically driven uses. For example, it has been used to support students on placement, to connect international students and experts and support students with career development activities. Blackboard Collaborate usage is presented to staff primarily as a tool for teaching and learning purposes, whilst Skype for Business is available for online meetings. Turnitin is also centrally supported and integrated within Blackboard.

Online submission, online feedback and online marking of coursework have been reviewed as part of the institution's EMA Programme and have informed discussions around learning analytics. To support this work, there have been developments to expand functionality of the student record system (SITS), to increase integration with Blackboard and to improve assessment processes. For example, a development is in progress to set up Blackboard assignment submission points and Grade Centre columns automatically using data in SITS. Now halfway through the EMA Programme, work is underway to develop the post-programme operational mode for maintaining and sustaining these innovations.

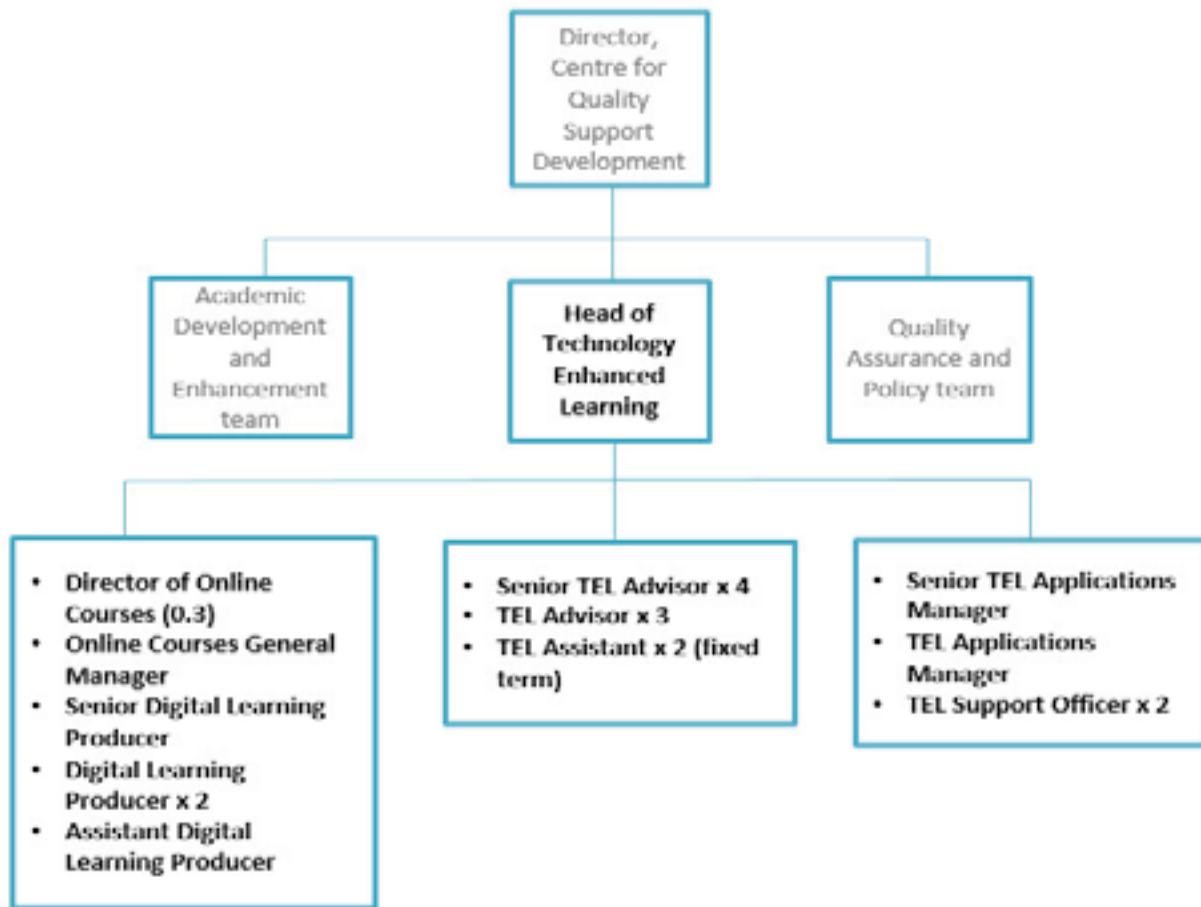
A project has been launched to introduce desktop personal capture and screencasting for roll out in 2018–19. At the time of writing, Reading is running a small pilot with the eventual aim of implementing a centrally supported solution. Discussion regarding live lecture capture recording is ongoing; the first step will be to offer personal capture, which meets some of the needs expressed by students (e.g. flipped classroom approaches to teaching). This might be later built on with a possible pilot of live lecture capture. Interestingly, anecdotal research at Reading has indicated that screencasting has been highly valued by students and that it will not be viewed as a cheaper alternative, but as an integral TEL service in its own right.

