UCISA REPORT

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

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

By

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SURVEY

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Executive summary

What are the key trends in technology enhanced learning across the UK HE sector? How are institutions responding to new challenges and what are the next priorities on the planning horizon? We highlight below six developments emerging from the data gathered in this year's UCISA TEL survey.

1. A core set of TEL services has been identified

A common set of institutional TEL services supporting course delivery has been established across the sector. The Top 5 services include the virtual learning environment (VLE), text-matching tools, provision for the electronic management of assignments (EMA), reading list software and lecture capture provision.

2. External hosting of TEL service provision is gathering momentum

Over half of respondents to this year's Survey have chosen an external hosting model for their VLE service provision, with cloud-based SaaS provision doubling since the last Survey. Just under half of respondents have done so for their lecture capture provision, and cloud-based SaaS services are the most common form of service provision for digital repositories and media streaming services, as vendors favour this mode of delivery.

3. Course delivery modes are not changing greatly

Despite the investment in TEL services, we are not seeing major changes in the way that technology is being used to support learning, teaching and assessment activities. Blended learning delivery focusing on the *provision of lecture notes and supplementary resources* to students still represents the most commonly supported activity, with active learning, open learning and fully online course delivery modes showing little change from 2016.

4. Fully online delivery remains a strategic priority, despite the slow progress to date

Despite the limited tangible progress in distance education to date, institutions are exploring ways of expanding their fully online provision through the creation of dedicated distance learning units and collaboration arrangements with external/commercial partners. New modes of course delivery are identified as one of the Top 3 challenges for the future. The other priority areas are electronic management of assignments (EMA) and learning analytics.

5. TEL system reviews continue to be important, but there is less emphasis on the evaluation of student learning and staff pedagogic practices

TEL review activity is well established across the sector with just under half of the institutions having conducted some form of TEL review over the last two years, and two-thirds planning to do so over the next two years. VLE and lecture capture systems represent the most common systems under review. In contrast, there is very limited evidence of evaluation on the impact of TEL on the student learning experience. Where it is taking place, it tends to focus on student satisfaction as part of a general review of TEL services. The evaluation of staff pedagogic practices is at its lowest level since 2012 and has most commonly focused on a general review of TEL services, determining the take-up and usage of TEL tools across an institution.

6. Staff digital capabilities and knowledge are under the spotlight again...

Lack of academic staff knowledge re-emerges as one of the top three barriers to TEL development in this year's Survey, in combination with lack of time and a supportive departmental/school culture. This is a concern, given the proliferation of systems that staff are now being asked to engage with, and the perceived lack of staff digital capabilities and awareness of the affordances of TEL tools that are given as reasons for less extensive use of TEL in this year's Survey. The availability of TEL support staff at an institutional and local level tops the list of encouraging factors identified by respondents to help promote TEL development. Encouragingly, the evidence in this year's Survey shows that there has been an increase in TEL support staff across the sector to help support TEL activities within institutions.

Acknowledgements

The following have all made invaluable contributions to the preparation, conduct or analysis of the Survey. It is customary in such circumstances to acknowledge their advice but to absolve them of blame for any subsequent inadequacies and imperfections. We gladly and appreciatively do both.

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Preface

The changing language of past Surveys neatly reflects the evolving development of support provision for TEL tools across the sector. From an initial focus on Virtual Learning Environment (VLE) and Managed Learning Environment (MLE) platforms (2001 and 2003 Surveys respectively), the Survey broadened its focus to take account of e-learning (2005) and then a much wider coverage of technology enhanced learning tools (2008, 2010, 2012, 2014 and 2016). For the 2018 Survey, this focus was retained, but an attempt was made to update questions and response options to capture new realities in TEL support and provision across the UK higher education sector. At the same time the questionnaire was restructured, with a concerted effort made to reduce the number of questions; the aim being to reduce the burden on respondents.

Background

The 2018 Survey is a continuation of those conducted since 2001 but it also captures new issues that have emerged since 2016. Whilst the challenges within the sector are constantly evolving, the rationale for the UCISA community remains the same. The following text was written in the Report for the 2001 Survey and despite the passage of time it remains apposite: (replace VLEs with TEL):

"UCISA is aware that a number of issues relating to VLEs are having a significant impact on computing/information services. They also represent cultural challenges for both academic staff and students in how they engage with their learning and teaching. Issues relate to choosing a VLE, its implementation, technical support and a whole range of support, training and pedagogic issues relating to its use."

The primary UCISA stakeholder community, i.e. UCISA is a very broad constituency, including managers, learning technologists, educational developers and technical and administrative staff. Institutionally, they can be found centrally or devolved in schools and departments. They may be in an IT unit or the Library, in staff development and educational development units, in specialist e-learning units, in academic departments or indeed in any combination of them all!

The Reports for the eight previous Surveys are available on the UCISA website, with links also to case study research publications that we have presented as an accompaniment to each Survey report[1]. Concise peer reviewed papers on the key messages from the 2016 Survey were presented to international delegates at ASCILITE 2016 in Adelaide, Australia[2] and at ICERI 2016 in Seville, Spain[3] and presentations were also made to national audiences at ALT-C 2016[4] and to members of the Management of Small Higher Education Institutions Network (MASHEIN) in 2017[5]. A series of YouTube executive summaries of the Survey findings were also created, reporting on learning analytics and open learning developments across the sector[6]. Finally, a journal article was also published in *Interactive Learning Environments* (2017) on TEL developments between 2012 and 2016[7].

The UCISA community, and the wider TEL community, has valued the oversight that the Survey reports provide of trends within UK higher education and may use them to assess the position of their own institution in relation to them. However, caution should be exercised against using the statistics as benchmarks or performance indicators. There are different perspectives on where an institution may wish to be located across the spectrum of options and there is no single path of uniform development in provision and support for learning technologies.

The focus of respondents' attention is firmly on institution level concerns, which is unsurprising given the nature of the Survey and the fact that the respondents are typically those in TEL leadership roles at institutional level. The support community may sometimes feel that they are at the end of this food chain, but the effectiveness of their role is highly dependent upon the cultural environment in which they are asked to operate. Technological advances have continued to be rapid since the 2016 Survey, bringing new educational opportunities and additional support headaches! It is these new challenges which the 2018 Survey wished to capture. Also, although many members of UCISA may indeed have some institutional influence in determining strategies, it is the implementation of the infrastructures and services to sustain those strategies that are also of importance and relevance to the core UCISA constituency.

We were encouraged by feedback from the support communities on the value of the Survey reports, most notably those represented by the UK Heads of e-Learning Forum (HeLF). Crucially we also received financial backing from the UCISA Executive to go ahead with the Survey in 2018.

Factors influencing the design of the 2018 Survey

The design of the question set for the Survey has purposely evolved over the years, seeking to reflect current technology themes and challenges whilst retaining an eye on longitudinal developments. Survey design choices are strongly influenced by sector developments in the policy and management of TEL and we have closely monitored TEL practices both nationally and internationally to inform our thinking.

Since the last Survey the institutional focus on e-assessment provision and the electronic management of assignments (EMA) has continued to grow. The enhancement of assessment and feedback processes through technology has been a key area of interest for the UK Heads of e-Learning Forum, which has been tracking institutional developments in digital examinations[8] and the implementation of the full EMA lifecycle from e-submission to return of marks to students through its own survey work[9]. Jisc has also been helping institutions to consider how best to integrate assessment technologies and track progress for both formative and summative work through its assessment and feedback lifecycle model[10], which it first published in October 2015.

1 *Reports on the UCISA surveys are available at: http://www.ucisa.ac.uk/bestpractice/surveys/tel/tel.aspx*

2 *Jenkins, M., Walker, R., Voce, J., Ahmed, J., Swift, E., & Vincent, P. (2016). Refocusing institutional TEL provision on the learner: drivers for change in UK higher education. In S. Barker, S. Dawson, A. Pardo, & C. Colvin (Eds.),* Show Me The Learning. Proceedings ASCILITE 2016 Adelaide *(pp. 278–282). http://2016conference.ascilite.org/wp-content/uploads/ascilite2016_jenkins_concise.pdf*

3 *Walker, R. (2016). Technology adoption trends and educational change within UK higher education: Reflections on the UCISA Survey data (2001–2016). ICERI2016, the 9th annual International Conference of Education, Research and Innovation. 14th–16th November 2016, Seville, Spain. (YouTube presentation: http://tinyurl.com/TELSurvey2016 ; presentation slides: http://tinyurl.com/ICERI2016-Tech-trends; abstract: https://library.iated.org/view/WALKER2016TEC)*

4 *Walker, R., Voce, J., Jenkins, M., Ahmed, J., Swift, E. & Vincent, P. (2016). Open and flexible learning opportunities for all? Findings from the 2016 UCISA TEL Survey on learning technology developments across UK HE.* ALT-C 2016: Connect, Collaborate, Create. *6th September, University of Warwick. (*http://tinyurl.com/UCISASurvey*).*

5 *Sherman, S., & Voce, J. (2015). Technology Enhanced Learning for HE in the UK: Implications of the 2016 UCISA Survey for Small and Specialist Institutions.* Leading Digital Learning: Key Issues for Small and Specialist Institutions. MASHEIN (Management of Small Higher Education Institutions Network), *London.*

6 *Jenkins, M. (2016). 2016 UCISA TEL Survey: Spotlight on open learning. Retrieved from: http://tinyurl.com/open-learning-summary Walker, R. (2016).* 2016 UCISA TEL Survey: Spotlight on learning analytics. *Retrieved from: http://tinyurl.com/learning-analytics-summary*

7 *Walker, R., Jenkins, M., & Voce, J. (2017). The rhetoric and reality of technology enhanced learning developments in UK higher education: reflections on recent UCISA research findings (2012 – 2016).* Interactive Learning Environments. *Taylor & Francis: London. First published on: 28 December 2017: http://www.tandfonline.com/doi/full/10.1080/10494820.2017.1419497*

8 *Newland, B. (2018).* Electronic Management of Assessment – Digital Exams in UK HE 2018. A HeLF Survey Report.

9 *Newland, B. (2016).* HeLF UK HE Research on Electronic Management of Assessment 2016. *http://www.slideshare.net/barbaranewland/helf-uk-he-research-on-electronic-management-of-assessment-2016*

10 *Jisc (2015).* Guide: The assessment and feedback lifecycle. *https://www.jisc.ac.uk/guides/transforming-assessment-and-feedback/lifecycle*

The agenda for the 2018 Survey sought to build on this work and track developments in e-assessment, as well as to monitor progress in other areas of learning technology service provision related to the student learning experience. Our case study research in 2016[11] highlighted the increasing influence of student engagement strategies on TEL developments, acting as a key driver for investments in new student-centred TEL services such as lecture capture. The 2018 questions sought to monitor the uptake of lecture capture, as well as to explore how institutions are seeking to enhance the learning experience in other ways, such as by supporting the use of students' devices on campus in teaching, learning and assessment activities. The Survey maintained a focus on the review of TEL systems and the evaluation work that institutions are undertaking after a decision has been made on their chosen platforms, whilst also tracking developments in the delivery of flexible learning and technology that underpins and supports the Teaching Excellence Framework (TEF) (http://www.hefce.ac.uk/lt/tef/).

The Survey team has also kept a watchful eye on other key TEL developments, such as the development of learning analytics services, which has been a focus of recent HeLF research[12] and Jisc activity – and the growth of fully online delivery across the sector. Fully online learning delivery has traditionally been a niche activity, although, as we reported in the 2016 case studies, the picture may now be changing and there appears to be an increasing level of engagement with fully online delivery with HE institutions declaring a commitment to scale up their provision of distance learning programmes and increase student enrolments through online learning.

These themes have all been addressed in the design of the 2018 question set. As with any continuing survey, there is a balancing act to be negotiated in the design of the instrument in maintaining continuity with previous surveys by retaining past questions, whilst not collecting merely stagnant data and keeping pace with new developments. The approach taken has been to retain the core of the questionnaire from previous years to enable longitudinal analysis, whilst adding new response options to some questions to ensure that the Survey remains up to date with sector developments. For instance, the list of driving factors for developing TEL was extended to include TEF and institutional reputation. The role of threshold/ minimum standards was introduced as a possible encouraging factor to be rated, alongside feedback from staff (separate from student feedback). Two new options were added to the question on institutional strategies, which inform the development of TEL: student learning experience strategy and student engagement strategy. With regard to the governance of TEL, attention to learning spaces was added as a possible mechanism. Section 3 was split into two sections, the first looking at the tools that support teaching (Section 3) and the new Section 4 focused on course delivery and evaluation. The questions about outsourcing were moved into the new Section 3, the questions about which also included digital repositories, learning analytics and media streaming as services. The evaluation questions in the new Section 4 now distinguish between institutional and local evaluations. Finally, there was also a clearer distinction between EMA and e-assessment throughout the Survey.

Through feedback and suggestions that we received on the 2016 Survey Report, we were also encouraged to introduce completely new questions. For instance, on the use of student and staff owned mobile devices and on the nature of local evaluations. The addition of these questions was carefully managed to ensure that the Survey did not become excessively long and so affect the completion rate. Consequently, unproductive questions were removed, other question sets were pruned, and several questions were flagged for inclusion in every other survey. The net effect was of all these changes was that the volume of the questions in the 2018 Survey remained broadly equivalent to previous years.

Circulation and completion of the 2018 Survey

Following on from the success of the online approach which was first introduced in 2012, institutional Heads of e-Learning were invited to complete the Survey at the start of February 2018 and an email message was also posted on the Heads of e-Learning Forum Jisc listserv inviting colleagues to complete their institutional returns. UCISA contacts were approached for those institutions without a recognised Head of e-Learning. The online survey tool was eventually closed to submissions at the end of March 2018.

The workers

The Survey was conducted by UCISA, through the work of Richard Walker (University of York), Julie Voce (City, University of London), Martin Jenkins (Coventry University), Melanie Barrand (University of Leeds), Laura Hollinshead (University of Derby), Adam Craik (University of Hull), Farzana Latif (University of Sheffield), Sarah Sherman (Bloomsbury Learning Environment) and Vicky Brown (University of Northampton). Support was provided by UCISA's Digital Education Group and, in particular, from Fiona Strawbridge (University College London) who edited the report. The project team worked in collaboration with The Research Partnership (an independent survey organisation) who oversaw management of the project alongside the Survey implementation.

The real contributors were, of course, all those who completed the Survey.

11 *UCISA (2016).* 2016 Survey of Technology Enhanced Learning: case studies. *https://www.ucisa.ac.uk/bestpractice/surveys/tel/tel.aspx*

12 *Newland, B., & Trueman, P. (2017).* Learning Analytics in UK HE. A HeLF Survey Report. *https://helfuk.blogspot.com/p/research_19.html*

Institutions surveyed

All 136 members of the Universities UK list[13] were invited to complete the Survey, along with 24 other higher education institutions, forming a total population of 160 higher education providers in receipt of public funding via one of the UK funding councils[14]. This is equivalent to the 160 HE institutions that were targeted in 2016.

Presentation of data

The Report commentary focuses on results from the 2018 Survey and where appropriate, the results are presented in tabular or graphical form. In most cases only the leading responses for each question are given in the tables within the main report (e.g. the Top 5 responses). The full tabular data for each question for 2018 is presented in Appendix A of the Report and the relevant tables are referenced in the report commentary.

As with previous Surveys, the analysis of the data is driven by type of institution (Pre-92, Post-92 and Other) and country (England, Wales, Scotland, Northern Ireland). As in 2016, the classification of institutions as higher education colleges has been dropped, as this term is no longer in currency and many of the former HE Colleges now have full degree-awarding powers. The descriptor *Other* has been used to capture those specialist higher education providers such as art institutions and business schools whose courses are validated by universities with full degree-awarding powers.

Unlike previous Surveys, there is no routine analysis by mission group for this Survey and no Appendix containing tables by mission group. This reflects the big changes in membership over recent years (e.g. movement of some institutions from the now defunct 1994 Group to the Russell Group) and an ever growing proportion of institutions that fall outside of the mission group classification. But key developments in mission group activity from previous Surveys are identified in the main commentary in a few places where they are worthy of discussion. Note that the membership of mission groups is based on the make-up of these groups in February/March 2018, when the Survey was being completed and, therefore, does not reflect any subsequent changes in group membership.

Where longitudinal analysis can be performed, any presentation of that data is in Appendix C. In most instances, this will only be shown since 2003 because the removal and modification of questions since 2001 seldom warrants detailed comparison with that first Survey. As part of the general narrative, any longitudinal analysis will be in the main text. Appendix B contains a list of the questions in this year's Survey and their predecessor questions from previous Surveys. It should be noted that the question numbering was completely revised for this year's Survey given the decision to split what was previously Section 3 (Technology Enhanced Learning Currently in use) into two sections, Section 3 (Technology Enhanced Learning Currently in use) and Section 4 (Course Delivery and Evaluation of Technology Enhanced Learning).

Although 108 institutions responded to the Survey, not all questions were answered by all respondents. The number of respondents answering each question is, therefore, presented at the top of each table. A *base definition* is given in italics and the number of respondents is shown in bracket. It is worth noting that some country populations are relatively small (e.g. Wales, n=7; Northern Ireland, n=1) and, therefore, susceptible to dramatic swings in percentage scores when the number of respondents in these groups is further reduced for particular questions. Care is, therefore, needed in drawing comparisons between these and other groups, based on the percentage scores recorded for those questions where the response level is much reduced.

In terms of the presentation of data within the Report, percentages have been rounded up (>/ = to 0.5) or down (< 0.5) to whole numbers, so a column of values will not necessarily add up to 100%. Where new response options have been added to established questions used in previous Surveys, they have been highlighted to the reader with an asterisk at the end of the response option in the table or figure where they appear. New questions for the 2018 Survey are identified in the main text accompanying each section of the Report, with an explanation of any changes to the organisation of the section since the 2016 Survey. Similarly, any changes to the wording of response options to specific questions have been noted in the commentary.

This report focuses primarily on presenting the data in a manner that will enable institutions to position themselves in relation to sector trends. It is not the main purpose of this report to provide detailed interpretation of the data, although some trends will be highlighted. As in previous years, additional qualitative research will continue to be conducted through a series of case study interviews with institutions which volunteered to share their approaches to TEL developments and support provision, offering clearer lines of interpretation on the data. These case studies will be presented in a companion report, which will be published by UCISA later in the year.

13 For the full list of Universities UK members, please see: http://www.universitiesuk.ac.uk/about/Pages/member-institutions.aspx

14 For further details on UK higher education numbers, see the Education UK web page: http://www.educationuk.org/global/articles/higher-education-universities-colleges/

Response rate

Survey returns were received from 108 of the 160 HE institutions targeted – a response rate of 68% (in line with 69% in 2016), maintaining the overall growth in the number of responses since 2008 (44%). The profile of those taking part is again representative of sector institutions in terms of type of institution and geographic spread – as shown by Tables A and B.

Table A: Type of institution

Type	Total possible[15]	Number responding	% responding	Universe %	Sample %
Pre-92	61	53	87%	38%	49%
Post-92	77	45	63%	48%	42%
Other	22	10	45%	14%	9%
Total	160	108	68%	100%	100%

As in previous years, so there was relative over-representation of Pre-92 institutions.

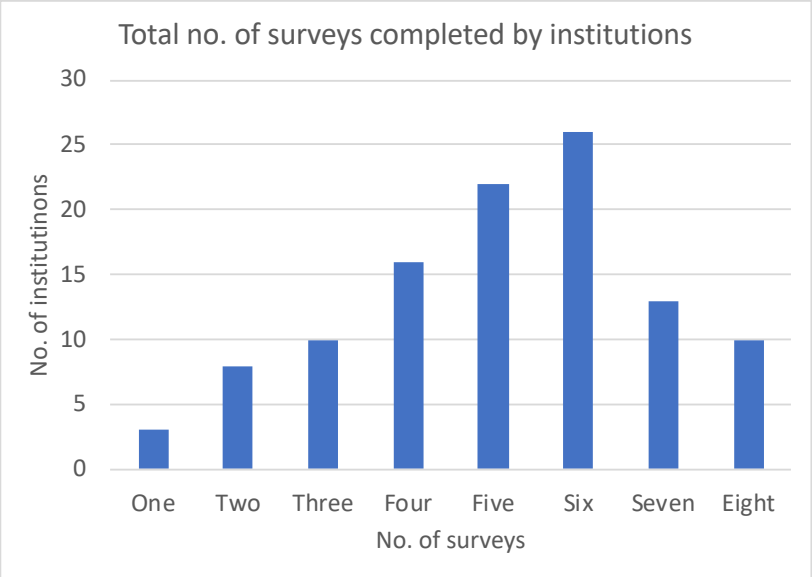
Table B: UK Country

Type	Total possible[16]	Number responding	% responding	Universe %	Sample %
England	132	87	66%	83%	81%
Wales	10	7	70%	6%	6%
Scotland	15	13	87%	9%	12%
Northern Ireland	3	1	33%	2%	1%
Total	160	108	68%	100%	100%

As in previous years, so there was a representative spread of institutions across the four UK countries.

Figure A provides a breakdown of institutional responses to this year's Survey and the seven that have preceded it, namely 2003, 2005, 2008, 2010, 2012, 2014 and 2016.

Figure A: Total number of Surveys completed by institutions responding to the 2018 Survey



15 *The figures in this column are a best estimate based on a collation of data from a variety of sources, and should not be reviewed as a definitive statement of the number of institutions by type.*

16 *The figures in this column are a best estimate based on a collation of data from a variety of sources, and should not be reviewed as a definitive statement of the number of institutions by UK Country.*

Figure A shows that there has been an uneven pattern to Survey completion over the years. Only 10 of the 108 institutions that responded to the 2018 Survey also responded to the 2016, 2014, 2012, 2010, 2008, 2005 and 2003 Surveys[17]. Nevertheless, a consistent longitudinal story is evident in the following analysis, suggesting that the responses are not merely an artefact of receiving returns from the same institutions.