Some tools and specialist software used by specific departments are centrally supported and integrated with the VLE (e.g. MapleTA). Staff at Reading are also free to use openly available tools. To address concerns around data collection and GDPR compliance, the TEL team works closely with the IT department and other services to check over and agree which tools should be recommended; e.g. Padlet, Socrative, Mentimeter. The utility of specific features in Microsoft Office 365 (supported by IT) for learning and teaching is also under discussion.

TEL governance and structures

The TEL and Online Courses teams are part of the University's central education development unit – the Centre for Quality Support and Development – which also includes the Academic Development and Enhancement team, and the Quality Assurance and Policy team. The TEL team acts as the business owner of learning technologies and focuses on supporting the pedagogical application of these tools. The team works closely with the IT department, which manages the licences and the technical implementation of the services. TEL and IT have a very good, mutually respectful working relationship, sharing the responsibility of supporting TEL in the institution. Joint decisions about the development of learning technologies are made following collaborative consultation and discussion.

The TEL team, led by the Head of TEL, currently consists of 20 members of staff and is broadly organised into three areas. The first area focuses on curriculum and professional development (four Senior TEL Advisors, three TEL Advisors and two fixed term TEL Assistants). The temporary TEL Assistants have been seconded from the central administrative Support Centres to work specifically on the EMA programme. The second area focuses on applications and support (Senior TEL Applications Manager, TEL Applications Manager, two TEL Support Officers), and acts as a bridge between TEL and the IT department by offering frontline support and configuring the systems. The third area focuses on MOOCs and online course production (Online Courses General Manager, Director of OCs, Senior Digital Learning Producer, two Digital Learning Producers and an Assistant Digital Learning Producer). The robust and well resourced structure of TEL was deliberately planned; the significant growth required significant investment and commitment from the institution.



The Head of TEL, who reports to the Director of the Centre for Quality Support and Development, provides the strategic steer for TEL to some extent. As TEL is well embedded into institutional activity, the University’s structure enables lines of reporting and communication that are clear and fluid, so that matters of TEL will be covered by a relevant committee – not just the TEL specialists. The Pro Vice Chancellor (Teaching and Learning) was also instrumental in getting the TEL agenda into its ubiquitous position.

The TEL team sits alongside the Academic Development team in the Centre for Quality Support and Development and they collaborate on projects and initiatives, and in delivering professional development. The Library and the Study Advice Unit are positioned in the same broader directorate as TEL, and the teams collaborate on common activities and through shared interests; e.g. embedding TALIS reading lists into the VLE, Digital Capability Working Group.

Outside of the central TEL team, two schools employ their own learning technologists: the Henley Business School, which works separately on their own courses; and the International Study and Language Institute, which runs much of the pre-session language teaching and has very specific TEL needs. The central TEL team has a good relationship and keeps in regular touch with both departments, providing advice and feeding into activity as and when required.

TEL-specific policies

Policies relating to TEL are embedded within existing policies supporting the institutional Teaching and Learning Strategy. For example, in the Assessment Handbook specific reference to Turnitin and Online Submission Protocols is included. Establishing threshold standards for the VLE is currently a work in progress with the aim to develop a principle-led approach rather than a checklist. The TEL philosophy at Reading is to integrate as much as possible into quality processes. For example, within the programme lifecycle process, the TEL team is a formal part of the new programme approval process, to examine the implications for learning technology.