Response scales

For the Surveys conducted up to 2005 inclusive, a Likert scale of 1–5 was used. However, the middle option, which is invariably construed as being neither important/unimportant was deemed to be uninformative. So, from 2008, this option was removed to, in effect, encourage the respondents to make a more explicit choice. Therefore, a four point scale was used, namely:

1 = Not at all important

2 = Not very important

3 = Fairly important

4 = Very important

Regarding longitudinal analysis, it is reasonable to compare rankings between Surveys, but with different scales being used it would clearly be unwise to compare means between, before and after 2008. In some cases, the questions compared do not have exactly the same wording. The wording of the question as recorded for each Survey is given in Appendix B.

17 This number excludes institutions which have recently merged or formed new institutional identities, which may have incorporated parts of their new organisation which did previously respond to surveys. The figure may, therefore, be higher than ten institutions.

Summary of conclusions

Section 1: Factors encouraging development of Technology Enhanced Learning

Enhancing the quality of learning and teaching remains the primary driver for considering using TEL. However, *Improving student satisfaction (e.g. NSS scores)* swaps places with *Meeting student expectations* and is now the second most common driver for institutional TEL provision. This marks the first change in the Top 2 drivers since the 2008 Survey and reflects the increasing importance of improving student satisfaction as a consideration in TEL developments.
[Question 1.1]

Availability of TEL support staff and *Feedback from students* retain their positions as the Top 2 encouraging factors for the development of TEL. *Availability and access to tools across the institution* has dropped down the list of encouragers to 6th place, with *Central university senior management support* and *School/departmental senior management support* now in 3rd and 4th places in the rankings.
[Question 1.3]

Section 2: Strategic questions

Teaching, Learning and Assessment strategies remain by far the most common category influencing TEL development, referenced by 88% of respondents; this is over 30% higher than any other strategy that was mentioned. *Corporate* (53%) and *Library/learning resources* strategies (42%) were the next most commonly cited. Meeting expectations for the Student learning experience and ensuring student satisfaction remain important drivers for TEL.
[Question 2.1]

TEL governance is primarily managed through general *teaching and learning* channels (70%). *TEL/e-learning/blended committees* (52%) and *Learning spaces groups* (37%) were the next most commonly cited governance bodies. The policies linking strategy and TEL implementation that were referenced most were *Learning, teaching and assessment* (59%), *Lecture capture* (59%) and *VLE usage* (58%). References to lecture capture policy have increased from the figure recorded in the 2016 Survey and no doubt reflect the expansion in lecture capture provision across the sector.
[Questions 2.2 and 2.4]

Section 3: Technology Enhanced Learning currently in use

The identity of the main institutional VLE remains largely a choice between *Moodle* and *Blackboard*. They have the same combined percentage of use (88%) as in 2016 and in 2014, although the 2018 data reveals that *Moodle* is now the leading main institutional platform in use – up from 43% in 2016 to 46%, with *Blackboard* falling from 45% to 42%. The other key change from the last Survey has been the rise in the number of institutions using *Canvas* as their main institutional VLE, up from two in 2016 to eight in this year's Survey. In comparison, other VLEs have made little headway as main institutional platforms.

Looking at VLE usage in general, the other key development since 2016 has been the rise in adoption of *FutureLearn* by Pre-92 institutions, with overall usage across the sector up from 24% in 2016 to 30% (n=31), no doubt linked to increasing MOOC delivery using this platform. Russell Group institutions have the highest percentage of users of the *FutureLearn* platform (79%) as compared with other mission groups, as they did in 2016.
[Questions 3.1 – 3.3]

There has been an increase in the number of institutions with outsourced VLE provision since the last Survey, with 52% now choosing an external hosting model. This increase may be attributed to institutions opting for a cloud-based SaaS service, and this mode of VLE provision has doubled from 7% to 14%, when comparing data with the 2016 Survey. Lecture capture platforms are the second most commonly outsourced TEL service (46%), and this level of provision has doubled since the last Survey, reflecting the widespread adoption of recording services across the sector. Digital repositories, media streaming services and VLE platforms supporting open online courses are all now predominantly managed through cloud-based SaaS services.
[Questions 3.7 – 3.15]

TEL review activity is well established across the sector, with nearly half of the institutions, which responded to the Survey having conducted some form of TEL review over the last two years. VLE reviews remain the most common form of TEL review activity that institutions are engaged in.

Lecture capture is the next most common system to undergo a review with 57% of Pre-92 institutions having done so, compared with just 17% of Post-92 (17%) and 14% of Other institutions. This is a reversal of the results in 2016 where there were more Post-92 institutions carrying out reviews on these systems. E-portfolio and learning analytics were the 3rd most common TEL systems to be reviewed.

Nearly two-thirds of the institutions that responded to the Survey are planning to conduct TEL reviews over the next two years. The primary focus again appears to be on VLE reviews, with lecture capture the 2nd most common cited system for review – rising above e-assessment and learning analytics since the 2016 Survey. Of the other TEL systems that are candidates for review, e-assessment, learning analytics and Electronic Management Assignments (EMA) all feature in institutional plans.
[Questions 3.16 – 3.20]

Looking beyond the VLE and text-matching tools, there have been some notable shifts of position in the list of Top 10 centrally-supported TEL tools since the last Survey. *Lecture capture tools* rise to 6th position with 75% usage (up four places from 2016). *Document sharing tools* are up three places from 2016 and are now placed joint 4th with *Formative e-assessment tools* at 81% usage. *Electronic management of assignments* (a new response item for 2018) enters the Top 10 in joint 10th position at 67% usage, sharing the spot with *Personal response systems* (which re-enters the top ten after a brief hiatus in the 2016 results). It is worth noting though that the figure for *Electronic management of assignments* represents a much lower level of usage across the sector than has been recorded in previous Surveys for e-submission tools (93% in 2016), and possibly reflects a lesser level of integration of electronic submission and management tools within the VLE for the management of student coursework.
[Question 3.21]

There has been little change in the list of non centrally-supported tools. The Top 2 remain the same as they were in 2016, with *social networking tools* the most common, followed by *document sharing tools* and *blogs*. However, the actual number of institutions reporting use of non-centrally-supported tools has decreased since the last Survey; notably social networking tools have dropped from 59% in 2016 to 42% in 2018. This may well reflect the investment in institutional services and the growing adoption of centrally-supported alternatives by staff and students.
[Question 3.22]

The most common use of student/staff owned mobile devices is for *Accessing course/learning content and resources*, *Accessing course administration/information* and *Participating in interactive class teaching sessions*. High usage is also reported for accessing library resources and *Accessing grade/other academic progress information*. These findings are consistent with the results recorded in the 2016 Survey in relation to the types of services that had been optimised to be accessible via mobile devices, with a strong emphasis on access to course information and resources, i.e. institutions pushing out resources and course information to students, as opposed to mobiles being used to support active learning usage. The one exception to this is the use of mobile to support *Student interaction in lectures through polling and quizzing activities*, which appears to be well established across the sector (81%).
[Questions 3.23 and 3.24]

Section 4: Course delivery and evaluation of Technology Enhanced Learning

The sector level picture of how TEL tools are being used for blended, online or open course delivery is very similar to 2016. Blended learning based on the provision of supplementary learning resources remains the most common form of delivery. The 2016 results suggested that there had been increasing institutional engagement in the delivery of *fully online courses*, but activity appears to have levelled off in 2018. This is still primarily at a local level with delivery based in *schools/departments* or led by individuals in over 70% of institutions. *Open online course delivery* also remains consistent with the picture recorded in 2016, with activity primarily at local levels. The data indicates that activity is higher at school/department level in Post-92 than Pre-92; yet activity by individuals is higher in Pre-92.

The picture presented is of an emergent strategic approach to the use of online methods of delivery, based on school/department or individual initiatives and linked potentially to links with external partners. As a consequence, the evidence for this activity is not yet emerging through clear institutional structures.
[Question 4.1]

Section 3 of the Survey demonstrated that a wide range of tools are available across institutions. However, Section 4 shows that extensive use within institutions is limited to small set of tools. Only *VLEs*, *Text-matching tools*, *Electronic management of assessment* and *Reading list management software* are identified as being used by 50% or more of courses across half of respondents.
[Question 4.9]

Evaluation of the impact of TEL on both the *Student learning experience* and *Staff pedagogic practices* remains low across the sector. Where evaluations are taking place, the aspects of the impact focused on have been *General review of TEL services*, *Student or staff digital fluency/capability* and specific projects, such as *Lecture capture*. The purpose for undertaking evaluations has been identified as *Student or staff satisfaction* and *Determining the take-up of TEL services*. Pre-92 institutions are more likely to evaluate Lecture capture and Post-92 *Student digital fluency/capability*.
[Questions 4.10 – 4.19]

Section 5: Support for Technology Enhanced Learning tools

The number of units providing support for TEL has increased since the last Survey, but this appears to fluctuate every two years, which could indicate that TEL support structures are still evolving. This is reflected by the continuing changes in TEL staffing provision with 38% of respondents reporting some form of restructure of their department(s) or TEL provision. In addition, the 2018 Survey included a new response option relating to Distance/Online Learning units, which are now present in 23% of institutions.
[Questions 5.1 to 5.6]

The 2018 findings also suggest a continued period of growth in TEL staffing, albeit at a slower rate than previous years, with 40% of respondents reporting an increase in the number of staff in the past two years. This is reflected in the increase in mean FTE of staff and this trend looks set to continue with the majority of institutions foreseeing further changes, primarily relating to increasing numbers of staff and restructuring of their services.
[Questions 5.1 to 5.6]

Section 6: Looking to the future ....

Lack of time remains the leading barrier to TEL development, consolidating its position at the top of the list which it has held since the 2005 Survey. Culture continues to be a key barrier, with *Departmental\school culture* retaining 2nd place and *Institutional culture* moving back up to 4th place. *Lack of academic staff knowledge* moves up to 3rd position, from 6th place in 2016, and is potentially linked to the changing TEL landscape in light of the TEL system reviews reported in Section 3.
[Question 6.1]

Electronic management of assessment and *Lecture capture* retain a position in the Top 2 developments making the most demand on TEL support teams, now holding joint 1st position. Mobile technologies remain in the Top 3 list, continuing its decline indicating that mobile technologies have now become embedded. Moving into 3rd place is the *VLE* with institutions reporting that the implementation of a new VLE, VLE upgrades and minimum requirements for VLE use were the main areas placing demands on support. *Learning analytics* continues its slow growth as a development making demands on TEL support teams.
[Questions 6.2 and 6.3]

There have been several changes in the Top 5 challenges facing institutions looking two to three years ahead. *Electronic management of assessment* now tops the table, followed by *Learning analytics* and *new modes of delivery,* which have both entered the Top 5 for the first time. *Lecture capture/recording* and *technical infrastructure* drop out of the Top 5 challenges but remain in the Top 10. *Staff development* and *investment* continue to be the primary ways of addressing these challenges. To address the challenges relating to *new modes of delivery*, there is now greater emphasis on sharing good practice through *Communities of practice* and a new item relating to *Focussing on pedagogy and curriculum design*.
[Questions 6.4 and 6.5]

Section 1: Factors encouraging development of Technology Enhanced Learning

Section 1 of the Survey looked at the factors encouraging and promoting the development of TEL within higher education institutions and retained the same questions used in 2016. However, the response options have been updated to reflect key changes since the last Survey, such as the increasing importance of improving institutional reputation, developing digital capabilities, and establishing threshold and baseline standards for TEL usage. The response options also considered the importance of feedback from staff, and the influence of the Teaching Excellence Framework (TEF), on TEL developments.

Question 1.1: How important, if at all, have each of the following *driving factors* been for developing TEL and the processes that promote it to date?

Table 1.1a: Driving factors for TEL development (mean values and ranking for all institutions and type of institution)

Driving factors – Top 7	Total		Type					
			Pre-92		Post-92		Other	
			Mean	Rank	Mean	Rank	Mean	Rank
(Base: all respondents)	*(103)*		*(51)*		*(42)*		*(10)*	
Enhancing the quality of learning and teaching in general	3.84	1	3.80	1	3.88	1	3.90	1
Improving student satisfaction, e.g. NSS scores	3.75	2	3.73	2	3.81	2	3.60	=5
Meeting student expectations in the use of technology	3.52	3	3.41	4	3.62	3	3.70	=2
Improving access to online/blended learning for campus-based students	3.46	4	3.43	3	3.48	7	3.50	8
Widening participation/inclusiveness	3.43	5	3.31	5	3.57	=4	3.40	=9
Supporting the development of digital literacy skills or digital capability for students and staff	3.39	6	3.18	6	3.57	=4	3.70	=2
Helping to create a common user experience	3.33	7	3.14	7	3.50	6	3.60	=5

Table 1.1b: Driving factors for TEL development (mean values and ranking for all institutions and country of institution)

Driving factors – Top 7	Total		Country							
			Eng		Wal		Sco		NI	
			Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
(Base: all respondents)	*(103)*		*(83)*		*(7)*		*(12)*		*(1)*	
Enhancing the quality of learning and teaching in general	3.84	1	3.84	1	3.86	=1	3.83	1	4.00	=1
Improving student satisfaction, e.g. NSS scores	3.75	2	3.75	2	3.86	=1	3.67	=3	4.00	=1
Meeting student expectations in the use of technology	3.52	3	3.49	3	3.71	=4	3.67	=3	3.00	=11
Improving access to online/ blended learning for campus-based students	3.46	4	3.46	4	3.43	=11	3.42	=7	4.00	=1
Widening participation/ inclusiveness	3.43	5	3.40	5	3.71	=4	3.42	=7	4.00	=1
Supporting the development of digital literacy skills or digital capability for students and staff	3.39	6	3.39	6	3.71	=4	3.25	11	3.00	=11
Helping to create a common user experience	3.33	7	3.25	7	3.57	=8	3.67	=3	4.00	=1

Tables 1.1a and 1.1b summarise the returns for Question 1.1 showing the top seven rankings for all the data, ordering them according to their mean values by type of institution (1.1a) and by country (1.1b). The mean values were calculated from the number of responses given for each option.

Table 1.1c: Longitudinal view of the Top 7 factors encouraging development of TEL

Driving factor	ALL							
	2018	2016	2014	2012	2010	2008	2005	2003
Enhancing the quality of learning and teaching in general	1	1	1	1	1	1	1	1
Improving student satisfaction, e.g. NSS scores	2	3	-	-	-	-	-	-
Meeting student expectations in the use of technology	3	2	2	2	2	2	3	5
Improving access to online/ blended learning for campus-based students	4	5	-	-	-	-	-	-
Widening participation/ inclusiveness	5	10	9	8	5	4	7	4
Supporting the development of digital literacy skills or digital capability for students and staff	6	7	-	-	-	-	-	-
Helping to create a common user experience	7	4	5	5=	7	8	-	-

Table 1.1c shows that the top driver for TEL development has remained unchanged since the 2008 Survey, with *Enhancing the quality of learning and teaching* again leading the list. However, *Improving student satisfaction, e.g. NSS scores* has now overtaken *Meeting student expectations in the use of technology* and is now the second most common driver for institutional TEL provision. This reflects the increasing importance of improving student satisfaction as a consideration in TEL developments.

Improving access to online/blended learning for campus-based students remains in the list of leading drivers, moving from 5th to 4th place. However, this ranking is dominated by Pre-92 institutions with Post-92 and Other types ranking it significantly lower. Post-92 institutions rank *Assisting and improving the retention of students* 3rd, and for Other HE institutions, *Supporting the development of digital literacy skills or digital capability for students and staff* is ranked equal 2nd and *Improving institutional reputation* ranks equal 1st for Wales and 2nd for Scotland.

Widening participation/inclusiveness is again in the list of the leading driving factors – ranked 5th overall, having been ranked 10th in 2016. However, this is not the case for Other HE institutions (ranked 8th) which consider *Assisting and improving the retention of students* and *Helping to create a common user experience* along with *Improving student satisfaction*, e.g. NSS scores as their joint equal 5th ranked factors.

As in 2016, the lowest two ranking factors were *Improving access to learning through the provision of open education resources* and *Improving access to learning through the provision of open education courses (e.g. MOOCs)*. All institution types and countries have these two factors in their bottom three, although the actual ranking of these drivers does vary between them, with other factors, such as *Helping to support joint/collaborative course developments with other institutions*, *The formation of other partnerships with external institutions/organisations* and for Scotland *Responding to the Teaching Excellence Framework (TEF)* also seen as less important drivers for TEL development.

Question 1.2: Are there any other *driving factors* in your institution?

Table 1.2: Other driving factors for TEL development

Other driving factor	Frequency
(Base: all respondents)	*(18)*
Enhancing the student experience	4
Institutional strategies	4
Learning space/campus development	3
External influences	2
Achieve cost/efficiency savings	2
Flexibility and inclusivity	2
Facilitating online/distance learning	1
Employability	1
Identify students at risk	1

This was an open question inviting respondents to identify additional driving factors for the development of TEL. Table 1.2 captures the additional driving factors that were identified by respondents. Some of the responses reflected the pre-coded response options in Question 1.1, such as enhancing the student learning experience and facilitating online/distance learning. Four institutions noted driving factors related to institutional strategies and strategic priorities, which are the focus of Question 2.1. Learning space and campus development was a new driver emerging in the data this year with three institutions noting how changing their physical spaces was driving TEL developments.

Question 1.3: How important, if at all, are the following factors in *encouraging* the development of TEL and the processes that promote it?

Table 1.3a: Factors encouraging development of TEL (mean values and ranking for all institutions and type of institution)

Encouraging factors – Top 7	Total		Type					
			Pre-92		Post-92		Other	
			Mean	Rank	Mean	Rank	Mean	Rank
(Base: all respondents)	*(103)*		*(51)*		*(42)*		*(10)*	
Availability of TEL support staff	3.67	1	3.65	1	3.74	2	3.50	=2
Feedback from students	3.64	2	3.53	3	3.79	1	3.60	1
Central university senior management support	3.51	3	3.57	2	3.50	5	3.30	4
School/departmental senior management support	3.42	4	3.45	4	3.43	6	3.20	=5
Feedback from staff*	3.40	5	3.25	5	3.55	4	3.50	=2
Availability and access to tools across the institution	3.37	6	3.24	6	3.62	3	3.00	8
Committed local champions	3.15	7	3.18	7	3.17	9	2.90	9

Table 1.3b: Factors encouraging development of TEL (mean values and ranking for all institutions and country of institution)

Encouraging factors – Top 7	Total		Country							
			Eng		Wal		Sco		NI	
	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
(Base: all respondents)	*(103)*		*(83)*		*(7)*		*(12)*		*(1)*	
Availability of TEL support staff	3.67	1	3.65	=1	3.86	=1	3.67	=1	4.00	=1
Feedback from students	3.64	2	3.65	=1	3.86	=1	3.42	5	4.00	=1
Central university senior management support	3.51	3	3.46	3	3.86	=1	3.67	=1	4.00	=1
School/departmental senior management support	3.42	4	3.36	5	3.71	=4	3.58	3	4.00	=1
Feedback from staff*	3.40	5	3.39	4	3.71	=4	3.33	6	1.00	=10
Availability and access to tools across the institution	3.37	6	3.31	6	3.71	=4	3.50	4	4.00	=1
Committed local champions	3.15	7	3.08	8	3.71	=4	3.17	=9	4.00	=1

Tables 1.3a and 1.3b summarise the returns for Question 1.3, showing the Top 7 rankings for all the data, ordering them according to their mean values.

Figure 1.3: Longitudinal view of the Top 7 factors encouraging development of TEL

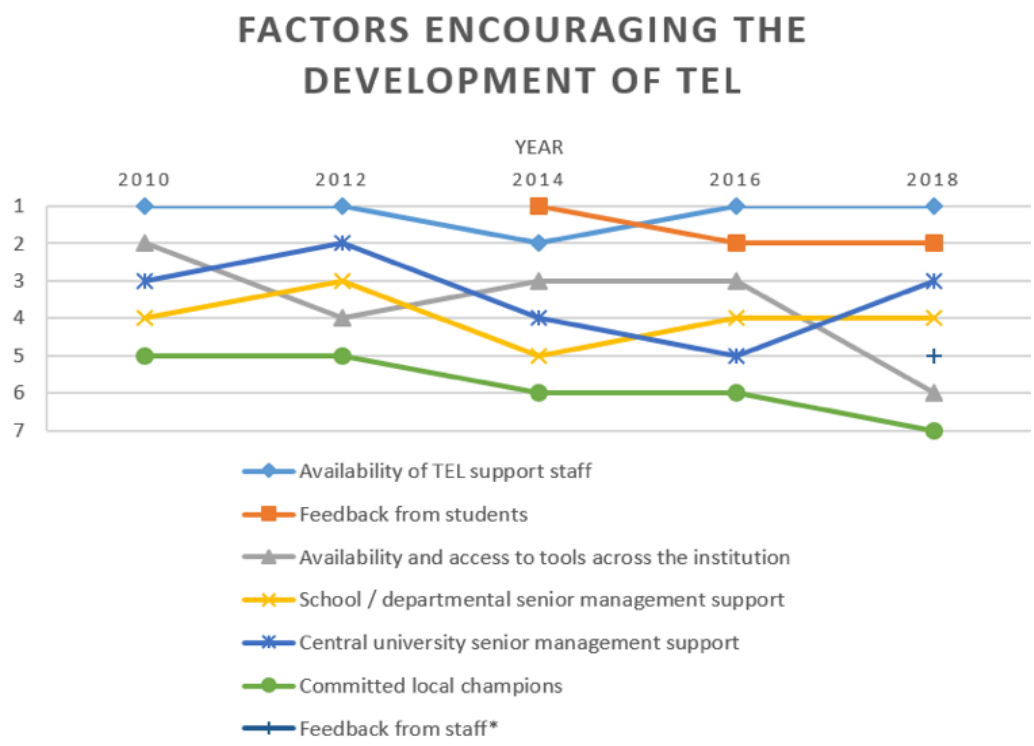


Figure 1.3 shows that the Top 7 encouraging factors have changed very little over the past eight years. *Availability of TEL support staff* and *Feedback from students* retain their positions as the Top 2 encouraging factors for the development of TEL. However, *Availability and access to tools across the institution* has dropped down the list of encouragers to 6th place, with *Central university senior management support* and *School/departmental senior management support* now occupying 3rd and 4th places. *Feedback from staff* was a new factor introduced in this year's Survey and appears as the 5th most commonly cited factor encouraging TEL development. *Availability of external project funding* continues to be the lowest ranked factor for 2018, perhaps reflecting the continued lack of availability of such funding opportunities across the sector.

For the different institution types there is not much variation in the overall ranking of the Top 7 encouraging factors, although for Post-92 institutions *Availability and access to tools across the institution* still features in the Top 5, ranked 3rd. The order of the Top 7 does vary depending on institution type, with Pre-92 institutions placing more importance on *Central university senior management support* – ranking this 2nd above *Feedback from students* which is ranked 3rd. For Post-92 and Other HE institutions. However, *Feedback from students* was ranked 1st whilst *Central university senior management support* was ranked 5th for Post-92 institutions, and 4th for Other institutions, with both ranking below *Feedback from staff*.

Availability of TEL support staff remains a leading encouraging factor for all countries. However, English, Welsh and Northern Irish institutions also ranked *Feedback from students* in joint 1st place, whilst Scottish institutions ranked *Central university senior management support* equal 1st, with *Feedback from students* ranking 5th. The Top 5 rankings by English and Welsh institutions mirror the overall rankings. In contrast, Scottish institutions rank *Availability and access to tools across the institution* 4th, above *Feedback from students* and *Feedback from staff*.

Question 1.4: Are there any *other* factors in your institution that encourage the development of technology enhanced learning and the processes that promote it?

Table 1.4: *Other* factors that encourage TEL development

Other factor identified	Frequency
(Base: all respondents)	*(14)*
Internal and external frameworks and strategies	4
Internal departments	3
Cost of buying software and resources	1
Sharing of good practice online	1
Steering group or committee	1
Responsive staff development opportunities	1
Motivation of e-learning team	1
Student wanting/not wanting TEL	1
Commercial partner knowledge and skills	1

Table 1.4 captures the most commonly referenced *other factors* encouraging the development of TEL that were identified by respondents. For this question there was once again some confusion between factors *encouraging* development of TEL and *enabling* use of TEL. Responses that articulated factors enabling use of TEL were therefore discounted for this question.

Internal and external frameworks and strategies in support of TEL development was the most commonly cited *other factor* by respondents. Respondents also highlighted the work of *Other internal departments* (e.g. Library, Staff Development) as encouraging factors for TEL development across an institution. The full set of results for this question is captured in Table A1.4.

Summary

Enhancing the quality of learning and teaching remains the top driver for TEL development. There is also a clear focus on the student experience across the sector, with improving student satisfaction and meeting student expectations consolidated as the other leading drivers guiding institutional activity. *Availability of TEL support staff* and *Feedback from students* remain the top encouraging factors for TEL development, followed by *central university* and *school/departmental senior management support*.

Section 2: Strategic questions

Section 2 of the Survey assessed the importance of internal and external strategies in influencing the development of TEL tools and services. This section has been revised since the 2016 Survey – questions linked to enabling adoption and promoting awareness have been dropped. In other questions, the options provided were rationalised: question 2.3 brought together external strategy documents and reports, which had previously been separate questions, and respondents were invited to identify the Top 3 documents rather than select all.

Question 2.1: Which, if any, *institutional strategies* inform the development of technology enhanced learning in your institution?

Table 2.1: Institutional strategies that have informed TEL development – Top 6

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(42)*	*(10)*	*(83)*	*(7)*	*(11)*	*(1)*
Teaching, learning and Issessment strategy	90	88%	82%	93%	100%	87%	100%	91%	100%
Corporate strategy	54	53%	46%	62%	50%	48%	71%	73%	100%
Library/learning resources strategy	43	42%	32%	50%	60%	42%	29%	46%	100%
Student learning experience strategy*	40	39%	34%	45%	40%	37%	57%	46%	0%
Information and Communication Technology (ICT) strategy	36	35%	32%	43%	20%	34%	57%	27%	100%
Technology enhanced learning or e-learning strategy	35	34%	30%	36%	50%	37%	14%	27%	0%

Question 2.1 has been retained from previous Surveys, enabling a comparison of rankings across the years. (See Table C2.1 for the complete list of rankings and totals for previous years.)

The *Teaching, learning and assessment strategy* tops the list and remains the most commonly cited strategy (88%) informing TEL development across institutional type, country and mission group categories.

The past three Surveys had shown an increase in the importance given to *Student learning experience/student engagement strategy*. In 2018, these were offered as separate items, with *Student learning experience strategy* being cited by 39% of respondents and *Student engagement survey* by 32% of respondents. While individually lower percentages than the 58% in 2016, taken together they indicate the importance of student experience and satisfaction, echoing the responses to Q1.1. Corporate strategy (53%) is consistent with the 2016 return (56%) and returns to 2nd place.

Beyond the Teaching, learning and assessment strategy, which is cited by 35% more institutions than any other strategies, the responses indicate a general levelling off or decline in the influence of other strategies upon TEL development. The influence of *Corporate strategy*, *Library/learning resources strategy* and *Student learning experience strategy* have all declined, though they remain in the Top 4. More Post-92 institutions report having strategies that address TEL than Pre-92 institutions, except for the *Open*, *International* and *Distance learning strategies* (see A2.1).

Two of the strategies addressing TEL, which are referenced more commonly in this year's Survey are *Estates* (up from 28% in 2016 to 33% and ranked 7th) and *Digital strategy/e-strategy* (up from 20% to 26% and ranked =11th). Qualitative responses to Q1.1, identifying driving factors for TEL developments also indicate that estates developments are emerging as a factor. *Student engagement strategy*, new for 2018, is ranked =8th.

Question 2.2: How is TEL governance managed within your institution? Do you have any of the following committees/working groups with an *institutional remit*, looking at TEL activity across the institution?

Question 2.2 was first introduced in 2016 to explore how the governance of TEL activities within an institution is managed. In 2018, more options were added for respondents to select from and this may account for a very different set of responses, in turn bringing to light a much wider range of approaches to governance within institutions. *Teaching and learning* (committees), which were not one of the options in 2016, are ranked Top in 2018; a higher proportion of Post-92 institutions selected this option than Pre-92 institutions. 2nd is *TEL/e-learning/blended learning*, ranked highest in 2016 and now 2nd in 2018, with 52% of respondents selecting this option. Interestingly, more Pre-92 institutions (60%) report this form of governance than Post-92 institutions (45%) in contrast with 2016. Pre-92 institutions also have higher levels of governance linked to *Learning spaces* (new for 2018) and *Open learning/MOOC development*, at similar levels to 2016. Table 2.2 presents the total responses and those for institutional type and country.

Table 2.2: Management of TEL governance within institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(42)*	*(10)*	*(83)*	*(7)*	*(11)*	*(1)*
Teaching and Learning*	71	70%	64%	79%	60%	65%	86%	91%	100%
TEL/e-learning/blended learning	53	52%	60%	45%	40%	49%	71%	55%	100%
Learning spaces*	38	37%	50%	26%	20%	35%	42%	56%	0%
Learning analytics*	35	34%	32%	43%	10%	29%	71%	46%	100%
Lecture capture*	32	31%	32%	36%	10%	30%	57%	27%	0%
Electronic Management of Assignments (EMA)*	29	28%	26%	36%	10%	27%	43%	36%	0%
Distance learning (fully online delivery)	26	26%	30%	21%	20%	25%	0%	36%	100%
Other 1	26	26%	24%	26%	30%	25%	29%	27%	0%
Open learning/MOOC development	20	20%	36%	5%	0%	19%	14%	27%	0%
e-assessment (eg. quizzes)*	14	14%	14%	17%	0%	11%	14%	36%	0%
Other 2	12	12%	16%	10%	0%	12%	0%	18%	0%
Other 3	5	5%	8%	2%	0%	5%	0%	9%	0%
Mobile learning	2	2%	4%	0%	0%	2%	0%	0%	0%
Other 4	2	2%	4%	0%	0%	2%	0%	0%	0%
Don't have committees/working groups with an institutional remit looking at TEL	11	11%	12%	7%	20%	12%	14%	0%	0%

Question 2.3: Which *three* external strategy documents or reports have been most useful in planning TEL in your institution?

Table 2.3: Three most useful external strategy documents in planning TEL – Top 4

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(50)*	*(40)*	*(10)*	*(81)*	*(7)*	*(11)*	*(1)*
Jisc: Digital Capability Framework (2015, 2017)*	39	39%	30%	48%	50%	42%	14%	36%	0%
UCISA: Survey of Technology Enhanced Learning for higher education (2012, 2014 and 2016)	37	37%	28%	45%	50%	37%	14%	55%	0%
NMC Horizon Report (2015 and 2017) Higher Education Edition	21	21%	26%	18%	10%	16%	43%	46%	0%
Jisc: Developing organisational approaches to digital capability (2017)*	19	19%	8%	30%	30%	16%	29%	27%	100%

Question 2.3 has been updated to ask respondents to identify the Top 3 strategy documents rather than select all that apply. Therefore, the potential counts per item in this question, compared to 2016, are much lower and longitudinal analysis is difficult.

Table 2.3 identifies the four most useful documents, these are *Jisc: Digital Capability Framework* (2015, 2017) (39%), the *UCISA TEL Survey* (37%), *NMC Horizon Report* (2015 and 2017) (21%) and *Jisc: Developing organisational approaches to digital capability* (2017) (19%). In 2016, the top strategies cited were *Jisc strategies* (71%) and *HEFCE strategies* (51%). For reports the most selected were *Jisc: Developing digital literacies* (73%) and the *UCISA TEL Survey* (61%).

Given the changes to the question, the dynamic nature of the TEL field and continued emergence of new reports and strategies, longitudinal analysis is problematic. It is though notable that reports on digital capabilities remain important, especially in Post-92 institutions, and the value of the UCISA surveys remains high.

Question 2.4: What institutional policies, if any, link strategy and implementation of TEL tools?

Table 2.4: Institutional policies which link strategy with implementation of TEL tools – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents		*(100)*	*(50)*	*(40)*	*(10)*	*(81)*	*(7)*	*(11)*	*(1)*
Learning, teaching and assessment policies	59	59%	52%	73%	40%	54%	57%	91%	100%
Lecture capture guidelines/policy	59	59%	70%	58%	10%	58%	71%	64%	0%
VLE usage policy (minimum requirements)	58	58%	40%	80%	60%	58%	71%	46%	100%
Faculty or departmental/school plans	44	44%	40%	55%	20%	46%	29%	36%	100%
VLE guidelines/description of VLE service	41	41%	38%	45%	40%	42%	43%	27%	100%

Learning, teaching and assessment policies were again the most frequently cited category linking institutional strategies with the implementation of TEL tools. At 59% this was down from the 70% recorded in 2016. Post-92 institutions again show a higher linkage between policy and implementation than Pre-92 institutions.

Lecture capture guidelines/policy appeared for the first time in 2016, with 44% of responding institutions having an institutional policy. This has now increased to 59% – equal with *Learning, teaching and assessment policies*. There is less of a difference between Pre-92 and Post-92 compared to 2016 indicating the increasing pervasiveness of lecture capture and the need for policies for this.

VLE usage policy (or minimum requirements) is ranked third and shows a slight decline in the number of responses compared to 2016. The clear difference between Pre-92 (40%) and Post-92 (80%) remains for this option.

In 2016, e-assessment/e-submission policy was included as an option, with a 50% return. For 2018, this was replaced by two options, *EMA policy* and *e-assessment policy*, which had 36% and 24% returns respectively. In both cases these policies are more prevalent in Post-92 institutions, particularly *e-assessment policy* (38% in Post-92, 14% in Pre-92).

Summary

Teaching, learning and assessment strategies and committees continue to dominate, with the importance of others remaining static or diminishing. However, estates and lecture capture committees and policies are growing in significance for TEL.

Section 3: Technology Enhanced Learning currently in use

Section 3 was redesigned in this year's Survey to focus on details of the TEL tools and services that are being used by institutions to support learning, teaching and assessment activities, rather than on the take-up and adoption of TEL tools and evaluation activities which were moved to a revised Section 4.

The section incorporated a series of questions on outsourcing of VLE and other institutional TEL services. It also included a mini section on collaboration in the delivery of TEL services, making a distinction in this year's Survey between collaboration with other HE institutions and collaboration with commercial partners. The question set on the review of institutional TEL services was also expanded to incorporate new items, such as the electronic management of assessments (EMA) and media streaming systems. Changes were also made to the question set on mobile devices to focus on how they are being used to support teaching, learning and assessment activities.

Question 3.1: Is there a VLE *currently* in use in your institution?

Table 3.1: Institutional VLE currently in use

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	103	99%	100%	100%	90%	99%	100%	100%	100%
No	1	1%	0%	0%	10%	1%	0%	0%	0%

Table 3.1 reveals that all respondents, bar one English HE institution, reported that they had at least one virtual learning environment in use within their institution. The institution without a VLE is using Google Classroom to support the delivery of taught programmes.

Question 3.2: Which VLE(s) is/are currently used in your institution?

This is a long standing question item, appearing in Surveys dating back to 2001. In this year's report data is presented for the first time on the number of VLE platforms that an institution is using. This information replaces the question item on *departments using a VLE in addition to the* main *centrally provided platform* that was not included in this year's Survey.

Table 3.2: Number of institutional VLEs currently in use

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
1	45	44%	28%	56%	78%	41%	71%	42%	100%
2	32	31%	31%	35%	11%	33%	14%	33%	0%
3	15	15%	20%	9%	11%	16%	14%	8%	0%
4	6	6%	12%	0%	0%	6%	0%	8%	0%
5	4	4%	8%	0%	0%	5%	0%	0%	0%
6	1	1%	2%	0%	0%	0%	0%	8%	0%

Table 3.2 shows that 44% of institutions use only one VLE system and three-quarters use two or fewer platforms – with a mean of two systems in use per institution across the sector. However, the range of VLE usage extends to six platforms in use – in one Pre-92 Scottish institution. Pre-92 institutions have the largest number of systems in use, a mean of 2.47 compared with 1.53 for Post-92 institutions and 1.33 for Other institutions. This finding is consistent with the data from previous Surveys, which reported on institutions with departments using their own VLE platforms; note the 2016 Survey data that revealed that 42% of Pre-92 institutions possess departmental platforms, in addition to the main institutional VLE, as compared with 16% of Post-92 institutions and 13% of Other institutions.

Table 3.2a: VLEs currently used – Top 5

Top 5 VLEs	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Moodle	57	55%	63%	42%	78%	57%	57%	50%	0%
Blackboard Learn	44	43%	41%	51%	11%	37%	71%	58%	100%
FutureLearn	31	30%	53%	7%	11%	31%	14%	33%	0%
Canvas (by Instructure)	16	16%	22%	9%	11%	18%	0%	8%	0%
Open Education (by Blackboard)	9	9%	4%	16%	0%	8%	0%	17%	0%

Table 3.2a (i): VLEs currently used – Top 5 (longitudinal)

Top 5 VLEs	2018	2016	2014	2012	2010	2008
Moodle	55%	53%	62%	58%	55%	55%
Blackboard Learn	43%	46%	49%	38%	9%	-
FutureLearn	30%	24%	5%	-	-	-
Canvas (by Instructure)	16%	7%	2%	-	-	-
Open Education (by Blackboard)	9%	9%	-	-	-	-

Table 3.2a highlights the most common platforms in use across the sector, with the full results presented in Table A3.2a. Table 3.2a (i) presents the longitudinal data for the Top 5 platforms dating back to 2008, with the full set of longitudinal results available in Table C3.2 in the Appendix.

Moodle and Blackboard have the largest market share, as they did in 2016; notably the percentage of institutions using Moodle is up from 53% in 2016 to 55%, although the actual number of institutions using the platform has only increased by one between 2016 and 2018. Blackboard has dropped from 46% in 2016 to 43% continuing the downward trend from the 49% recorded in 2014 – with five fewer institutions using the platform.

The key change from 2016 has been the rise in adoption of the FutureLearn platform by Pre-92 institutions, with overall usage across the sector up from 24% in 2016 to 30% (n=31), no doubt linked to increasing MOOC delivery using this platform. Russell Group institutions are the biggest users of FutureLearn (79%), as in 2016.

The other notable development has been the increasing market share of Canvas, which has more than doubled since 2016, up from seven institutions in 2014 to 16 in 2018. This rise has not been matched by other cloud-based platforms, such as Blackboard Ultra and Brightspace, which still have only limited adoption (n=3) across the sector. Indeed, uptake of Blackboard's hosted service for Moodle, Joule by Moodlerooms, has fallen from the three institutions which reported that they were using it in 2016 to just one in this year's Survey.

Of the other commercial platforms that are in use, Learning Pool, Aula, Virtual College and Administrate were all mentioned. WordPress was cited by three institutions as an open source platform that is currently in use. The overall picture, though, is one of consolidation across the sector, with the disappearance of platforms such as Blackboard Angel and Pearson eCollege from the marketplace. The continuing pace of VLE reviews (see Question 3.17) may also lead to a further rationalisation of institutional choices over platforms for accredited and open course delivery.

Question 3.3: Out of the above which is the *main* VLE in use across your institution?

Table 3.3: The *main* VLE in use – Top 4

Top 4 *main* VLEs	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Moodle	47	46%	45%	40%	78%	51%	29%	25%	0%
Blackboard Learn	43	42%	41%	49%	11%	36%	71%	58%	100%
Canvas (by Instructure)	8	8%	10%	5%	11%	8%	0%	8%	0%
Brightspace (by D2L)	2	2%	0%	5%	0%	2%	0%	0%	0%

Table 3.3 (i): The *main* VLE in use – Top 4 (longitudinal)

Top 4 *main* VLEs	2018	2016	2014	2012	2010	2008
Moodle	46%	43%	39%	31%	23%	11%
Blackboard Learn	42%	45%	49%	39%	9%	-
Canvas (by Instructure)	8%	2%	1%	-	-	-
Brightspace (by D2L)	2%	2%	2%	1%	1%	1%

Table 3.3 highlights the most common *main* VLE platforms in use across the sector, with the full results presented in Table A3.3. Table 3.3 (i) presents the longitudinal data for the Top 4 *main* VLE platforms dating back to 2008, with the full set of longitudinal results available in Table C3.3 in the Appendix.

There has been little change in the identity of the *main* institutional platforms since 2016, and this remains largely a choice between Blackboard and Moodle. Table 3.3(i) shows that they have the same combined percentage of use (88%) as they did in 2016 and in 2014, although the 2018 data reveals that Moodle is now the leading main institutional platform in use – up from 43% in 2016 to 46%, with Blackboard falling from 45% to 42%. When comparing the actual numbers of institutions using these solutions over the past two Surveys, the Moodle figure is unchanged (n=47), whereas the figure for Blackboard has dropped from 48 in 2016 to 43 in this year's Survey.

The other key change from the last Survey has been the rise in the number of institutions using Canvas as their main institutional VLE, up from two in 2016 to eight in this year's Survey. In comparison, the other VLEs have made little headway as alternative main institutional platforms. Indeed, some solutions, such as Blackboard Classic, Pearson eCollege and SharePoint that were cited in the 2016 results, are not referenced in this year's Survey and appear to be no longer in use. (See Table C3.3 for a breakdown of results by main institutional platform over the years).

Question 3.4: Is the main VLE used for each of the following or not?

Question 3.4 was introduced for the first time in the 2016 Survey, with the intention of learning more about the role of the main institutional VLE in supporting different modes of course delivery, ranging from support for blended learning for campus-based courses through to open online course delivery.

Table 3.4 (i): The *main* VLE and blended learning (campus-based courses)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with a main VLE		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	99	96%	94%	98%	100%	95%	100%	100%	100%
No, another VLE (mainly) used	0	0%	0%	0%	0%	0%	0%	0%	0%
No, mode not supported using VLE across institution	0	0%	0%	0%	0%	0%	0%	0%	0%
No, mode not supported across institution	4	4%	6%	2%	0%	5%	0%	0%	0%

Table 3.4 (i) confirms that the main VLE platform is used by all institutions that are engaged in blended learning course delivery.

Table 3.4 (ii): The *main* VLE and distance learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with a main VLE		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	80	77%	75%	86%	56%	76%	86%	83%	100%
No, another VLE (mainly) used	10	10%	14%	7%	0%	10%	0%	17%	0%
No, mode not supported using VLE across institution	1	1%	2%	0%	0%	1%	0%	0%	0%
No, mode not supported across institution	12	12%	10%	7%	44%	13%	14%	0%	0%

Table 3.4 (ii) reveals both the extent of distance learning across the sector (87% of responding institutions are delivering courses of this type) and the reliance on the main institutional VLE to support this activity. Of the 10 institutions that have opted to use a different platform, four institutions use Moodle, two use Blackboard Learn and two use FutureLearn, with WordPress and a locally developed platform also mentioned.