Staff development and digital capabilities

The TEL team has been successful in supporting staff in developing their digital capabilities for teaching and learning by running an ongoing programme of workshops, showcases and events including a three day *TELfest* conference⁵⁴. Participation is recorded in staff CPD records and contributes towards HEA Fellowship applications. The team has set up TEL Communities of Practice and works with a range of individuals from programme level tutors to School Directors of Teaching and Learning. TEL staff also teach on the Academic Practice Programme for new lecturers.

Beyond TEL, broader digital capabilities need further investigation and development. For example, some staff and students feel that they lack IT skills such as managing files or understanding basic software (email, MS Excel, Office 365, etc.), and would like training and support available to meet these needs. These gaps and requests surface during TEL training sessions. To address this for both staff and students, the University has set up a Digital Literacy Working Group as a first step to capture the current state, identify any requirements and make recommendations for addressing these needs. The Group has been collecting data and looking at available options, such as the Jisc Digital Capability Service.

Teaching Excellence Framework

The Head of TEL was involved with the institution's TEF submission in helping to put together the narrative. The TEF has been valuable in supporting the adoption of TEL at Reading; the Head of TEL noted that it has been pleasing to see how much has been achieved and how the TEL contribution can be mapped to the teaching quality and the development of the learning environment. The TEF has also likely informed and encouraged discussion about learning analytics at Reading, as a way of understanding the impact of teaching and learning activities.

The TEF process has emphasised to the TEL team the importance of collecting more evidence as they go along, to demonstrate the effect that TEL is having on teaching and learning. Reading has recently appointed a Teaching and Learning Evaluation and Impact Manager based in the Centre of Support Quality and Development, and the TEL team will be working closely with the post holder. Ideally, collecting TEF-relevant evidence should be built into project plans to examine what difference TEL is making, with a conscious focus on evaluation as well as implementation. With regard to subject-level TEF, the TEL team already works closely with its schools, and will be in a good position to work with them on evidencing impact.

Distance and open learning

There are distance learning programmes in some schools. Each instance, whether partially or completely distance-taught, has been initiated, funded and driven within the specific school and department delivering the course. There is currently a move to look at expanding distance learning as an institutional level initiative, identifying initial programmes for development. Ultimately, like many others, the University wants to grow its student numbers, so they are looking into how to take this forward.

The Online Courses team designs, develops and produces a portfolio of high quality MOOCs and other online courses. An active partner with FutureLearn since its early days, Reading has achieved great success, and is on the way to reaching a million learners. Initiated by the PVC (Teaching and Learning), the MOOCs are pitched at any potential learner in the public. The experience garnered from developing these courses feeds into internal programmes and courses such as the highly successfully StudySmart course for all incoming students, thus benefiting the Reading student body. The strategy for Distance Learning will therefore also be informed by what has been learned by the Online Courses work.

Future challenges

In terms of supporting TEL, like many universities, Reading's main short and medium term challenges lie in maintaining current provision while also taking steps to move forward. There is a strong appetite for using technology to enhance learning and teaching at the University, but meeting these demands stretches staff capacity and resources. Reading took part in the ACODE TEL Benchmarking exercise⁵⁵ (facilitated by the Open University), which helped to identify and evidence both Reading's strengths in TEL as well as the challenges in maintaining pace. The University has developed its approaches to scoping and planning its institutional projects, which is already helping to understand requirements. Locally, the TEL team is striving to get the best value from what they already have; e.g. making improvements to the Blackboard user experience.