Table 3.4 (iii): The *main* VLE and open online learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a main VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	7	7%	8%	5%	11%	6%	29%	0%	0%
No, another VLE (mainly) used	39	38%	53%	28%	0%	39%	0%	50%	100%
No, mode not supported using VLE across institution	7	7%	6%	9%	0%	7%	0%	8%	0%
No, mode not supported across institution	50	48%	33%	58%	89%	48%	71%	42%	0%

Open online learning activities are far less developed across the sector than blended and distance learning delivery, with the picture largely unchanged from the last Survey. This context is indeed consistent with the findings from question 1.1 of the Survey on driving factors for developing TEL, with *Improving access to learning through the provision of open education resources* and *Improving access to learning through the provision of open education courses (e.g. MOOCs)* representing the two lowest ranking factors.

Table 3.4 (iii) shows that 48% of institutions (n=50) are not engaged in any form of open online delivery at all. Only seven institutions use their main VLE platform for open online learning, with 39 opting to use a different delivery platform to support this activity. Unsurprisingly, dedicated MOOC platforms account for the majority of alternative VLEs in use for open learning, with 23 institutions using FutureLearn's platform and six using Open Education by Blackboard and six using Coursera. Other MOOC platforms that are referenced include edX (n=3), Brightspace, the Canvas Network, CourseSites by Blackboard, Moodle and PebblePad (all n=1).

Question 3.5: Thinking about the (main) VLE in use, which of the following best describes how your platform is technically managed?

Table 3.5: Hosting results for *main* institutional VLE

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a main VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Institutionally hosted and managed	50	48%	55%	44%	33%	45%	86%	58%	0%
Institutionally managed but hosted by a third party	39	38%	31%	42%	56%	42%	14%	25%	0%
Cloud-based Software as a Service (SaaS) multi-tenant service	14	14%	14%	14%	11%	13%	0%	17%	100%

This question aimed to determine the extent to which VLE provision is being outsourced by higher education institutions. Table 3.5 reveals that the percentage of institutionally hosted main VLE services is continuing to decline from the high of 67% recorded in 2014 and 57% in 2016 to 48% in 2018; in absolute numbers there are ten fewer institutionally hosted and managed VLE services reported in this year's Survey compared with the figure recorded in 2016. Interestingly, the number of institutions that have VLE services hosted by a third party (38%) remains almost at the exact same level as in 2016 (37%). The main change since the last Survey has been the increase in the number of institutions opting for a cloud-based SaaS service, which has doubled from 7% to 14%, when comparing data with the 2016 Survey.

Table 3.5 (i): Hosting results per platform for main institutional VLE – Top 4

Top 4 main VLEs	Total	Institutionally hosted and managed		Institutionally managed but hosted by third party		Cloud-based Software as a Service/multi-tenant service	
(Base: all respondents with main VLE)	*(103)*	*No*	*%*	*No*	*%*	*No*	*%*
Moodle	47	27	57%	17	36%	3	6%
Blackboard Learn	43	20	47%	21	49%	2	5%
Canvas (by Instructure)	8	0	0%	0	0%	8	100%
Brightspace (by D2L)	2	1	50%	0	0%	1	50%

Table 3.5 (i) provides a breakdown of results per platform, performed through a cross-tabulation of data for *main institutional VLE* (Table 3.3) and *whether hosting is taking place* (Table 3.5). The results show that the institutions using Canvas are based exclusively on SaaS services, but there has been very limited adoption of cloud-based versions of Moodle and Blackboard Learn software – the leading main institutional VLE platforms within the UK HE sector to date.

Table C3.5 (i) in the Appendix compares 2018 hosting results with the picture reported in 2016 and reveals that there have been slight increases in the combined percentages of hosted and cloud-based services for Moodle and Blackboard platforms, as compared with locally managed services. The most notable change though has been the reduction in the number of institutionally hosted and managed Blackboard clients (down from 26 in 2016 to 20 in 2018), which appear to have moved to hosted services or other platforms (see Table 3.18 for a summary of outcomes from recent institutional VLE reviews).

Question 3.6: Who is the external provider that hosts your (main) VLE?

Question 3.6 invited respondents using an externally hosted service for their main institutional VLE to reveal the identity of their service provider. Note that the format of this question was changed from an open response question in 2016 to a pre-coded list of options in 2018.

Table 3.6: External hosting provider for *main* institutional VLE

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents using external provider to host main VLE)		*(53)*	*(23)*	*(24)*	*(6)*	*(46)*	*(1)*	*(5)*	*(1)*
Blackboard Managed Hosting	23	43%	35%	58%	17%	37%	100%	80%	100%
CoSector (previously ULCC)	16	30%	35%	21%	50%	35%	0%	0%	0%
Other external provider	7	13%	13%	17%	0%	15%	0%	0%	0%
Instructure	5	9%	13%	4%	17%	9%	0%	20%	0%
Moodlerooms	1	2%	4%	0%	0%	2%	0%	0%	0%
Webanywhere	1	2%	0%	0%	17%	2%	0%	0%	0%

Table 3.6 (i): Cross-tabulation of external hosting provider and *main* institutional provider

	Blackboard Learn		Bright space (by D2L)		Canvas		Joule (by Moodle rooms)		Moodle		Total
(Base: all respondents with externally hosted main VLE)	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*(53)*
Blackboard Managed Hosting	23	100%	-	-	-	-	-	-	-	-	23
CoSector (previously ULCC)	-	-	-	-	-	-	-	-	16	80%	16
Other external provider	-	-	1	100%	3	37%	-	-	3	15%	7
Instructure	-	-	-	-	5	63%	-	-	-	-	5
Moodlerooms	-	-	-	-	-	-	1	100%	-	-	1
Webanywhere	-	-	-	-	-	-	-	-	1	5%	1
Total	23		1		8		1		20		53

Table 3.6 shows the range of external providers hosting main institutional VLE platforms and Table 3.6(i) presents a cross-tabulation of data comparing external provider (Q3.6) with main institutional VLE (Q3.3) – revealing which platforms external providers are hosting.

The numbers of institutions using the services of Blackboard Managed Hosting to host Blackboard Learn and CoSector (previously University of London Computing Centre) to host Moodle remain unchanged from the last Survey. Of the other external providers that were mentioned in this year's Survey, three institutions referenced their use of Canvas by Instructure (despite Instructure being a listed option to select), two institutions identified Catalyst as host for their Moodle platform and one referenced Desire2Learn as host for Brightspace. Synergy Learning was not referenced in this year's Survey as a hosting provider.

Question 3.7: Does your institution currently outsource its *provision* of any of the following? Provision refers to an institutional service being hosted by another organisation.

Questions 3.7 to 3.11 focused on the types of institutional TEL services, which are outsourced (3.7) or under consideration for outsourcing (3.10), how they are outsourced (3.8) and whether institutions are looking to bring services back in house (3.9).

Table 3.7: Institutional services which are currently outsourced

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Lecture capture platform	48	46%	51%	49%	10%	49%	57%	25%	0%
Digital repositories (e.g. Google Drive, Google Docs)	35	34%	37%	30%	30%	36%	29%	25%	0%
e-portfolio	35	34%	29%	40%	30%	35%	14%	42%	0%
Media streaming*	34	33%	33%	33%	30%	33%	14%	42%	0%
VLE platform – supporting the delivery of blended learning courses	33	32%	31%	30%	40%	36%	0%	17%	100%
VLE platform – supporting the delivery of open online courses	28	27%	35%	23%	0%	27%	14%	25%	100%
VLE platform – supporting the delivery of fully online courses	26	25%	26%	28%	10%	25%	29%	17%	100%
No outsourced provision	21	20%	16%	26%	20%	20%	14%	25%	0%
Learning analytics*	9	9%	4%	14%	10%	7%	0%	17%	100%
Don't know	2	2%	2%	2%	0%	2%	0%	0%	0%

Table 3.7 reveals that lecture capture platforms are the most commonly outsourced TEL service (46%), and uptake of this mode of provision has doubled since the last Survey, reflecting both the widespread adoption of recording services across the sector together with the recent move by the leading vendors to a *hosting only* model; (Table 3.21 shows that 75% of respondents (n=77) now have such a centrally-supported recording service).

A clarification for *Digital repositories* was presented in this year's Survey question set, with an illustrative reference made to the suite of Google tools (e.g. Google Drive, Google Docs) as examples of outsourced repository tools. This clarification may, in part, explain why we see a marked increase in outsourcing figures against this item in this year's Survey results (see Table C3.7) as the term is better understood, rising from 10% in 2016 to 34%. Table 3.7 shows that the outsourcing of e-portfolio and media streaming services is also being supported at a similar level across the various types of institutions.

Question 3.8: How is the provision of these services currently outsourced?

Table 3.8: How the institutional services identified in Question 3.7 are currently outsourced

Response	Institutionally managed but hosted by a third party		Cloud-based Software as a Service (SaaS) multi-tenant service		Don't know	
	No.	Total	No.	Total	No.	Total
Lecture capture platform	12	25%	35	73%	1	2%
Digital repositories (e.g. Google Drive, Google Docs)	10	29%	25	71%	0	0%
e-portfolio	19	54%	16	46%	0	0%
Media streaming*	12	35%	21	62%	1	3%
VLE platform – supporting the delivery of blended learning courses	20	61%	13	39%	0	0%
VLE platform – supporting the delivery of open online courses	11	39%	17	61%	0	0%
VLE platform – supporting the delivery of fully online courses	13	50%	12	46%	1	4%
Learning analytics*	4	44%	4	44%	1	12%

This question aimed to identify the type of outsourcing used for the institutional services listed in Question 3.7. The data shows that *lecture capture, digital repositories, media streaming services* and *VLE platforms supporting open online courses* are all predominantly managed through cloud-based SaaS services. Table C3.8 again shows that there have been big shifts away from *institutionally managed but externally hosted* services for *lecture capture* and *digital repositories*, and towards SaaS delivery since the last Survey. This development may be attributed, in part, to the changing way in which vendors manage these services. Interestingly though, SaaS delivery is less established for other TEL related outsourced services, such as *VLE platform provision for blended and fully online courses*, with the balance of outsourcing activity still based on institutionally managed but externally hosted delivery models.

Question 3.9: Which, if any, of the services that are currently outsourced are you considering bringing back in to be institutionally managed?

Table 3.9: Services that are currently outsourced are under consideration for bringing back in to be institutionally managed

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that currently outsource some provision)		*(80)*	*(42)*	*(30)*	*(8)*	*(42)*	*(30)*	*(6)*	*(2)*
None being considered for bringing back in house	80	100%	100%	100%	100%	100%	100%	100%	100%

This question invited respondents to consider whether they would bring any outsourced TEL services back *in house*, reverting to an institutionally managed service model. Table 3.9 clearly shows that this is not a likely development, with no institutions currently considering bringing back services to an institutionally managed service model.

Question 3.10: Is your institution formally considering the outsourcing of some or all of your *provision* for any of the following? Provision refers to an institutional service being hosted by another organisation?

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	48	46%	55%	41%	20%	41%	57%	67%	100%
None being considered for outsourcing	47	45%	41%	47%	60%	49%	43%	25%	0%
Don't know	9	9%	4%	12%	20%	10%	0%	8%	0%

Question 3.10 invited respondents to confirm whether they were considering outsourcing the provision of any of their existing institutionally managed TEL services. 46% of respondents confirmed that they were considering such a development, with Pre-92 institutions (55%) most commonly considering the outsourcing of TEL service provision.

Table 3.10 (a): Services being formally considered for outsourcing – Top 5

Top 5 services	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
VLE platform – supporting the delivery of blended learning courses	21	20%	24%	21%	0%	16%	57%	33%	0%
VLE platform – supporting the delivery of fully online courses	17	16%	20%	14%	10%	14%	14%	33%	0%
Learning analytics*	16	15%	14%	19%	10%	14%	0%	33%	0%
Lecture capture platform	15	14%	20%	12%	0%	11%	29%	25%	100%
Media streaming*	10	10%	8%	14%	0%	10%	14%	0%	100%

Following on from Table 3.10, Table 3.10 (a) identifies the services that are being considered for outsourcing. The results show that the leading candidate for outsourcing is the VLE platform supporting blended learning, followed by the VLE platform supporting fully online courses. Although the numbers are quite small, consideration of outsourced VLE provision for these activities reflects the prevailing trend in VLE service management, with the move away from institutionally hosted and managed services in this domain, as revealed in Table 3.5.

Question 3.11: What option(s) are being considered for the outsourcing of this provision?

Table 3.11: Options being considered for outsourcing of Top 5 services

Top 5 services	Institutionally managed but hosted by a third party		Cloud-based Software as a Service (SaaS) multi-tenant service		Don't know/ options still being considered	
	No.	Total	No.	Total	No.	Total
VLE platform – supporting the delivery of blended learning courses	2	10%	10	48%	9	43%
VLE platform – supporting the delivery of fully online courses	0	0%	10	59%	7	41%
Learning analytics*	1	6%	4	25%	11	69%
Lecture capture platform	1	6%	10	67%	4	27%
Media streaming*	2	20%	4	40%	4	40%

This question aimed to identify the type of outsourcing being considered for the institutional services listed in Question 3.10. The data shows that SaaS is the primary method of outsourcing being considered for all candidate services, although a great deal of uncertainty surrounds the question of how new institutional TEL services such as learning analytics should be managed.

Question 3.12: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff? Please include institutions both in the UK and abroad.

Table 3.12: Considered collaboration with other HE institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
No, have not considered	72	69%	65%	70%	90%	68%	57%	83%	100%
Don't know	14	13%	15%	12%	10%	15%	14%	0%	0%
Yes, and do collaborate as a result	7	7%	8%	7%	0%	6%	14%	8%	0%
Yes, currently under consideration so no decision reached	6	6%	4%	9%	0%	6%	0%	8%	0%
Yes, did consider but decided *not* to collaborate	5	5%	8%	2%	0%	5%	14%	0%	0%

Table 3.12 summarises the returns for Question 3.12, which invited respondents to confirm whether they had considered collaboration with other HE institutions in the delivery of TEL services. As in previous surveys, the majority of institutions (74%) have not considered or are not currently collaborating with other HE institutions.

Question 3.13: What (do you collaborate/are you considering collaborating/did you consider collaborating) on?

Table 3.13: Nature of collaboration with other HE institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that considered collaboration with other HE institutions)		*(18)*	*(10)*	*(8)*	*(0)*	*(14)*	*(2)*	*(2)*	*(0)*
Designing and sharing course resources	8	44%	40%	50%	0%	50%	50%	0%	0%
Other idea for collaboration	7	39%	60%	13%	0%	36%	50%	50%	0%
Joint course collaboration, blended learning (fly out faculty, teach in situ)	5	28%	30%	25%	0%	29%	50%	0%	0%
Joint course delivery, fully online	4	22%	20%	25%	0%	21%	0%	50%	0%

In this year's Survey, respondents considering collaboration with other HE institutions in the delivery of TEL services were presented with pre-coded response options for the first time. Table 3.13 summarises the results, revealing that *designing and sharing course resources* is the most common form of collaboration. Of the other ideas for collaboration that were mentioned, shared hosting of VLE platforms (n=3), a shared data centre (n=1) and joint employment of a VLE service manager across institutions (n=1) were noted.

Question 3.14: Has your institution formally considered collaboration with commercial partners in the delivery of TEL services or resources to staff? Please include partners both in the UK and abroad.

Table 3.14: Considered collaboration with commercial partners

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
No, have not considered	51	49%	43%	54%	60%	44%	86%	67%	0%
Yes, and do collaborate as a result	18	17%	23%	14%	0%	19%	14%	8%	0%
Yes, currently under consideration so no decision reached	18	17%	18%	16%	20%	19%	0%	8%	100%
Don't know	13	13%	12%	12%	20%	16%	0%	0%	0%
Yes, did consider but decided not to collaborate	4	4%	4%	5%	0%	2%	0%	17%	0%

Questions 3.14 and 3.15 were new additions to the Survey and asked respondents to confirm whether they had considered collaboration with commercial partners in the delivery of TEL services or resources to staff. Table 3.14 reveals that nearly half of the respondents (49%) have not considered collaborations of this type, although the combined number of institutions that do collaborate or are currently considering doing so with commercial partners (34%; n=36) is far greater than the number considering collaborations with HE institutions (13%; n=13), as recorded in Table 3.12.

Question 3.15: What (do you collaborate/are you considering collaborating/did you consider collaborating) on?

Table 3.15: Nature of collaboration with commercial partners

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that considered collaboration with commercial partners)		*(40)*	*(23)*	*(15)*	*(2)*	*(34)*	*(1)*	*(4)*	*(1)*
Fully online/distance learning	35	88%	87%	93%	50%	88%	0%	100%	100%
Design and delivery of open learning	10	25%	35%	13%	0%	29%	0%	0%	0%
Degree apprenticeships	5	13%	13%	13%	0%	12%	0%	25%	0%
Other idea for collaboration	2	5%	0%	7%	50%	3%	100%	0%	0%

Respondents considering collaboration with commercial partners in the delivery of TEL services were presented with pre-coded response options to help identify the nature of the collaboration. Table 3.15 summarises the results, revealing that collaboration in *fully online/distance learning* is the most common form of activity (88%; n=35), followed by collaboration in the *design and delivery of open learning* (25%; n=10) and *degree apprenticeships* (13%; n=5).

Question 3.16: Have you undertaken a review of a major institutional TEL facility or system in the *last two years*?

The next set of questions (3.16 – 3.20) was adapted from previous Surveys to include a broader focus on TEL review activities. In 2012 and 2014, the question set focused exclusively on VLE review activity, but in this year's Survey – following on from the change made in 2016 – participants were invited to report on any TEL facility or system that they had reviewed. New response items were included in this year's Survey on Electronic Management of Assignments (EMA) and media streaming.

Table 3.16: Institutional review of TEL facility or system in last two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	49	47%	45%	44%	70%	46%	14%	67%	100%
No	55	53%	55%	56%	30%	54%	86%	33%	0%

Table 3.16 confirms that TEL review activity is well established across the sector, with nearly half (47%) of the institutions which responded to the Survey having conducted some form of TEL review in the last two years. TEL review activity is fairly evenly spread across the institutional types. However, two-thirds (67%) of the Scottish institutions that responded were conducting reviews (up from 39% in 2016), with just under half (46%) of English institutions also conducting reviews (down from 55% in 2016); the percentage of Welsh institutions conducting this activity has decreased from 50% in 2016 to only 14% in 2018.

Question 3.17: Which major TEL facilities or systems have you reviewed in the *last two years*?

Table 3.17: TEL facilities or systems that have been reviewed in the last two years – Top 6

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have undertaken a review)		*(49)*	*(23)*	*(19)*	*(7)*	*(39)*	*(1)*	*(8)*	*(1)*
VLE	40	82%	70%	95%	86%	80%	100%	88%	100%
Lecture capture	23	47%	57%	47%	14%	49%	100%	38%	0%
e-portfolio	13	27%	13%	37%	43%	26%	100%	25%	0%
Learning analytics	13	27%	26%	37%	0%	21%	100%	38%	100%
Electronic Management of Assignments (EMA)*	9	18%	26%	16%	0%	15%	100%	25%	0%
Media streaming*	9	18%	17%	16%	29%	18%	0%	25%	0%

The number of institutions conducting VLE reviews has decreased from 83% (n=47) in 2016 to 82% (n=40) in 2018 but is still the most common form of TEL review activity that institutions are engaged in and tops the list in Table 3.17. Lecture capture is the next highest system to undergo a review with 57% of Pre-92 institutions having done so, compared with just 47% of Post-92 and 14% of Other institutions. This is a reversal of the results in 2016 when there were more Post-92 institutions carrying out a review on these systems. Indeed, this picture is reflected in the mission group data, with the Russell Group having the highest percentage of members which have conducted a lecture capture review (71%) in this year's Survey, compared with the lowest percentage in 2016 (27%). E-portfolio and learning analytics were the third most common TEL systems to be reviewed. Million+ is again the most engaged mission group in reviewing learning analytics provision, with 71% of members confirming that they have done so over the past two years, compared with the 100% that had done so in the last Survey.

Table 3.17 (i): Cross-tabulation of *main institutional VLE* with *VLE review conducted in the last two years*

Main institutional VLE	Conducted review in last two years		
	No.	*Main VLE total (3.3)*	%
Blackboard Learn	16	*43*	37%
Moodle	15	*47*	32%
Canvas (by Instructure)	5	*8*	63%
Brightspace (by D2L)	2	*2*	100%
Joule (by Moodlerooms)	1	*1*	100%
Sakai	1	*1*	100%

Note: n=49 for Table 3.17 (i)

Table 3.17 (i) provides a breakdown of results per platform, performed through a cross-tabulation of data for *main institutional VLE* (Table 3.3) and *whether a review of the VLE has taken place in the last two years* (Table 3.17). Care needs to be taken in interpreting the data from this table. The reviews will not necessarily have taken place for the platforms listed in Table 3.17 – in some cases they will have been for predecessor systems. This appears to be the case for Canvas users; whilst the results suggest that institutions using Canvas as their main VLE have recorded the highest level of evaluation activity (63%), the data from Table 3.18 (i) below shows that the outcomes of five institutional VLE reviews have resulted in the adoption of Canvas as the new institutional platform, with the reviews focusing on use of the predecessor platform. Of the two main platforms used by the majority of institutions, there is only a small difference in review percentages with Blackboard Learn having slightly more with 37% and Moodle with 32%. This has changed since 2016 when there was a clearer majority of reviews on Moodle platforms (55%) and 2014 when more reviews took place on Blackboard Learn (59%).

Question 3.18: Please write the outcome of the review on these TEL facilities or systems.

Table 3.18 (i) below summarises the outcomes of the VLE reviews that were reported in this year's Survey and Table C3.18 in the Appendix presents a longitudinal picture of review outcomes looking back to 2012. The results show that the decision to switch institutional platforms (n=10) was the most common one to take in 2018 – in marked contrast to 2016 when only four institutions switched platforms – followed by a decision to remain with the current platform (n=8) or upgrade to the latest version (n=7).

Table 3.18 (i): Outcomes of the VLE review – Top 5

Top 5 *(Base: all respondents)*	**Frequency** *(40)*
Switch to a different VLE platform	**10**
• From Moodle to Canvas (by Instructure)	(2)
• From Blackboard to Canvas (by Instructure)	(2)
• From Moodle to Brightspace (by Desire2Learn)	(2)
• From Blackboard to Brightspace (by Desire2Learn)	(1)
• From Pearson Learning Studio to Canvas (by Instructure)	(1)
• From Sakai to Canvas	(1)
• From not specified to Canvas (by Instructure)	(1)
Continue with the same VLE platform	**8**
• Blackboard Learn	(4)
• Moodle	(3)
• Brightspace (by Desire2Learn)	(1)
Continue with the same platform and upgrade to latest version	**7**
• Moodle	(5)
• Blackboard	(2)
Review process not yet completed	**4**
• Blackboard Learn	(4)
Switch to external hosting for same VLE platform	**4**
• Move to Blackboard Managed Hosting (for Blackboard Learn)	(3)
• Move to external hosting provider (for Moodle)	(1)

Tables 3.18 (ii) – (x) summarise the outcomes from the TEL systems that have been reviewed. Table 3.18 (ii) shows that lecture capture reviews have mostly focused on the implementation or piloting of new systems. Table 3.18 (iii) reveals a similar picture for *e-portfolio provision*, with most reviews introducing or changing systems. Table 3.18 (vii) summarises the other TEL systems mentioned by respondents; *personal response software* was the leading *other* system under review, reported by three respondents.

Table 3.18 (ii): Outcomes of the lecture capture review

Top 5 *(Base: all respondents)*	**Frequency** *(23)*
New system implementation/pilot	**11**
• Panopto	(6)
• Not specified	(3)
• Institutional solution	(1)
• Planet eStream	(1)
Change of system	**3**
• Medial to Panopto	(1)
• Echo360 to Panopto	(1)
• Kaltura to Panopto	(1)
Upgrade current platform	**2**
• Panopto	(2)
Stay with current platform	**2**
• Panopto	(2)
In progress	**2**

Table 3.18 (iii): Outcomes of the e-portfolio review

Top 5 *(Base: all respondents)*	**Frequency** *(13)*
Change/introduction of system	**4**
• PebblePad to Campus Press	(1)
• Mahara to Brightspace ePortfolio	(1)
• Mahara to WordPress	(1)
• PebblePad	(1)
In progress	**4**
Upgrade current system	**2**
• Mahara	(1)
Continue with current system	**2**
• Blackboard ePortfolio	(1)
• PebblePad	(1)
Move to self-hosting	**1**
• Mahara	(1)

Table 3.18 (iv): Outcomes of the Learning Analytics review

Top 3 *(Base: all respondents)*	**Frequency** *(13)*
Jisc Partnership	3
Pilot of service	3
In progress	3

Table 3.18 (v): Outcomes of the EMA review*

Outcomes *(Base: all respondents)*	**Frequency** *(9)*
Submission recommendation	**6**
• Install or upgrade Turnitin Plugin to Moodle	(2)
• Use Blackboard Grades Journey	(1)
• Update integration of Turnitin in Blackboard	(1)
• Use both Blackboard and Turnitin for submissions	(1)
• Move from SITS/eVision to Moodle	(1)
Move to fully online submission, grading and feedback	**2**
In progress	**1**

Table 3.18 (vi): Outcomes of the media streaming review*

Top 2	**Frequency** *(8)*
Move system	**3**
• From Adobe Flash to Planet E Stream	(1)
• Migrated to alternative media streaming provider	(1)
• From Helix to Planet eStream	(1)
Stayed with current system	**2**
• CoSector (previously ULCC)	(1)
• Vimeo (and Panopto)	(1)

Table 3.18 (vii): Other

Top 4 *(Base: all respondents)*	Frequency *(7)*
Polling Software	**3**
• Turning Point to Mentimeter	(1)
• Poll Everywhere	(1)
• Turning Technologies (ResponseWare)	(1)
Review in progress (system not specified)	**2**
Moved systems (system not specified)	**1**
Remain with Turnitin but review after new system is implemented	**1**

Table 3.18 (viii): Outcomes of the e-assessment review

Top 4 *(Base: all respondents)*	Frequency *(6)*
Platform	**3**
• Use Blackboard Grades Journey	(1)
• Moodle	(1)
• Stayed with Turnitin	(1)
Review of policy and procedures	**1**
Investigate further Wiseflow	**1**
Upgrade and partial move	**1**
• Examstarts and QuestionMark Perception (SaaS)	(1)

Table 3.18 (ix): Outcomes of the MOOC platform review

Outcomes *(Base: all respondents)*	Frequency *(6)*
Development planning and implementation of MOOCs	**4**
• FutureLearn	(3)
• Cousera, edX and Open edX	(1)
Continue with current provider	**1**
• FutureLearn (1)	
Switch MOOC Platform	**1**
• From Canvas to Brightspace	(1)

Table 3.18 (x): Outcomes of the mobile learning review

Outcomes *(Base: all respondents)*	Frequency *(2)*
Key services now mobile friendly	1
Pending	1

Question 3.19: Are you planning to undertake a review of a major institutional TEL facility or system within the *next two years*?

Table 3.19: Institutional review of TEL facility or system in next two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		(104)	(51)	(43)	(10)	(84)	(7)	(12)	(1)
Planning a review in the next year	38	37%	33%	44%	20%	35%	29%	58%	37%
Planning a review in the next two years	30	29%	39%	12%	50%	26%	71%	17%	29%
Not planning a review in the next two years	36	35%	28%	44%	30%	39%	0%	25%	35%

Table 3.19 shows that nearly two-thirds of the institutions, which responded to the Survey are planning to conduct TEL reviews over the next two years. The primary focus appears to be on VLE reviews (65%), as it was in 2016, with lecture capture (46%) now the second most commonly reviewed system, rising above e-assessment (40%) and learning analytics (37%) since the 2016 Survey.

Question 3.20: Which major TEL facilities or systems are you planning on reviewing in the next two years?

Table 3.20: TEL facilities or systems to be reviewed in the next two years – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents planning a review)		(68)	(37)	(24)	(7)	(51)	(7)	(9)	(1)
VLE	44	65%	60%	71%	71%	71%	71%	33%	0%
Lecture capture*	31	46%	38%	63%	29%	39%	71%	56%	100%
e-assessment*	27	40%	43%	46%	0%	33%	57%	68%	0%
Learning analytics	25	37%	41%	38%	14%	33%	57%	44%	0%
Electronic Management of Assignments (EMA)*	23	34%	41%	33%	0%	29%	43%	56%	0%

Table 3.20 (i): Cross-tabulation of *main institutional VLE* with *VLE review to be conducted in the next two years*

Main institutional VLE	VLE review to be conducted in next two years		
	No.	*Main VLE total (3.3)*	%
Blackboard Learn	25	*43*	58%
Moodle	17	*47*	36%
Canvas (by Instructure)	1	*8*	13%
Other VLE – developed in house	1	*1*	100%

Note: n=44 for Table 3.20 (i)

Table 3.20 (i) provides a breakdown of results per platform, performed through a cross-tabulation of data for *main institutional VLE* (Table 3.1b) and *whether a review of the VLE is to be conducted over the next two years* (Table 3.20). The results show that institutions using Blackboard Learn as their main VLE record the highest frequency (n= 25) and top the list of platforms, which will be reviewed over the next two years, as was the case in 2016.

Question 3.21: Which centrally-supported TEL tools are used by students in your institution?

Question 3.21 invited institutions to identify the range of software tools that are centrally provided for students. This question has been used in previous Surveys dating back to 2008, but *Electronic Management of Assignments (EMA)* was added as a new response option for 2018, replacing the item *e-submission* that had been used in previous Surveys, in order to incorporate both assignment submission and the management of electronically submitted work and make a clearer distinction between this activity and *e-assessment*, which focuses on the use of online tests and quizzes.

Table 3.21: Centrally-supported software tools used by students – Top 12

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Virtual Learning Environment (VLE)	97	94%	92%	98%	90%	93%	100%	100%	100%
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	92	89%	94%	91%	60%	88%	100%	92%	100%
Asynchronous communication tools (e.g. discussion forums)	87	84%	86%	81%	90%	82%	86%	100%	100%
Document sharing tool (e.g. Google Docs, Office 365)	83	81%	80%	86%	60%	80%	86%	83%	100%
Formative e-assessment tool (e.g. quizzes)	83	81%	84%	79%	70%	76%	100%	100%	100%
Lecture capture tools	77	75%	84%	77%	20%	73%	100%	67%	100%
e-portfolio	75	73%	66%	81%	70%	72%	57%	83%	100%
Summative e-assessment tools (e.g. quizzes)	73	71%	72%	72%	60%	66%	86%	92%	100%
Blog	70	68%	68%	74%	40%	61%	86%	100%	100%
Electronic Management of Assignments (EMA)*	69	67%	72%	63%	60%	67%	71%	58%	100%
Personal response systems (including handsets or web-based apps)	69	67%	76%	67%	20%	63%	86%	83%	100%
Reading list management software	66	64%	66%	70%	30%	61%	57%	83%	100%

Table 3.21 shows the results for the Top 12 centrally-supported tools most commonly used by students, and there have been some notable shifts in position since the 2016 Survey. *Lecture capture tools* rises to 6th position with 75% usage (up four places from 2016). *Document sharing tools* is up three places from 2016 and now placed joint 4th with *formative e-assessment tools* at 81% usage. *Electronic Management of Assignments* (a new response item for 2018) enters the Top 10 in joint 10th position at 67% usage, sharing the spot with *personal response systems* (which re-enters the Top 10 after a brief hiatus in the 2016 results).

These shifts in position appear to be common across both Country and Institution type, with the exception of *lecture capture tools* and *personal response systems*, which both have significantly lower percentages of central provision in institutions categorised as type *Other*. The *VLE* continues to be the most common centrally-supported software used by students, maintaining the top position since its introduction as a response item in 2014.

Table A3.21 in the Appendix captures the full set of results for this question and Table C3.21 presents the longitudinal picture dating back to 2008. Continuing the trend from 2014, use of *podcasting tools* continues its dramatic fall (from 35% in 2014 to 17% this year), whereas *lecture capture tools* continue to rise, albeit at a slower rate than in previous years (up to 75% this year from 71% in 2014). As posited in 2014, it is reasonable to assume that *lecture capture tools* are offering sufficient functionality to render dedicated podcasting tools unnecessary for many institutions. *Wikis* record their lowest percentage of institutional provision to date at 48%, down from 63% recorded in 2016. The reduction is reflected in lower percentage figures in the Pre-92, Post-92 and English institution categories. Institutional provision of *learning analytics* (which was a new response item in 2016) has increased from 19% in 2016 to 31% for 2018. Given the level of interest in *learning analytics* reported by respondents to the 2016 Survey, this growth may reflect subsequent successful project implementations over the past two years.

In addition to indicating the types of tools that are centrally-supported, respondents were invited to identify the specific tools that they are using. A selection of the tables for the leading tools (n=10 or more responses) is presented below and the full set of results is available in Tables A3.21a–z. Please note that the percentage scores are calculated based on the total number of respondents for the question, rather than the total population for the Survey.

The results in Table 3.21a show that Blackboard and Moodle are still the most common *VLE platforms* – confirming the findings reported in Table 3.2, with their platforms including *formative* and *summative e-assessment tools*, *wikis* and *asynchronous communication tools* for which they are also the most popular solutions. Although Blackboard also remains the leading supplier for a range of software (*including blogs, content management system, electronic essay exams, mobile apps and synchronous collaboration tools*), the two VLEs have now swapped position, with Moodle becoming the most common VLE in use across the sector.

Table 3.21d reveals that MS Office 365 once again tops the list of preferred *document sharing* solutions, now with more than three times as many institutions using it (n=69) as the next leading solution – Google Drive (n=22). Similarly, Panopto remains the number one solution for *lecture capture* – also with more than three times the number of institutions that are using it (n=47) compared with the next leading solution which is Echo360 (n=14). Table 3.21b confirms the position of Turnitin as the most popular *text-matching tool* with 93%, down only 3% from 2014.

Table 3.21a: Centrally-supported virtual learning environment – Top 3

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported VLE)		*(97)*	*(46)*	*(42)*	*(9)*	*(77)*	*(7)*	*(12)*	*(1)*
Moodle	49	51%	54%	40%	78%	53%	29%	50%	0%
Blackboard	42	43%	43%	50%	11%	38%	71%	58%	100%
Canvas	9	9%	13%	5%	11%	10%	0%	8%	0%

Table 3.21b: Centrally-supported text-matching tools – Top solution

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported text-matching tools		*(92)*	*(47)*	*(39)*	*(6)*	*(73)*	*(7)*	*(11)*	*(1)*
Turnitin	86	93%	94%	97%	67%	93%	100%	91%	100%

Table 3.21c: Centrally-supported asynchronous communication tools – Top solution

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: All respondent with centrally-supported asynchronous communication tools)		*(87)*	*(43)*	*(35)*	*(9)*	*(68)*	*(6)*	*(12)*	*(1)*
Blackboard	33	38%	37%	46%	11%	34%	67%	42%	100%
Moodle	33	38%	40%	29%	67%	40%	17%	42%	0%

Table 3.21d: Centrally-supported document sharing tool – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported document sharing tool)		*(83)*	*(40)*	*(37)*	*(6)*	*(66)*	*(6)*	*(10)*	*(1)*
MS Office 365	69	83%	83%	84%	83%	79%	100%	100%	100%
Google Drive	22	27%	25%	27%	33%	30%	17%	10%	0%

Table 3.21e: Centrally-supported formative e-assessment tool – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported formative e-assessment tool)		*(83)*	*(42)*	*(34)*	*(7)*	*(63)*	*(7)*	*(12)*	*(1)*
Moodle	32	39%	43%	32%	43%	41%	14%	42%	0%
Blackboard	31	37%	38%	41%	14%	33%	57%	42%	100%

Table 3.21f: Centrally-supported lecture capture tools – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported lecture capture tools)		*(77)*	*(42)*	*(33)*	*(2)*	*(61)*	*(7)*	*(8)*	*(1)*
Panopto	47	61%	52%	70%	100%	66%	86%	13%	0%
Echo360	14	18%	29%	6%	0%	20%	0%	25%	0%

Table 3.21g: Centrally-supported e-portfolio – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported e-portfolio)		*(75)*	*(33)*	*(35)*	*(7)*	*(60)*	*(4)*	*(10)*	*(1)*
Mahara	37	49%	55%	43%	57%	52%	50%	40%	0%
PebblePad	23	31%	33%	34%	0%	32%	25%	30%	0%

Table 3.21h: Centrally-supported summative e-assessment tools – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported summative e-assessment tools)		*(73)*	*(36)*	*(31)*	*(6)*	*(55)*	*(6)*	*(11)*	*(1)*
Blackboard	28	38%	33%	48%	17%	36%	50%	36%	100%
Moodle	25	34%	36%	29%	50%	38%	17%	27%	0%

Table 3.21i: Centrally-supported blog – Top 4

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with centrally-supported blog)		*(70)*	*(34)*	*(32)*	*(4)*	*(51)*	*(6)*	*(12)*	*(1)*
Blackboard	29	41%	41%	44%	25%	39%	67%	33%	100%
WordPress	26	37%	29%	47%	25%	45%	0%	25%	0%
Moodle	11	16%	21%	6%	50%	18%	0%	17%	0%
Campus Pack	7	10%	18%	3%	0%	8%	33%	8%	0%

Table 3.21j: Centrally-supported Electronic Management of Assignments* – Top 4

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported Electronic Management of Assignments)		*(69)*	*(36)*	*(27)*	*(6)*	*(56)*	*(5)*	*(7)*	*(1)*
Turnitin	31	45%	50%	48%	0%	41%	100%	29%	100%
Blackboard	27	39%	42%	41%	17%	36%	80%	29%	100%
Moodle	24	35%	33%	30%	67%	36%	20%	43%	0%
In house developed	10	14%	22%	4%	17%	18%	0%	0%	0%

Table 3.21k: Centrally-supported personal response systems – Top 4

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported personal response systems)		*(69)*	*(38)*	*(29)*	*(2)*	*(52)*	*(6)*	*(10)*	*(1)*
TurningPoint (by Turning Technologies)	32	46%	47%	45%	50%	40%	83%	50%	100%
Poll Everywhere	15	22%	16%	28%	50%	25%	0%	20%	0%
Mentimeter	7	10%	11%	10%	0%	12%	0%	10%	0%
ResponseWare (by Turning Technologies)	7	10%	16%	3%	0%	13%	0%	0%	0%

Table 3.21l: Centrally-supported reading list management software – Top solution

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with centrally-supported reading list management software)		*(66)*	*(33)*	*(30)*	*(3)*	*(51)*	*(4)*	*(10)*	*(1)*
Talis Aspire	42	64%	67%	63%	33%	67%	75%	50%	0%

Table 3.21m: Centrally-supported media steaming system – Top 4

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported media steaming system)		*(65)*	*(28)*	*(31)*	*(6)*	*(51)*	*(4)*	*(9)*	*(1)*
Medial	17	26%	25%	32%	0%	22%	75%	33%	0%
Panopto	13	20%	18%	23%	17%	24%	25%	0%	0%
Planet eStream	11	17%	7%	16%	67%	22%	0%	0%	0%
Kaltura	10	15%	21%	13%	0%	16%	0%	22%	0%

Table 3.21n: Centrally-supported webinar – Top 3

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported webinar)		*(55)*	*(31)*	*(21)*	*(3)*	*(43)*	*(4)*	*(7)*	*(1)*
Adobe Connect	17	31%	32%	29%	33%	37%	25%	0%	0%
Blackboard Collaborate	15	27%	26%	33%	0%	30%	0%	14%	100%
Skype for business	11	20%	16%	24%	33%	16%	50%	29%	0%

Table 3.21o: Centrally-supported mobile apps – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported mobile apps)		*(53)*	*(24)*	*(25)*	*(4)*	*(40)*	*(3)*	*(9)*	*(1)*
Blackboard Mobile Learn	21	40%	46%	36%	25%	33%	100%	44%	100%
CampusM	12	23%	38%	12%	0%	25%	0%	22%	0%

Table 3.21p: Centrally-supported synchronous collaborative tools – Top 3

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported synchronous collaborative tools)		*(50)*	*(25)*	*(25)*	*(0)*	*(40)*	*(2)*	*(7)*	*(1)*
Blackboard Collaborate	18	36%	32%	40%	0%	35%	50%	43%	0%
Adobe Connect	13	26%	28%	24%	0%	30%	0%	14%	0%
Blackboard Collaborate Ultra	10	20%	16%	24%	0%	18%	50%	14%	100%

Table 3.21q: Centrally-supported wiki – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported wiki)		*(49)*	*(25)*	*(22)*	*(2)*	*(33)*	*(6)*	*(9)*	*(1)*
Blackboard Learn	22	45%	44%	45%	50%	48%	50%	33%	0%
Moodle	12	24%	24%	27%	0%	30%	0%	22%	0%

Table 3.21r: Centrally-supported screen casting – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported screen casting)		(44)	(20)	(19)	(5)	(31)	(3)	(9)	(1)
Panopto	16	36%	35%	37%	40%	35%	100%	22%	0%
Camtasia	7	16%	15%	16%	20%	16%	0%	22%	0%

Question 3.22: And which, if any, TEL tools that are used by students are *not* centrally-supported? For example, those used by particular departments or even individuals.

Question 3.22 invited institutions to identify the range of software tools that students are using which are not centrally-supported by institutions. This question has been used in previous Surveys dating back to 2008, but the response items were updated for 2018, mirroring the changes made to Question 3.21.

Table 3.22: Software tools used by students which are *not* centrally-supported – Top 10

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Social networking	43	42%	40%	49%	20%	40%	57%	42%	100%
Document sharing tool (e.g. Google Docs, Office 365)	41	40%	42%	37%	40%	41%	29%	42%	0%
Blog	37	36%	34%	37%	40%	36%	29%	42%	0%
Personal response systems (including handsets or web-based apps)	27	26%	32%	23%	10%	25%	29%	33%	0%
Mobile apps	25	24%	18%	33%	20%	25%	0%	25%	100%
Asynchronous communication tools (e.g. discussion forums)	19	18%	22%	14%	20%	18%	14%	25%	0%
None used	18	18%	18%	16%	20%	16%	29%	25%	0%
Other non centrally-supported TEL tool	15	15%	14%	14%	20%	14%	14%	17%	0%
e-portfolio	14	14%	16%	14%	0%	14%	14%	8%	0%
Media streaming system	12	12%	10%	16%	0%	13%	0%	8%	0%
Synchronous collaborative tools (e.g. virtual classroom)	12	12%	14%	12%	0%	13%	0%	8%	0%

Data for this question requires some circumspection, as the results reflect the perspectives of respondents (generally e-learning managers) on the range of tools that they believe students to be using as a supplement to the centrally-supported toolset. A comparison with results from 2016 (Table C3.22) shows that the Top 3 non-centrally-supported solutions remain the same as they were then, with *social networking tools* the most common, followed by *document sharing tools* and *blogs*. Comparing the percentage of institutions reporting use of non-centrally-supported solutions, there has been a decrease from the figures recorded in 2016 for *social networking*, down from 59% (n=62) in 2016 to 42% (n=43) in 2018.