⁵⁴ <https://blogs.reading.ac.uk/tel/2017/07/21/inaugural-tel-fest-17-a-success/>

⁵⁵ <http://www.open.ac.uk/acode-uk/>

York St John University

Overview

York St John University is a Post-92, predominantly teaching-based institution and a member of the GuildHE University mission group. Originally founded in 1841 (York Diocesan Training School), in 2016 York St John University celebrated its 175th anniversary as one of the oldest institutions in the UK. York St John was granted Taught Degree Awarding Powers in 2005 and became York St John University in October 2006. It was then awarded Research Degree Awarding Powers for PhD and doctoral programmes in 2015 (<https://www.yorks.j.ac.uk/about/facts--figures/fast-facts/>). The University has nearly 7,000 full time students and approximately 300 academic staff. There are two campuses, one in York city centre and a second in London (opened in 2018: <https://www.yulondon.ac.uk/>).

Over the past two years the University has grown and restructured, reconfiguring four large Faculties into nine Schools, specialising in a range of high quality undergraduate and postgraduate courses, and supporting an expanding portfolio of degree programmes. This change in structure gives subject areas more autonomy. However, it is important to note that there is a lot of cross-school working where relevant still.

Phil Vincent, Educational Developer (TEL) at the University, provided the information for this case.

TEL strategy and drivers for TEL

TEL strategy

For approximately eight years, TEL has been typically incorporated into the University's Learning and Teaching Strategy, and more recently the Digital Strategy. The University also has a new Inspiring Learning and Teaching Strategy, which, following the trend of recent years, seeks to redefine digital education by implying the use of TEL, without expressly referring to it.

The University is embarking on a programme of change with a number of key strategic priorities to deliver the 2026 University Strategy. A key element of this work involves Inspiring Learning, with a heightened focus on developing the digital capability of staff and the use of their technology to enhance the student learning experience. The University is focusing on digital enhancements to enable delivery of the 2026 Strategy; this work is overseen through the Digital Strategy, which emphasises Digital Capability and Digital Learning and Teaching.

The Technology Enhanced Learning (TEL) team produces an annual TEL plan which this year and going forward will relate to the goals detailed in the Digital Strategy, and takes into account the goals and priorities set out in each of the School annual plans.

Drivers for TEL use

There is an expectation that staff will use the University VLE (Moodle) or another core supported TEL product, and the vast majority of courses do have an online presence.

Minimum Expectations are in place to show how the VLE should be used. These have largely focused on administration, making sure students are receiving core information about the course. This academic year the University plan to introduce a more qualitative measure using an adapted version of the Blackboard Exemplary Course Rubric (available via Creative Commons) with more qualitative statements about the design and layout. This will be used to encourage staff to go beyond the baseline.

From 2018–19 the TEL team will take an active role in auditing all Moodle courses against the standards set out in the Minimum Expectations and the criteria contained within the Exemplary Course Rubric, in order to better understand the support needed by academic staff in delivering a compelling and engaging student experience.

Students are an important driver at the University and they have the growing expectation that there will be some online materials available for their course. The TEL team enjoys an excellent working relationship with the Student Union and will regularly meet with the Union's President of Education to discuss issues and aims. The TEL team have spent a lot of time consulting with students, for example, students were consulted to help set the VLE Minimum Expectations. The TEL team also have sight of module evaluations, helping them gain a greater insight into what students want from a TEL perspective.

The University is introducing new approaches to curriculum design and validation shortly which will encourage academic staff to take a more blended approach when designing their courses.

Departmental and institutional take-up of TEL

Implementation of TEL at the University is reasonably consistent across the different Schools, with some TEL champions in most areas.

TEL Provision

The core supported TEL tool at the University is the VLE (Moodle) and all courses are expected to have a presence there. Other centrally supported TEL tools are:

- Mahara (portfolio tool)
- Media Library (based on Medial)
- WordPress (blog/website tool)
- Turnitin (assignment submission/marking tool)
- Screencast-o-Matic (screen recording tool)
- Open Badge Factory
- Big Blue Button (web conferencing tool)

Mentimeter (presentation software) will also be piloted during the 2018–19 academic year.

Other products are not formally supported but, if there is a demand from staff or students, the TEL team assesses the tool and accommodates its use where possible.

Moodle, Mahara, Wordpress, Media Library, Big Blue Button are all locally hosted and supported; Screencast-o-Matic and Open Badge Factory are cloud-based; Turnitin is hosted by the supplier and accessed through a Moodle plug-in.

There is no out sourcing policy but if acquiring a new product, outsourcing would certainly be considered. If it made business sense to outsource then this would be the preference.

There have been no reviews of TEL tools in the past two years and none are expected in the short term. Moodle fulfils current needs and since it is open source there are no licence fees, meaning there is no strong appetite to move to another product.

TEL governance and structures

The main team delivering TEL support is the TEL Team. There are three members in the team: the Educational Developer for TEL (Team Leader), a TEL Assistant and TEL Advisor.

The TEL Team have been moved from the Academic Development Directorate to the Innovation and Growth Directorate, under the Head of Strategic Projects and Change. This recognises the digital side of the team's remit, and positions them alongside ILE (Information, Learning and Estates). The move aligns the team with the Digital Strategy, with the Educational Developer for TEL providing the steer to meet the TEL related goals of the Digital Strategy. This is reported to the Executive Director: Innovation and Growth.

The TEL team work closely with Learning and Teaching Development and Research Development, for example working with Learning and Teaching Development on the Inspiring Learning and Teaching Strategy, curriculum design, the Postgraduate Certificate of Academic Practice programme, and a CPD framework. There is also a good working relationship with the Digital Training team who work alongside the TEL Team to ensure the best experience is provided to support students and staff.

TEL-specific policies

There is a TEL Quality framework which includes the Minimum Expectations that staff should follow when using the VLE.

The TEL team also embrace the 3E Framework developed by Edinburgh Napier University. They follow the 3E Framework when designing their training and encourage staff to follow it in their teaching design.

Staff development and digital capabilities

The TEL Team are responsible for TEL system support and are first-line support for staff; this will include pedagogic support, help with TEL tools and guidance as required. An IT Helpdesk sit within ILE (Information, Learning and Estates) and they provide first-line support to students and second/third-line support as required to all. IT are also responsible for the maintenance and upgrades of locally hosted systems. There is also a Digital Training team in ILE who cover digital skills, which includes TEL systems for students. The Digital Training team focus on how to set up and use tools from the practical view but do not generally offer pedagogic advice.

The TEL Team offer a wide range of support to assist staff in using TEL tools. Staff are offered one to one sessions, programme focused sessions, online guidance, and a variety of face to face group training sessions. A new online resource will be launched for the 2018–19 academic year featuring blog posts and mini, bite sized online courses which reward staff with an electronic badge upon completion (<https://tel.yorks.ac.uk/>).

The University also offer a SEDA accredited award *Supported Technology Enhanced Learning* to staff as part of their CPD framework. This features a number of face to face workshops and online activities and is assessed by portfolio. Staff are also expected to become Fellows of the HEA, over 95% academics are currently Fellows.

Teaching Excellence Framework

Although not as a direct result of the introduction of TEF, the University has recently purchased a Learning Analytics product (Stream by Solution Path). This product should help the TEL team demonstrate how the majority of their modules use the VLE and how usage is generally high, providing useful information to include in the next TEF submission.

Distance and open learning

York St John are launching their first formal distance learning programme this autumn (an MBA in Project Management). They are also expecting to launch a number of degree apprenticeships in the near future. At present, existing teams and TEL systems will support these activities.

The University has a long term strategic driver to diversify into online learning, aiming for 2000 distance learning students by 2026.

Some staff have been interested in producing MOOCs, but this is not an institutional priority and, therefore, development has not progressed. There is currently no institutional push to create open educational resources.

Future challenges

York St John prides itself on being a small, tight knit community where academic staff have a strong personal relationship with students. Whilst a positive ethos, this can have a side effect of some academic staff feeling that an online presence is not required for their kind of University; they feel they have good levels of face to face contact with students and don't need to use a VLE as they view it as something which is a substitute for face to face contact. The TEL team work hard to dispel this idea that the VLE is only required for distance learning, encouraging academic staff to complement and enhance classroom teaching with TEL activities. They also encourage staff to appreciate how students need to be well equipped with digital skills for beyond their education. This will be encouraged through the development of the TEL related Digital Strategy goals and the changes to curriculum design.