In addition to indicating the types of non-centrally-supported tools that students are using, respondents were again invited to identify the specific packages in use. A selection of tables for the leading tools (n=10 or more responses) cited by respondents is set out below. The leading tools are broadly the same as those reported in the 2016 Survey. The full set of results is available in Tables A3.22a-z. Please note that the percentage scores are calculated based on the total number of respondents for the question, rather than the total population for the Survey.

Table 3.22a: Non-centrally-supported social networking tool – Top 2

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported social networking)		*(43)*	*(20)*	*(21)*	*(2)*	*(33)*	*(4)*	*(5)*	*(1)*
Facebook	38	88%	85%	90%	100%	85%	100%	100%	100%
Twitter	28	65%	70%	62%	50%	67%	50%	60%	100%

Table 3.22b: Non-centrally-supported document sharing tool – Top 3

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported document sharing tool)		*(41)*	*(21)*	*(16)*	*(4)*	*(34)*	*(2)*	*(5)*	*(0)*
Google Docs/Drive	33	80%	90%	81%	25%	79%	100%	80%	0%
Dropbox	10	24%	33%	13%	25%	26%	0%	20%	0%
Office365/OneDrive	10	24%	33%	13%	25%	26%	0%	20%	0%

Table 3.22c: Non-centrally-supported blog tool – Top solution

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with non-centrally-supported blog)		*(37)*	*(17)*	*(16)*	*(4)*	*(30)*	*(2)*	*(5)*	*(0)*
WordPress	28	76%	94%	69%	25%	77%	100%	60%	0%

Table 3.22d: Non-centrally-supported personal response system – Top 3

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported personal response systems)		*(27)*	*(16)*	*(10)*	*(1)*	*(21)*	*(2)*	*(4)*	*(0)*
Socrative	14	52%	63%	40%	0%	48%	100%	50%	0%
Poll Everywhere	11	41%	38%	40%	100%	38%	50%	50%	0%
Mentimeter	10	37%	50%	20%	0%	29%	0%	100%	0%

Table 3.22i: Non-centrally-supported media streaming tool – Top solution

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported media steaming system)		*(12)*	*(5)*	*(7)*	*(0)*	*(11)*	*(0)*	*(1)*	*(0)*
YouTube	10	83%	100%	71%	0%	82%	0%	100%	0%

Question 3.23: How does your institution *use* student or staff owned mobile devices in support of learning, teaching and assessment activities?

This question was introduced in this year's Survey to track the ways that institutions are using student or staff owned mobile devices in support of learning, teaching and assessment activities. It replaced the question employed in previous Surveys on the type of TEL services that are optimised to be accessible via mobile devices. The revised question aimed to get a clearer understanding of how mobile devices are actually being used to support the student learning experience.

Table 3.23: How mobile devices are used

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Accessing course/learning content and resources, e.g. when students and staff are offsite	90	87%	84%	91%	90%	88%	86%	83%	100%
Accessing course administration/information, e.g. timetabling	87	84%	76%	93%	90%	86%	86%	75%	100%
Participating in interactive class teaching sessions, e.g. polling, class quizzes	83	81%	84%	81%	60%	80%	86%	83%	100%
Accessing library resources	77	75%	72%	79%	70%	73%	71%	83%	100%
Accessing grade and other academic progress information	74	72%	72%	77%	50%	70%	86%	75%	100%
Completing surveys in class	66	64%	54%	77%	60%	64%	86%	50%	100%
Assessing student work (e.g. whilst observing performance of skills, presentations, activities)	49	48%	32%	67%	40%	48%	43%	42%	100%
Recording and uploading data, e.g. when on fieldwork trips	49	48%	34%	67%	30%	48%	57%	33%	100%
Providing feedback on student work	45	44%	34%	63%	10%	43%	57%	33%	100%
Subject specific learning apps	39	38%	36%	40%	40%	40%	29%	25%	100%
Other use of mobile devices	10	10%	10%	9%	10%	11%	0%	8%	0%
Institution does not aim to use mobile devices	4	4%	6%	0%	10%	2%	14%	8%	0%

The most common use of student/staff owned mobile devices is for accessing course/learning content and resources, followed by access to course administration/information and participating in interactive class teaching sessions. High usage was also reported for accessing library resources and accessing grade/other academic progress information. These findings are consistent with the results recorded in the 2016 Survey in relation to the types of services that had been optimised by institutions to be accessible via mobile devices, with a strong emphasis on access to course information and resources – i.e. institutions pushing out resources and course information to students, as opposed to mobiles being used to support active learning usage. The one exception is the use of mobile to support student interaction in lectures through polling and quizzing activities, which appears to be well established across the sector (81%) and particularly so within Pre- and Post-92 institutions.

Of the *Other use* of mobile devices mentioned in free-text responses to this question, there was a variety of responses with no main theme. It was reported that it was the personal choice of the user on how they used their device. Use of VLE resources and a University app were also mentioned. Institutions also reported that personal devices were used for podcasting, screen casting, screen capture, recording audio/video and specific course apps.

Question 3.24: How does your institution promote the use of student or staff owned mobile devices in support of learning, teaching and assessment activities?

This question was first introduced in the 2014 Survey to track the ways that institutions are promoting the use of student and staff owned mobile devices.

Table 3.24: How use of mobile devices is promoted

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(43)*	*(9)*	*(82)*	*(7)*	*(12)*	*(1)*
Institutional Bring Your Own Device (BYOD) policy and supporting mobile device usage on campus	47	46%	42%	49%	56%	44%	57%	58%	0%
Loaning of devices to staff or students	43	42%	38%	51%	22%	41%	71%	33%	0%
Institution does not promote the use of mobile devices	21	21%	28%	9%	33%	21%	14%	25%	0%
Other promotion of mobile devices	17	17%	22%	14%	0%	17%	0%	17%	100%
Free provision of devices to staff/students	15	15%	10%	21%	11%	15%	29%	8%	0%
Funding for mobile learning projects	10	10%	6%	14%	11%	12%	0%	0%	0%
Institutional switch-on policy to encourage use of devices by staff and students for learning, teaching and assessment	6	6%	0%	14%	0%	6%	0%	8%	0%

The most common ways in which institutions are promoting the use of mobile devices continue to be through the establishment of a Bring Your Own Device (BYOD) policy and by loaning out devices to staff and students. There is little change in these figures, with the percentages of respondents implementing a BYOD policy and loaning devices to staff/students broadly equivalent to the 2016 and (where relevant) 2014 figures (Table C3.24).

A longitudinal review of the data for this question shows that the number of institutions reporting funding for mobile learning projects continues to decrease, continuing the trend reported in 2014, down from 23% (n=23) in 2016 to 10% (n=10) in 2018. The number of institutions implementing a switch-on policy has also decreased, down from 15% (n=15) in 2016 to 6% (n=6) in 2018. The number of institutions not promoting the use of mobile devices has increased, up from 15% (n=15) in 2016 to 21% (n=21) in 2018. This may well reflect the fact that mobile usage is now well established across institutions and does not require a dedicated *push* to adoption; indirectly this is indicated through the disappearance of mobile services as a recent and prospective development making demands on institutions (see Tables C6.3 and C6.4).

Of the other methods of promoting mobile devices, which were mentioned in free-text responses, institutions reported implementing comprehensive wifi infrastructure to support users on campus. It was also reported that IT systems and services were designed to be mobile friendly.

Summary

The main institutional VLE remains largely a choice between Blackboard and Moodle. The two platforms have the same combined percentage of use as they did in 2014 and 2016, although Moodle is now, by a small margin, the leading institutional platform. The other key change from the 2016 Survey has been the rise in the number of institutions using Canvas as their main institutional VLE.

When considering all VLEs in use at institutions, the key development has been the rise in adoption of FutureLearn by Pre-92 institutions. The increasing market share of Canvas is also notable; it has more than doubled since 2016.

The percentage of institutionally hosted main VLE services has continued to decline. The main development since 2016 has been the increase in the number of institutions opting for a cloud-based SaaS VLE service.

Outsourcing continues to be considered for institutionally managed TEL services, with nearly half of respondents considering this. Lecture capture platforms are the most commonly outsourced TEL service with more than twice the number outsourced than in the last Survey.

TEL review activity continues to be happening across the sector, with nearly half of the institutions, which responded having conducted some form of TEL review in the last two years. VLE reviews still represent the most common form of activity that institutions are engaged in.

The VLE, text-matching tools, asynchronous communication tools and formative e-assessment solutions continue to feature in the Top 5 centrally-supported software tools in use across the sector. Document sharing tools move up the rankings to enter the Top 5. Social networking, document sharing tools and blogs remain the top three non-centrally-supported tools in use across the sector. However, there has been a notable decline in the figures recorded for social networking.

In terms of how institutions use student/staff owned mobile devices in support of learning, teaching and assessment activities, the most common use is for accessing course/learning content and resources, followed by access to course administration/information and participating in interactive class teaching sessions. The use of mobile to support student interaction in lectures through polling and quizzing activities also appears to be well established across the sector and particularly so within Pre- and Post-92 institutions. The most common ways in which institutions are promoting the use of mobile devices continue to be through the establishment of a Bring Your Own Device (BYOD) policy and by loaning out devices to staff and students.

Section 4: Course delivery and evaluation of Technology Enhanced Learning

Section 4 of the Survey has been designed to focus on how TEL tools are being used in institutions and how this use is being tracked and evaluated; complementing the focus, in Section 3, on what TEL tools are being used.

In this section the question set includes understanding types of courses being offered – blended, online and open – and which disciplines are making greater or less use of TEL. Respondents are also asked to identify the extent to which individual tools are being used across their institutions, so helping understand the depth as well the breadth explored in Section 3. The final set of questions asks to what extent institutions are evaluating both the impact of TEL on the student learning experience and on staff pedagogic practices.

Question 4.1: Does your institution offer any of the following types of courses?

This question was updated in 2016 to incorporate the more commonly understood categories of *blended, fully online* and *open* modes of delivery. The question invites respondents to indicate how TEL is being used for each mode of course delivery, estimating the extent to which this activity is taking place across their institution. The results are presented in Figure 4.1 below.

The categories of course delivery used in Figure 4.1 were adapted from the classification scheme employed in the 2013 European Universities Association Survey of e-learning in European higher education institutions. They are described as follows:

a. Blended learning: lecture notes and supplementary resources for courses studied in class are available;

b. Blended learning: parts of the course are studied in class and other parts require students to engage in active learning online (e.g. engaging in collaborative or assessed tasks);

c. Fully online courses;

d. Open online learning courses for all students at your institution: internal access only;

e. Open online boundary courses: free external access to the course materials for the public, but assessment restricted to students registered at your institution only;

f. Open online learning courses for public: free external access;

g. Other: free-text responses.

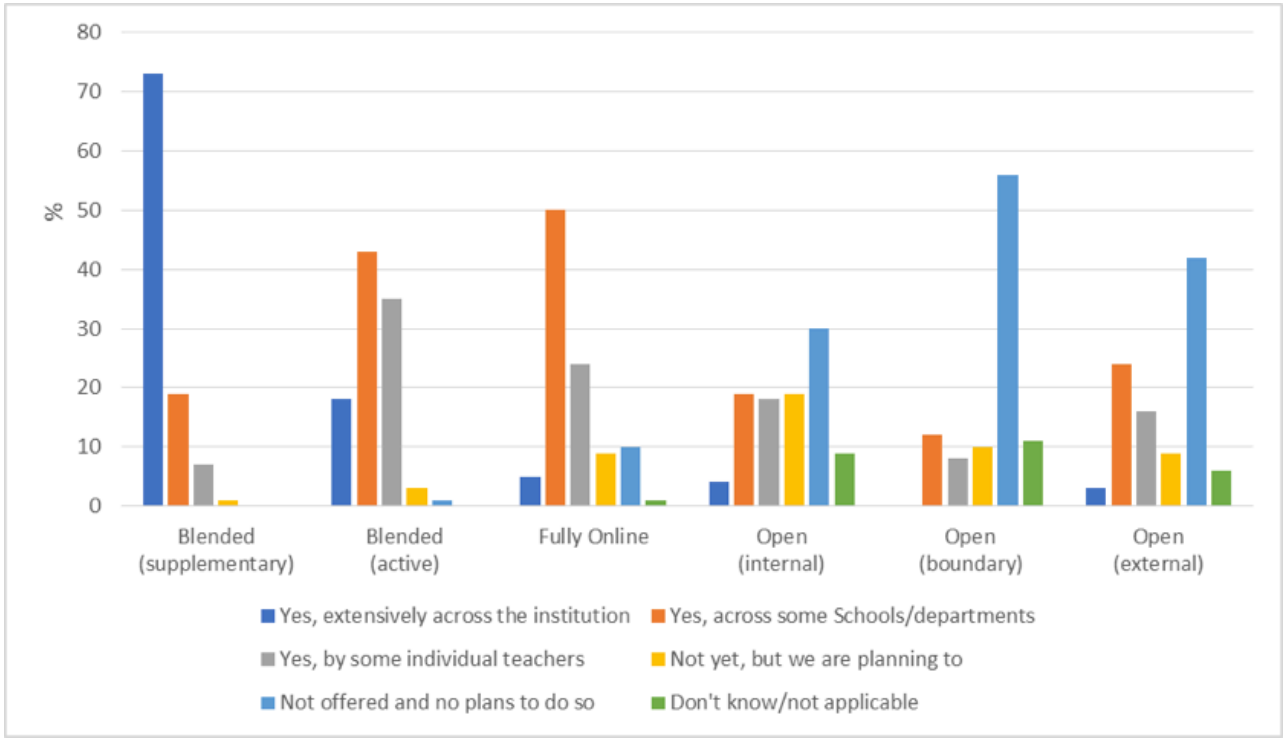


Figure 4.1: Proportion of all modules or units of study in the TEL environment in use

Nearly three-quarters of respondents (73%) report that *Blended learning*, focusing on the provision of lecture notes and supplementary resources to students (*category a.*), is used extensively across their institutions (down from 79% in 2016). Combined with 19% indicating that this mode is also used across some Schools/departments it reinforces that there continues to be a consistent focus on supplementary uses of TEL.

More active modes of Blended Learning (category b) are only encountered extensively in 18% of institutions, more in Post-92 (26%) than in Pre-92 (10%). With respect to use across some schools/departments the response was 43% (with 39% in Post-92 and 48% in Pre-92).

The third most common category was *Fully online courses (category c.)*. The 2016 results suggested that there had been increasing institutional engagement in the delivery of fully online courses, but activity appears to have levelled off in 2018. This is still primarily at a local level with delivery based in *schools/departments* or led by individuals in over 70% of institutions. There is more fully online provision across *schools/departments* in Post-92 institutions than Pre-92 (59% vs 48%) but in Pre-92 institutions there is more led by *some individual teachers* (27% vs 21%).

Cross referencing the results with responses for Question 1.1, improving access to online/blended learning for campus-based students is ranked 4th as a driving factor for using TEL, yet improving access for distance learners is only ranked 24th.

Evidence of engagement with *Open learning course delivery (categories d., e. and f.)* also remains consistent with the levels indicated in 2016 at institutional level. However, there are small increases for *Open online boundary courses* and *Open online courses for the public* at local levels within institutions.

The most popular open delivery format in 2018 is *Open online courses for public (category f.)* with 43% institutions showing some level of activity. Pre-92 institutions remain the most active with 60% offering some engagement compared to 30% in Post-92. As in 2016, this reflects the high adoption levels of the FutureLearn platform as a channel for open learning course delivery by Pre-92 institutions, as revealed in Question 3.2a.

Open online learning courses for all students at an institution (category d.) were reported by 41% of institutions. In 2016, Post-92 institutions were more active in this area, but in 2018 Pre-92 institutions are more active at 48% compared with 34% in Post-92.

Of the other categories of course delivery that are supported by TEL across institutions, only three responses were received singling out CPD courses, pre-entry access programmes and in house library resources, which are publicly available.

Tables 4.1a – 4.1d show the results for the four most popular course delivery approaches using TEL, with the full results available in Tables A4.1a – A4.1g.

Table 4.1a: Blended learning: lecture notes and supplementary resources for courses studied in class are available

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	70	73%	73%	77%	56%	69%	100%	82%	100%
Yes, across some schools/departments	18	19%	17%	18%	33%	21%	0%	18%	0%
Yes, by some individual teachers	7	7%	8%	5%	11%	9%	0%	0%	0%
Not yet, but we are planning to	0	0%	0%	0%	0%	0%	0%	0%	0%
Not offered and no plans to do so	1	1%	2%	0%	0%	1%	0%	0%	0%
Don't know/not applicable	0	0%	0%	0%	0%	0%	0%	0%	0%

Table 4.1b: Blended learning: parts of the course are studied in class and other parts require students to engage in active learning online (e.g. engaging in collaborative or assessed tasks)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	17	18%	10%	26%	22%	14%	50%	18%	100%
Yes, across some schools/departments	41	43%	48%	39%	33%	40%	17%	82%	0%
Yes, by some individual teachers	34	35%	35%	36%	33%	41%	33%	0%	0%
Not yet, but we are planning to	3	3%	4%	0%	11%	4%	0%	0%	0%
Not offered and no plans to do so	1	1%	2%	0%	0%	1%	0%	0%	0%
Don't know/not applicable	0	0%	0%	0%	0%	0%	0%	0%	0%

Table 4.1c: Fully online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	5	5%	8%	3%	0%	4%	0%	9%	100%
Yes, across some schools/departments	48	50%	48%	59%	22%	47%	67%	64%	0%
Yes, by some individual teachers	23	24%	27%	21%	22%	27%	17%	9%	0%
Not yet, but we are planning to	9	9%	8%	5%	33%	10%	0%	9%	0%
Not offered and no plans to do so	10	10%	6%	13%	22%	10%	17%	9%	0%
Don't know/not applicable	1	1%	2%	0%	0%	1%	0%	0%	0%

Table 4.1d: Open online learning courses for public (free external access)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	3	3%	6%	0%	0%	3%	0%	9%	0%
Yes, across some schools/departments	23	24%	35%	15%	0%	26%	17%	18%	0%
Yes, by some individual teachers	15	16%	19%	15%	0%	18%	0%	9%	0%
Not yet, but we are planning to	9	9%	2%	13%	33%	9%	0%	18%	0%
Not offered and no plans to do so	40	42%	31%	49%	67%	37%	83%	46%	100%%
Don't know/not applicable	6	6%	6%	8%	0%	8%	0%	0%	0%

Question 4.3: Are there any particular subject areas that make *more extensive* use of technology enhanced learning tools than your institutional norm?

Questions 4.3 invited respondents to confirm whether there are any disciplines within their institution, which make extensive use of TEL tools, above and beyond the institutional norm for technology usage.

Table 4.3: Subjects that make *more extensive* use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes	48	50%	58%	41%	44%	51%	33%	46%	100%
No	48	50%	42%	59%	56%	49%	67%	54%	0%

The trend that is emerging is for a drop in identification of subjects that make more extensive use of TEL than the institutional norm, with an even split between institutions that responded yes and no. This compares to 57% of respondents who confirmed that there are subject areas which exceed the institutional norm in 2016 and 71% in 2014, and may suggest that institutions are moving towards a more standardised use of TEL.

Questions 4.4 and 4.5: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of TEL tools and why you think this is so.

Questions 4.4 invited respondents to identify those subject areas, which exceed the institutional norm in terms of their use of TEL tools. Respondents were provided with a series of options to select from, highlighting subject categories derived from previous Survey feedback.

Table 4.4: Subject areas that make *more extensive* use of technology enhanced learning tools than the institutional norm – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with subjects that make more extensive use of TEL tools)		*(48)*	*(28)*	*(16)*	*(4)*	*(40)*	*(2)*	*(5)*	*(1)*
Medical sciences (Medicine, Nursing, Health)	27	56%	57%	63%	25%	53%	50%	80%	100%
Business and management	15	31%	29%	38%	25%	35%	0%	0%	100%
Education, teacher training	12	25%	21%	31%	25%	18%	100%	60%	0%
Natural sciences	10	21%	32%	6%	0%	18%	100%	20%	0%
Other subject 1	13	27%	18%	31%	75%	33%	0%	0%	0%

Table 4.4 shows that *Medical Sciences* and *Business and Management* once again top the list of subject areas making more extensive use of TEL tools than the institutional norm, continuing a pattern that has been seen since 2008 (see table C4.4). While Question 4.3 shows the overall number of institutions reporting disciplines making extensive use continues to decline, Question 4.4 shows that the proportions within that group remain largely consistent.

With regard to *Medical Sciences*, the explanations offered for more use of TEL varied from reports of e-portfolio usage and work-based learning, to demands of employers and professional standards, as well as a consistently reported increase in the delivery of wholly online courses or as a minimum a blended approach of online and face to face. The adoption of other in-class technologies, simulation and extensive EMA was also mentioned.

In reference to *Business and Management*, assessment and scaling up of course delivery came through as key drivers for increased use of TEL; respondents also noted the provision of dedicated design and implementation expertise driven by institutional TEL policy, in turn responding to increased expectations of students both for on and off-campus course delivery.

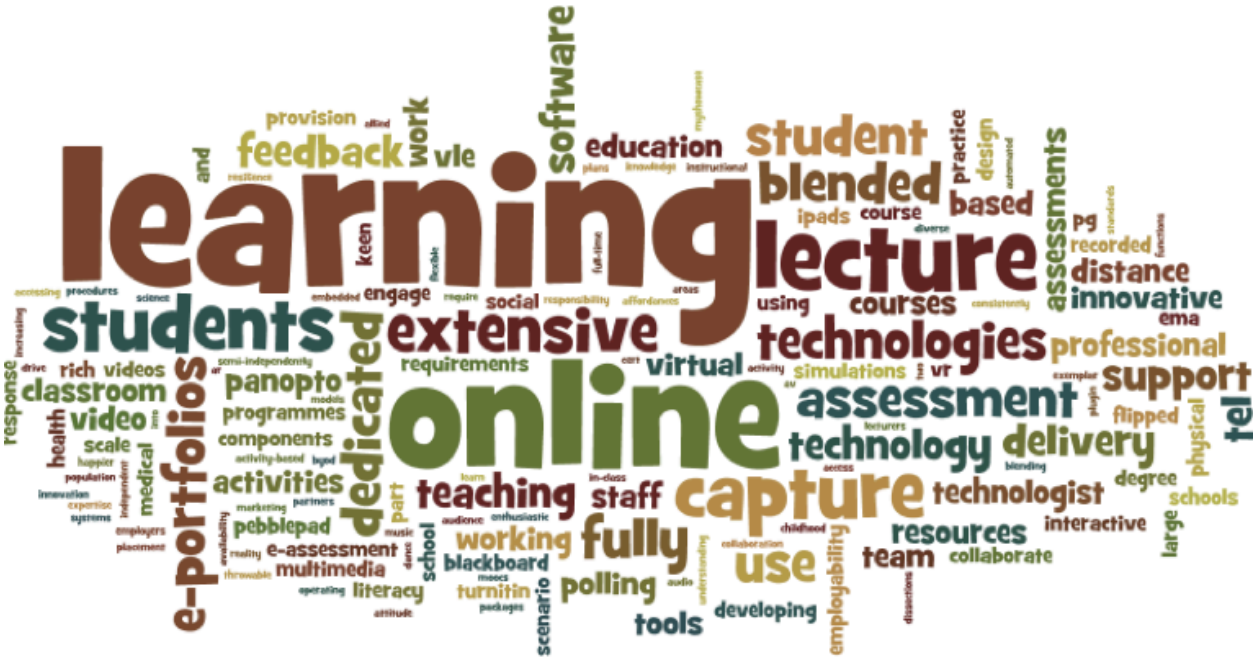


Figure 4.5: Word cloud showing most commonly mentioned words from reasons for more extensive use of TEL

Figure 4.5 illustrates the most common words that were used by respondents to explain why subjects make more extensive use of TEL then the institutional norm.

Table 4.5 below highlights some of the leading drivers for extensive use of TEL with sample quotes from respondents. Explanations vary from a stronger focus on the needs of the end user, logistics of course delivery, and support for work-based learning and collaboration, to a reported general increase in competence and familiarity with technology.

Table 4.5: Reasons for more extensive use of TEL

Category	Sample quote
Driven by needs of students, increased course uptake and backed up by local strategies	Postgraduate courses (PG Cert, Dip and MA) in teaching and learning for health professionals.... They are in full time work and the blend is mostly online with a small number of face to face sessions. Transformed a face to face course to a fully online/virtual course to make running the course more scalable due to increasing student numbers. Students are mostly working or on placement. This means they're not on campus as often as other students, so we must rely on a stronger blended learning approach.
Provision of dedicated support	Use cutting edge technologies. Have a proactive learning technology lead. Dedicated support staff within departments support technology usage. The school has a clear vision for digital education and the resources to enable TEL – a dedicated budget and two learning technologists in house. This School [Social Work] also benefits from having a dedicated educational technologist who supports academic colleagues in their use of technology. This faculty [Business and Management] has had a dedicated learning technologist for a number of years and he has supported the drive for the use of TEL tools in the faculty. This model has since been replicated in other areas.
Subject driven	Allied Health.... have been forced to innovate in their delivery so it is more distance learning in order to keep market share, have a good collegial attitude to sharing practice, and are willing to try innovations. Languages have a strong benefit from using multimedia resources and iterative testing of knowledge, plus a number of students going abroad who need to be included.
Use of specific technology	Education and teacher training utilise e-portfolios and in classroom tools more. I think this links to the higher use of these tools in school settings Use of classroom technologies, audience response, lecture capture and throwable microphones. Use of VR and multimedia. Presents opportunities that students may not be able to gain locally. Used for presenting image rich teaching resources (e.g. anatomy dissections, clinical procedures) in an interactive or AR environment
Staff competencies/student literacy/ enthusiasm and confidence	Enthusiastic lecturers happy to try technology, such as video assignments, classroom polling etc. Perception that students are comfortable with online study. Staff are keen to engage, support from management, innovative course design, understanding of employability and digital literacy agendas.
Standardisation	Development of fully online components of courses, embedded use of Office 365. Are delivering distinctive programmes with a much greater emphasis of work-based learning and online delivery. Professional education programmes delivered at distance. Professional standards require extensive technology usage. Tech usage is embedded within the curriculum.

One major recurring theme from the free-text comments is the level of support that is being made available to encourage and embed the use of TEL. This is consistent with the results received for Question 1.3, where *Availability of technology enhanced learning support staff* once again tops the list of factors encouraging the development of TEL. The nature of the support includes drivers such as a defined TEL strategy; a top down strategic decision making focus on the expansion of online courses and dedicated *in school* technical support to academic staff. Reference is also made though to *Departmental culture with strong academic buy-in*, with certain subject areas showing a natural enthusiasm for innovative technological and pedagogical practice.

Question 4.6: Are there any particular subject areas that make *less extensive* use of technology enhanced learning tools than your institutional norm?

Table 4.6: Subjects that make less extensive use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes	34	35%	27%	49%	22%	40%	17%	18%	0%
No	62	65%	73%	51%	78%	60%	83%	82%	100%

Table 4.6 shows that only 35% reported that there are subject areas which fall below the institutional norm, so continuing the decline that has been seen since 2014 (52% in 2014 and 46% in 2016).

Questions 4.7 and 4.8: Please select *up to three* subject areas and in the following question you will be asked in what way they make *less use* of technology enhanced learning tools and why you think that this is so.

Table 4.7: Subject areas that make *less extensive* use of technology enhanced learning tools than the institutional norm – Top 6

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with subjects that make less extensive use of TEL tools)		*(34)*	*(13)*	*(19)*	*(2)*	*(31)*	*(1)*	*(2)*	*(0)*
Art and design	11	32%	8%	53%	0%	36%	0%	0%	0%
Mathematics	7	21%	39%	5%	50%	23%	0%	0%	0%
Humanities (Geography, History)	6	18%	8%	26%	0%	19%	0%	0%	0%
Engineering, technology	4	12%	0%	21%	0%	10%	0%	50%	0%
Social sciences	4	12%	31%	0%	0%	10%	100%	0%	0%
Other subject 1	8	24%	31%	16%	50%	26%	0%	0%	0%

The question was modified from a free-text response format to one in which a series of subject categories were provided for respondents to select from. *Art and Design* is the most commonly cited subject area (32%), as it was in 2016 (then 45%) followed by *Maths and Humanities*. *Other* subjects cited by participants included Music, Conservatoire & Acting, Archaeology, Dance, Music, English, Politics and International Relations and Women's Studies. For the full list of results, please see Table A4.7.

The change to the question design makes it difficult to conduct a meaningful longitudinal analysis, comparing results with previous years. Nevertheless, the order of subjects remains similar. *Art and Design* in 2018 (32%; 45% in 2016) compares with Art, Music and Drama, which was the most commonly cited subject area to make less extensive use of TEL. However, *Humanities*, occupying 2nd position in 2016 (34%), 2014 (24%) and 2012 (17%) has now dropped to 3rd position. It has been replaced by an increasing number of references to *Mathematics* (for the second year running) as a subject area with less extensive TEL usage, and this is now the second most commonly referenced subject area, although the number of institutions citing it remains low (n=3 in 2014 and n=7 in 2016 & 2018). The full longitudinal picture of results for this question is presented in Table C4.7.

Figure 4.8: Word cloud showing most commonly mentioned words from reasons for less extensive use of TEL

Table 4.8 provides a summary of reasons for less extensive use of TEL. The categories of reasons are very similar to those given in 2014 and in 2016 in that they focus on teaching style and preferences over course delivery methods, with academic staff placing a greater emphasis on face to face interaction and practical activities using *traditional* media. The varying engagement of staff with technology and the culture of teaching for the discipline were also commonly referenced as reasons for less extensive use of TEL, as well as the lack of strategic guidance, support and practical emphasis of outputs from specific disciplines.

Table 4.8: Reasons given for less extensive use of TEL

Category	Sample quotations
Traditional pedagogic approaches	Limited use of VLE and lack of engagement.... due to studio-based working... and always in contact with students so see less reason to use the VLE Focus on physical creation; resistance to use of corporate TEL. Mostly studio works – very hands on. Technology not viewed as relevant to pedagogic methods. They insist on using traditional technologies such as paper based homework problem setting, chalkboards instead of digital virtual whiteboards or tools like OneNote.
Focus on specific classroom based technologies or alternative technologies	Use course specific software supported by division rather than TELs. Difficulty of maths e-assessment (very complex software requiring specialist support). Use course specific software, use quizzes extensively to teach maths for science. Dedicated system used to gather evidence opposed to traditional classroom resources being shared via the VLE.
Lack of strategy/support	Limited support from senior management. The school lacks local support. Departmental culture not supportive of technology usage. Academic culture does not buy-in to tech adoption. Cultural is at Department level, resulting in lack of engagement and hence output of TEL usage. Perception that students are less comfortable with online study.
Staff skills	Skill set of staff. Staff digital skills and confidence. ...the number of staff who come from practice and have low confidence in using digital technologies.

Question 4.9: Approximately, what proportion of courses within your institution use each of the following TEL tools?

This question aims to track the extent of TEL usage in courses across institutions; it uses a list of tools, which has been updated and based on responses from participants. For 2018 the term *Electronic Management of Assessments (EMA)* was used instead of *e-submission tools*.

Table 4.9 captures the leading TEL tools which are being used by institutions to support teaching and learning practices. The Top 10 tools listed in this table are those with the highest proportion of usage in 50% or more of courses. Data for this question requires some circumspection, as the results are estimates by respondents of the proportion of courses using TEL tools within their institutions.

The results are comparable to those from 2016, where the Top 3 were *VLE, e-submission tools* and *text-matching tools*.

Table 4.9: Percentage of courses using TEL tools – Top 10

(Base: all respondents, 94)	**100%**	**75%–99%**	**50%–74%**	**25%–49%**	**5%–24%**	**1%–4%**	**0%**	**Don't know**
Virtual Learning Environment (VLE)	42%	50%	2%	1%	1%	1%	0%	3%
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	13%	52%	17%	6%	2%	2%	1%	6%
Electronic Management of Assignments (EMA)*	18%	44%	7%	9%	4%	1%	5%	12%
Reading list management software	16%	28%	13%	12%	5%	1%	13%	13%
Lecture capture tools	5%	18%	11%	17%	23%	10%	9%	7%
Document sharing tool (e.g. Google Docs, Office 365)	2%	9%	14%	11%	16%	20%	0%	29%
Formative e-assessment tool (e.g.quizzes)	1%	7%	16%	28%	28%	5%	0%	15%
Asynchronous communication tools (e.g. discussion forums)	2%	5%	16%	26%	34%	3%	0%	14%
Digital/learning repository	6%	14%	3%	9%	9%	15%	14%	31%
Content management system	6%	13%	4%	10%	9%	12%	12%	35%

What Tables 4.9 and A4.9 show is that while some tools are widely used by different institutions, others are not yet pervasive in their use. The table shows that four tools, *VLEs*, *EMA*, *text-matching* and *Reading list management software* are being used in over 50% of courses in the majority of institutions. There is then a drop in levels of usage with tools, such as *Lecture capture*, *Formative assessment*, *Document sharing* and *Asynchronous communication*, being used in less than 50% of courses.

When cross referencing these results with the centrally-supported software tools used by students in Question 3.21, we see a slightly different pattern emerging. The Top 6 tools from table 4.9 appear in the Top 12 centrally-supported software tools used by students (Table 3.21) but in a different order, although *VLE* and *text-matching* are the Top 2 in both tables.

Tools appearing in Table 4.9, indicating higher levels of use, but which are not common centrally provided (see table 3.21) are *Digital/learning repository* and *Content management systems*. Conversely, tools that appear in the list of Top 12 centrally provided tools (Table 3.21), but which are not heavily used (Table 4.9), are *e-portfolios*, *Summative e-assessment tools*, *Blog* and *Personal response systems*. Comparing the responses to questions 3.21 and 4.9 does reinforce how provision does not necessarily lead to use.

A breakdown of results for the Top 5 tools is presented below. Please note that the total number of responses received for each tool does vary. The full set of results for each item is available in the Appendix (Tables A4.9a–y). For a full longitudinal comparison of results across previous Surveys, please view Table C4.9.

Table 4.9a: Virtual Learning Environment (VLE)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	39	42%	34%	47%	56%	45%	20%	30%	0%
75% – 99%	47	50%	53%	50%	33%	45%	80%	70%	100%
50% – 74%	2	2%	2%	3%	0%	3%	0%	0%	0%
25% – 49%	1	1%	2%	0%	0%	1%	0%	0%	0%
5% – 24%	1	1%	2%	0%	0%	1%	0%	0%	0%
1% – 4%	1	1%	2%	0%	0%	1%	0%	0%	0%
0%	0	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	3	3%	6%	0%	0%	4%	0%	0%	0%

Table 4.9b: Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	12	13%	13%	11%	22%	12%	0%	30%	0%
75% – 99%	49	52%	51%	61%	22%	53%	100%	20%	100%
50% – 74%	16	17%	21%	13%	11%	18%	0%	20%	0%
25% – 49%	6	6%	2%	8%	22%	5%	0%	20%	0%
5% – 24%	2	2%	0%	5%	0%	3%	0%	0%	0%
1% – 4%	2	2%	2%	3%	0%	3%	0%	0%	0%
0%	1	1%	0%	0%	11%	1%	0%	0%	0%
Don't know	6	6%	11%	0%	11%	6%	0%	10%	0%

Table 4.9c: Electronic Management of Assignments (EMA)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	17	18%	9%	26%	33%	18%	0%	20%	0%
75% – 99%	41	44%	45%	45%	33%	48%	60%	10%	0%
50% – 74%	7	7%	9%	8%	0%	6%	20%	10%	0%
25% – 49%	8	9%	15%	0%	11%	9%	0%	10%	0%
5% – 24%	4	4%	2%	8%	0%	4%	0%	10%	0%
1% – 4%	1	1%	2%	0%	0%	1%	0%	0%	0%
0%	5	5%	4%	8%	0%	4%	0%	20%	0%
Don't know	11	12%	15%	5%	22%	10%	20%	20%	0%

Table: 4.9d: Reading list management software

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	15	16%	15%	16%	22%	14%	20%	20%	100%
75% – 99%	26	28%	26%	37%	0%	30%	40%	10%	0%
50% – 74%	12	11%	15%	13%	0%	14%	0%	10%	0%
25% – 49%	11	12%	15%	8%	11%	10%	20%	20%	0%
5% – 24%	5	5%	6%	5%	0%	4%	0%	20%	0%
1% – 4%	1	1%	0%	0%	11%	1%	0%	0%	0%
0%	12	13%	9%	11%	44%	14%	0%	10%	0%
Don't know	12	13%	15%	11%	11%	13%	20%	10%	0%

Table: 4.9e: Lecture capture tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	5	5%	9%	0%	11%	6%	0%	0%	0%
75% – 99%	17	18%	32%	5%	0%	19%	40%	0%	0%
50% – 74%	10	11%	13%	11%	0%	10%	0%	20%	0%
25% – 49%	16	17%	15%	24%	0%	17%	20%	10%	100%
5% – 24%	22	23%	19%	32%	11%	21%	40%	40%	0%
1% – 4%	9	10%	2%	21%	0%	10%	0%	10%	0%
0%	8	9%	2%	3%	67%	9%	0%	10%	0%
Don't know	7	7%	9%	5%	11%	8%	0%	10%	0%

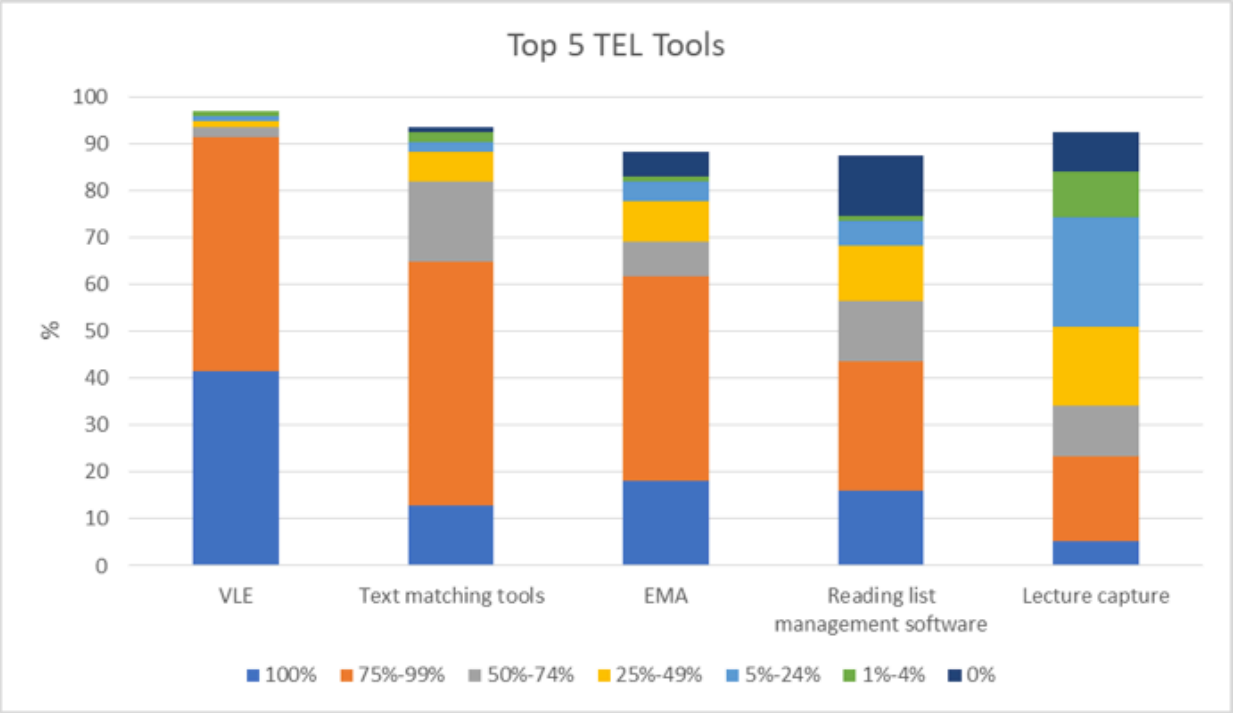


Figure 4.9: Chart showing proportion of courses using (Top 5) TEL tools

Comparing the extent to extent to which tools are used across Pre-92 and Post-92 institutions tables 4.9a-e show that VLE and text-matching tool use are comparable. However, the use of EMA and Reading list management software is higher in Post-92 and lecture capture in Pre-92.

Unpacking this further by mission group, Tables 4.9(i) a-e provide a breakdown for the Top 5 tools of use, in terms of percentage of courses using, by mission group. Russell Group Institutions have notably lower use of EMA across courses than the other mission groups. Only 6% of these universities are at 100% course usage compared to GuildHE (43%), Alliance (30%) and Million + (42%) (Table 4.9(i)c). Conversely Lecture Capture is used more widely in Russell Group universities, with 71% of these HEIs reporting use in over 50% of courses compared to GuildHE (0%), Alliance (10%) and Million + (25%) (Table 4.9(i)e).