TEL support staffing may need to be reviewed as online learning and apprenticeships are introduced over the coming years. Existing staff will need to develop skill-sets to meet these challenges and/or new staff will need to be employed. If large contracts are won this will have a huge impact on the current TEL team's capacity.

Appendix: Case study questions

For each of the nine interviews conducted, a common question template was used to structure the interview, addressing the themes and question areas as outlined below.

TEL theme	Interview questions
Background about institution	Status of institution (research-based; teaching-based..?); size of institution (# of students; # of departments etc.); campus-based (one site or multiple sites; overseas campus?)
1. Understanding of TEL strategy	Do you have a TEL strategy? (How is TEL addressed in your institutional strategies – as a stand-alone planning document or embedded across a range of strategies? What is the time horizon for TEL planning; e.g. 3–5 years?) Can you explain the reasons/history for your current position re. a TEL strategy? [need to know if have one or not] What has been the evolution of (any) TEL strategy? (e.g. is it now part of your L&T strategy?) What have been the drivers for TEL use in this institution? To what extent does departmental or institutional culture affect uptake?
2. Overview of TEL provision	What TEL tools are centrally supported? Does your institution support a mix of central and devolved tools provision and if so, why? Do you locally host and manage these tools or are some/all of them outsourced and hosted by an external provider? Do you have an outsourcing strategy? Which TEL services/tools have you reviewed over the past two years and why?
3. Governance and structures	How are TEL services organised and supported within your institution? How does TEL support relate organisationally to IT/Library/Information Management support to Educational Development? Please explain the roles of the different TEL units within your institution; what systems do they support?; how are they supported?; what are the roles of the different staff What governance structures are in place for TEL? (Who provides strategic steer/oversight for TEL services?) How did the current organisational structure for TEL services emerge? (Was it deliberately planned or has it emerged organically over recent years. Have there been any significant changes in organisational structure over the last two years – since the last TEL Survey in Feb 2016?)
4. TEL-specific policies	Does your institution have any TEL-specific policies in place? Do you have minimum requirements for the adoption and use of TEL tools in learning and teaching activities? If so, how is the policy implemented and monitored (enforced)?
5. Staff development and digital capabilities	What policies/enabling approaches (e.g. training programmes, rewards/recognition) has your institution introduced to support the development of staff digital capabilities? How are you helping staff to make effective use of TEL tools (technical and pedagogical skills) in support of student learning?
6. Teaching Excellence Framework (TEF)	What impact has the TEF had on the organisation of TEL services and academic support at your institution? To what extent has the TEF encouraged the adoption of learner analytics services within your institution, as a way of tracking teaching and learning activities and supporting better outcomes for students? What preparations are you making for subject-level TEF – what will be the likely impact on TEL services and academic support?

TEL theme	Interview questions
7. Distance and open learning	<p>How important is distance learning to your institution? How widespread is distance learning delivery across the institution?</p> <p>How many distance learning programmes are currently being delivered?</p> <p>How are distance learning activities supported? Do you have a specific support team for distance learning within your institution?</p> <p>Has its importance changed over the past two years since the last Survey (in light of the changing economic climate and challenging context for student recruitment for campus-based courses)?</p> <p>Does your institution provide any free or open educational resources/courses? If not, is the institutional position likely to change in the near future?</p> <p>If it does, what is the relationship between open and distance learning delivery? Are the two activities linked in any way, in terms of central support provision (e.g. through supported course design and delivery approaches/sharing of resources) and the pathway between open and accredited online courses? (Do your open courses promote or lead on to accredited courses?)</p>
8. And finally ...	<p>What do you see as your main short and medium term challenges in supporting TEL services for your institution? How are you planning to address them?</p> <p>Are there any other important TEL developments within your institution that you would like to report on?</p>