Table 4.9(i) a: Virtual Learning Environment (VLE) [mission group]

Response	Total		Mission Group				
	No	%	GuildHe	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(94)*	*(7)*	*(10)*	*(12)*	*(17)*	*(48)*
100%	39	42%	71%	50%	58%	29%	35%
75% – 99%	47	50%	29%	40%	42%	59%	54%
50% – 74%	2	2%	0%	10%	0%	6%	0%
25% – 49%	1	1%	0%	0%	0%	6%	0%
5% – 24%	1	1%	0%	0%	0%	0%	2%
1% – 4%	1	1%	0%	0%	0%	0%	2%
0%	0	0%	0%	0%	0%	0%	0%
Don't know	3	3%	0%	0%	0%	0%	6%

Table 4.9(i) b: Text-matching tools (e.g. SafeAssign, Turnitin, Urkund) [mission group]

Response	Total		Mission Group				
	No	%	GuildHe	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(94)*	*(7)*	*(10)*	*(12)*	*(17)*	*(48)*
100%	12	13%	29%	20%	17%	12%	8%
75% – 99%	49	52%	29%	40%	50%	41%	63%
50% – 74%	16	17%	14%	30%	25%	24%	10%
25% – 49%	6	6%	0%	10%	8%	6%	6%
5% – 24%	2	2%	14%	0%	0%	0%	2%
1% – 4%	2	2%	14%	0%	0%	6%	0%
0%	1	1	0%	0%	0%	0%	2%
Don't know	6	6%	0%	0%	0%	12%	8%

Table: 4.9(i) c: Electronic Management of Assignments (EMA)

Response	Total		Mission Group				
	No	%	GuildHe	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(94)*	*(7)*	*(10)*	*(12)*	*(17)*	*(48)*
100%	17	18%	43%	30%	42%	6%	10%
75% – 99%	41	44%	29%	50%	17%	41%	52%
50% – 74%	7	7%	0%	10%	8%	18%	4%
25% – 49%	8	9%	0%	0%	8%	18%	8%
5% – 24%	4	4%	14%	0%	8%	6%	2%
1% – 4%	1	1%	0%	0%	0%	0%	2%
0%	5	5%	0%	10%	8%	6%	4%
Don't know	11	12%	14%	0%	8%	6%	17%

Table: 4.9(i) d: Reading list management software

Response	Total		Mission Group				
	No	%	GuildHe	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(94)*	*(7)*	*(10)*	*(12)*	*(17)*	*(48)*
100%	15	16%	14%	30%	17%	12%	15%
75% – 99%	26	28%	14%	40%	25%	29%	27%
50% – 74%	12	13%	0%	10%	17%	6%	17%
25% – 49%	11	12%	0%	10%	8%	18%	13%
5% – 24%	5	5%	14%	0%	8%	18%	0%
1% – 4%	1	1%	0%	0%	0%	0%	2%
0%	12	13%	29%	0%	17%	6%	15%
Don't know	12	13%	29%	10%	8%	12%	13%

Table: 4.9(i) e: Lecture capture tools

Response	Total		Mission Group				
	No	%	GuildHe	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(94)*	*(7)*	*(10)*	*(12)*	*(17)*	*(48)*
100%	5	5%	0%	0%	0%	6%	8%
75% – 99%	17	18%	0%	10%	0%	41%	19%
50% – 74%	10	11%	0%	0%	25%	24%	6%
25% – 49%	16	17%	0%	20%	17%	18%	19%
5% – 24%	22	23%	29%	20%	33%	6%	27%
1% – 4%	9	10%	0%	30%	25%	0%	6%
0%	8	9%	57%	10%	0%	0%	6%
Don't know	7	7%	14%	10%	0%	6%	8%

Question 4.10: Has the institution evaluated the impact of TEL on the *student learning experience* across the institution as a whole over the *past two years*? This can include particular aspects of TEL across the institution.

Questions 4.10–4.14 sought to investigate the extent to which the sector is evaluating the impact of TEL, both in terms of the effect on the student learning experience and its influence on pedagogic practices. First introduced in 2012, the question set has been redesigned in the light of the data collected in previous Surveys, using pre-coded response options to reflect commonly referenced evaluation themes.

Table 4.10: Evaluation of the impact of TEL on the student learning experience across the institution as a whole over the past two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(93)*	*(47)*	*(37)*	*(9)*	*(77)*	*(5)*	*(10)*	*(10)*
Yes	40	43%	43%	43%	44%	43%	60%	40%	0%
No institutional evaluation, but individual departments/schools have evaluated*	11	12%	15%	8%	11%	10%	20%	20%	0%
No evaluation*	42	45%	43%	49%	44%	47%	20%	40%	100%

The 2018 Survey included an option to differentiate institutional level and local evaluations – previous Surveys had invited simple yes/no responses. Table 4.10 shows that 43% of respondents had undertaken institutional level evaluations and a further 12% local departmental level evaluations. In 2016, 40% of institutions had undertaken evaluations on the impact of TEL on the student learning experience over the past two years. Even combining the institutional and departmental level evaluations, the level of activity (55% for 2018) remains relatively low, comparable with that reported in 2014 (52%) and 2012 (61%).

Previous Surveys had indicated that Pre-92 institutions had been more active than Post-92 institutions in conducting impact studies, but in 2018 there is little difference in the data. However, analysis of mission group data does show that GuildHE and Russell Group institutions have conducted more impact studies: 71% of GuildHE and 59% of Russell Group institutions (Table 4.10(i)).

Table 4.10(i): Evaluation of the impact of TEL on the student learning experience across the institution as a whole over the past two years [by mission group]

Response	Total		Mission Group				
	No	%	GuildHE	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(93)*	*(7)*	*(9)*	*(12)*	*(17)*	*(48)*
Yes	40	43%	71%	22%	33%	59%	40%
No institutional evaluation, but individual departments/schools have evaluated*	11	12%	0%	22%	17%	12%	10%
No evaluation*	42	45%	29%	56%	50%	29%	50%

Question 4.11: What types of evaluations have individual departments/schools undertaken over the *past two years*? Please write in some examples.

Eleven institutions provided information on the types of evaluation undertaken. Of these, four indicated that they were part of module or course evaluation, providing a standard format to ask questions linked to TEL. In other instances, there was a project focus to the evaluations, linked to tools that were being piloted or being focused on VLE usability or learning spaces; student led evaluations; and an example of an evaluation of an initiative to have TEL partners in faculties. Example responses include:

- Student Council led evaluation of student needs and Moodle use, resulting in *Moodle Minimum* policy.
- We are piloting the role of TEL partners in the Faculties and are currently evaluating TEL at a Faculty level.
- Question in the standard module evaluation questionnaire.

Question 4.12: What aspects of the impact of technology enhanced learning on the *student learning experience* have you evaluated over the past two years?

This question was introduced in 2016, inviting respondents to identify the key themes for institutional evaluation activities. Respondents were provided with a list of options based on previous Survey data and known areas of evaluation activity across the sector.

Table .12: What aspects of the impact of technology enhanced learning on the student learning experience have you evaluated over the past two years?

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(40)*	*(20)*	*(16)*	*(4)*	*(33)*	*(3)*	*(4)*	*(0)*
General review of TEL services*	28	70%	80%	69%	25%	67%	100%	75%	0%
Take-up/usage/adoption by students of lecture capture	24	60%	75%	50%	25%	61%	67%	50%	0%
Student digital fluency/capability*	21	53%	45%	75%	0%	55%	33%	50%	0%
Electronic Management of Assignments (EMA)*	14	35%	40%	25%	50%	33%	33%	50%	0%
e-assessment*	11	28%	35%	19%	25%	27%	0%	50%	0%
Other aspect evaluated*	8	20%	15%	13%	75%	24%	0%	0%	0%
Mobile learning	6	15%	10%	19%	25%	18%	0%	0%	0%
Use of learning analytics in supporting students	6	15%	25%	6%	0%	18%	0%	0%	0%
Effectiveness of flipped learning	2	5%	5%	6%	0%	6%	0%	0%	0%

While *General review of TEL services* is the most common response, Table 4.12 shows that where more specific aspects are identified, *Lecture capture* (60%) and *Student digital fluency/capability* (53%) are now the most cited; this contrasts with 2016 when e-assessment (43%), lecture capture (30%) and mobile learning (28%) were the most common evaluation themes. The new prominence of Student digital fluency/capability may reflect the recent use of the Jisc Student tracker (which three institutions referenced in the *Other* category).

More (75%) Pre-92 institutions evaluate *Lecture capture* (Post-92 = 50%), a pattern consistent with the 2016 data, while more Post-92 institutions evaluate *Student digital fluency/capability* (Post-92 = 75%; Pre-92 = 45%).

Question 4.13: *How* has the impact been measured, *when*, and for *what purpose*?

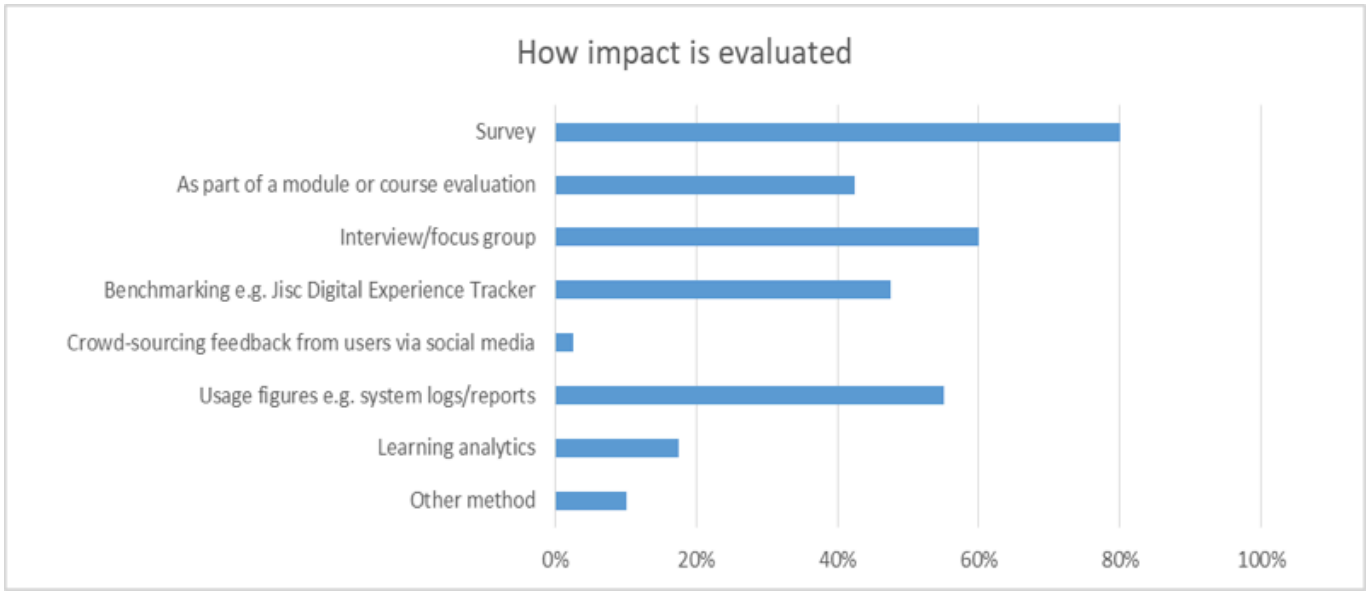


Figure 4.13a: Details of how the impact of TEL tools on the student learning experience has been measured, when and for what purpose

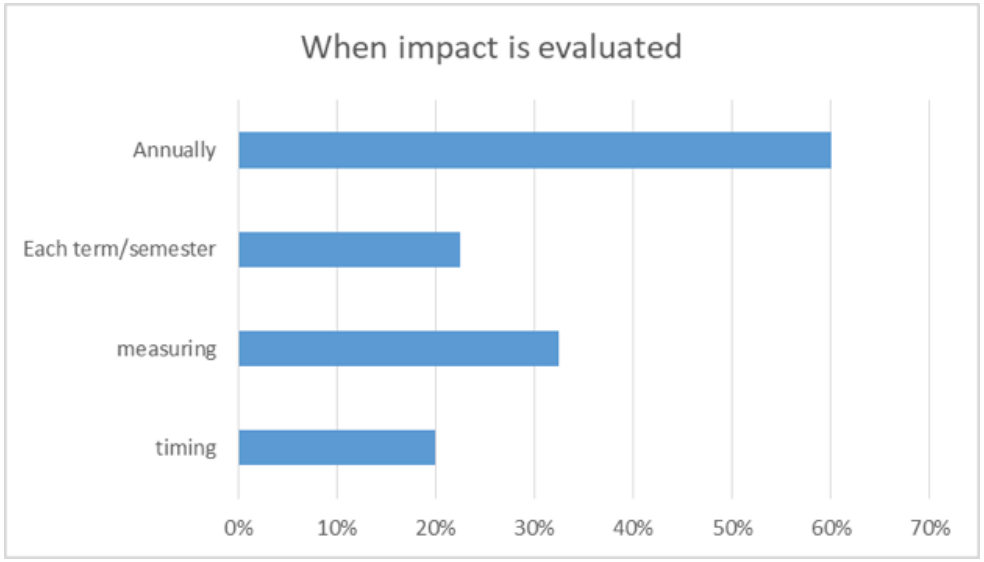


Figure 4.13b: Details of when the impact of TEL tools on the student learning experience is evaluated

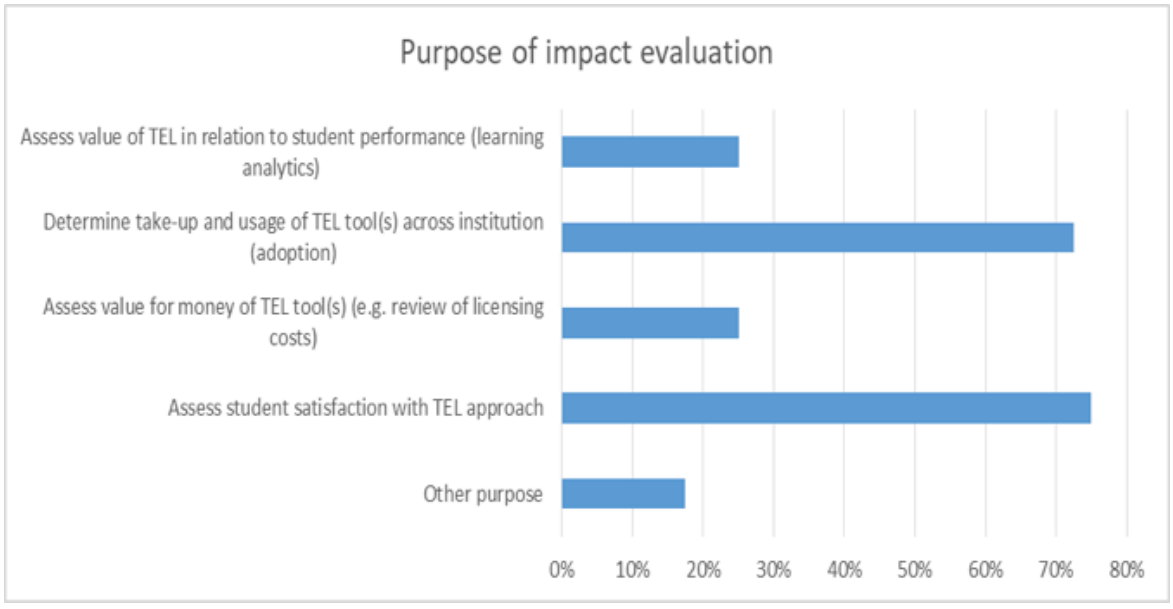


Figure 4.13c: Details of purpose of the evaluation of TEL tools on the student learning experience

The two most common purposes for undertaking evaluation activities, remain to investigate student satisfaction (75%) and to determine take-up of TEL services (73%) (Table 4.13c). The number of institutions whose purpose is to *Assess value of TEL in relation to student performance (learning analytics)* remains relatively low. However, it does show an increase from 8% in 2016 to 25%. This is consistent with responses elsewhere in the Survey (Q1.3) which indicating how Improving student satisfaction and Meeting student expectations in the use of technology are key driving factors for TEL development.

The 2018 results show that *surveys* remain the most common data gathering method (80%), followed by *interview/ focus groups* (60%). New responses for 2018, *Usage figures* (55%) and *Benchmarking* (48%) also figure prominently (Table 4.13a).

Question 4.14: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

40 respondents provided responses to this question, with 35 providing information on the evaluation outcomes. It is possible to identify general themes from the responses, which were variable in detail. Question 4.13 shows that *Assessing student satisfaction* and *Determining take-up and usage of TEL tools* were the most common reasons for undertaking the evaluations. The responses to Question 4.14 reveal that the evaluations are helping respondents inform how they *organise services and tools*, identify gaps in their provision and identify areas where usage is limited. The responses also reveal factors or services that are impacting on *Student satisfaction*. For example, the positive response to provision of lecture capture and conversely concern over the level of staff digital capabilities. Consistency of provision was another emerging theme. Table 4.14 presents the broad themes which emerged from the responses, some are very generic (e.g. student satisfaction and usage) but in some cases more specific information was provided such as consistency and lecture capture.

Table 4.14: Broad conclusions from the evaluations undertaken into the impact of TEL on the student learning experience

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact and provided details of outcome)		*(35)*	*(18)*	*(14)*	*(3)*	*(28)*	*(3)*	*(4)*	*(0)*
Organisation of services and tools	11	31%	28%	36%	0%	25%	67%	25%	0%
Student usage	10	29%	22%	36%	67%	36%	33%	25%	0%
Lecture capture	10	29%	44%	14%	0%	21%	67%	50%	0%
Consistency	7	20%	22%	14%	0%	14%	0%	50%	0%
Staff digital capabilities	6	17%	6%	29%	33%	11%	33%	50%	0%
Student satisfaction	6	17%	11%	29%	0%	18%	33%	0%	0%

Table 4.14b provides some indicative responses to help illustrate the themes identified in table 4.14.

Table 4.14b: Qualitative comments provided by respondents in support of the broad conclusions on TEL impact studies on the student learning experience

Category	Sample comments
Organisation of services and tools	Students are generally very satisfied with the use of TEL, but feel that the VLE could be used more within particular areas. Students want more technology integrated into their learning experiences and they want more consistent use of technology and the VLE. Highlighted general areas for development including missing services and tools. Also issues of usability and inconsistent practices within and across courses.
Student usage	Student use of digital interfaces change as they progress as learners; students value a mixed methods approach, that is a variety of tools. Students are confident, strategic and discerning online learners – though they may not use TEL to best effect and are reluctant to explore how they could better engage with technology.
Lecture capture	Lecture recording is being received positively by students. Students want all lectures recorded.
Consistency	Students like consistency across modules. Students are positive towards the use of TEL but have growing expectations and want more consistency.
Staff digital capabilities	The general consensus that students learn better and feel more engaged when technology is used, and see the value in technology skills for their chosen careers, but are less than satisfied with staff digital capability. Students would like staff to make use of more tools within Moodle, including collaborative learning activities.
Student satisfaction	Generally positive feedback from students on current way TEL is used. Students in the main are satisfied with TEL deployment.

Question 4.15: Has the institution evaluated the impact of TEL on *staff pedagogic practices* across the institution as a whole over the *past two years*? This can include particular aspects of TEL across the institution

Table 4.15: Evaluation of the impact of TEL on pedagogic practices across the institution as a whole over the past two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(92)*	*(47)*	*(37)*	*(9)*	*(76)*	*(5)*	*(10)*	*(1)*
Yes	21	23%	24%	24%	11%	22%	20%	30%	0%
No institutional evaluation, but individual departments/schools have evaluated*	12	13%	17%	8%	11%	12%	20%	20%	0%
No evaluation*	59	64%	59%	68%	78%	66%	60%	50%	100%

Table 4.15 shows that only 21 institutions (23%) evaluated the impact of TEL on staff pedagogic practices across the institution as a whole, this is down from 36% in 2016, and is the lowest percentage response to this question since it was introduced in 2012. Twelve institutions (13%) indicated local evaluation activity. The breakdown of data by organisational type shows that Pre-92 and Post-92 institutions have a similar level of evaluation activity. In contrast to Q4.10, which asked about evaluation of the student learning experience, in this instance there is less difference between mission group types (Table 4.15(i)).

Table 4.15(i): Evaluation of the impact of TEL on pedagogic practices across the institution as a whole over the past two years [by mission group]

Response	Total		Mission Group				
	No	%	GuildHE	Alliance	Million+	Russell Group	Unclassified
(Base: all respondents)		*(92)*	*(7)*	*(9)*	*(12)*	*(17)*	*(47)*
Yes	21	23%	14%	33%	33%	35%	15%
No institutional evaluation, but individual departments/schools have evaluated*	12	13%	0%	0%	17%	12%	17%
No evaluation*	59	64%	86%	67%	50%	53%	68%

Question 4.16: What types of evaluations have individual departments/schools undertaken over the past two years? Please write in some examples.

12 institutions provided examples of types of evaluations undertaken by individual departments/schools. The types of evaluation undertaken includes use of annual programme/course reports and module evaluations plus focused evaluations on specific projects or services. Where there has been an identified focus beyond annual review and module evaluations, then learning spaces, minimum VLE standards and usability were identified. Example responses include:

- *An assessment of the use of technology is one of the factors in the Annual Departmental Teaching Reviews.*
- *Evaluation of active learning spaces and impact on teaching approaches.*
- *Individual schools look closely at student module evaluations and consider use of technology.*
- *Part of the ongoing T&L reports done by programme leaders.*

Question 4.17: What aspects of staff pedagogic practices have you evaluated over the *past two years*?

This was a new question for 2016, introduced to gain a clear understanding of the institutional focus for pedagogic evaluation activity. In 2016, assessment related uses of TEL were the most common. These do still feature prominently. However, *General review of TEL services* (62%) and *Staff digital fluency/capability* (48%) are the most common responses in 2018. The recent interest in lecture capture is also evident in the responses (33%).

Table 4.17: Aspects of staff pedagogic practices that have been evaluated in the last two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(21)*	*(11)*	*(9)*	*(1)*	*(17)*	*(1)*	*(3)*	*(0)*
General review of TEL services*	13	62%	73%	44%	100%	65%	100%	33%	-
Staff digital fluency/capability	10	48%	46%	56%	0%	47%	100%	33%	-
Take-up/usage/adoption by students of lecture capture	7	33%	27%	44%	0%	41%	0%	0%	-
e-assessment	7	33%	36%	22%	100%	29%	0%	67%	-
Electronic Management of Assignments (EMA) including e-marking and e-feedback*	5	24%	36%	11%	0%	18%	100%	33%	-
Other aspect evaluated	4	19%	18%	11%	100%	24%	0%	0%	-
Effectiveness of flipped learning	3	14%	9%	22%	0%	18%	0%	0%	-
Mobile learning	2	10%	9%	0%	100%	12%	0%	0%	-
Use of learning analytics in supporting students	2	10%	18%	0%	0%	6%	0%	33%	-

Question 4.18: *How* has the impact on *pedagogic practices* been measured, *when* and for *what purpose*?

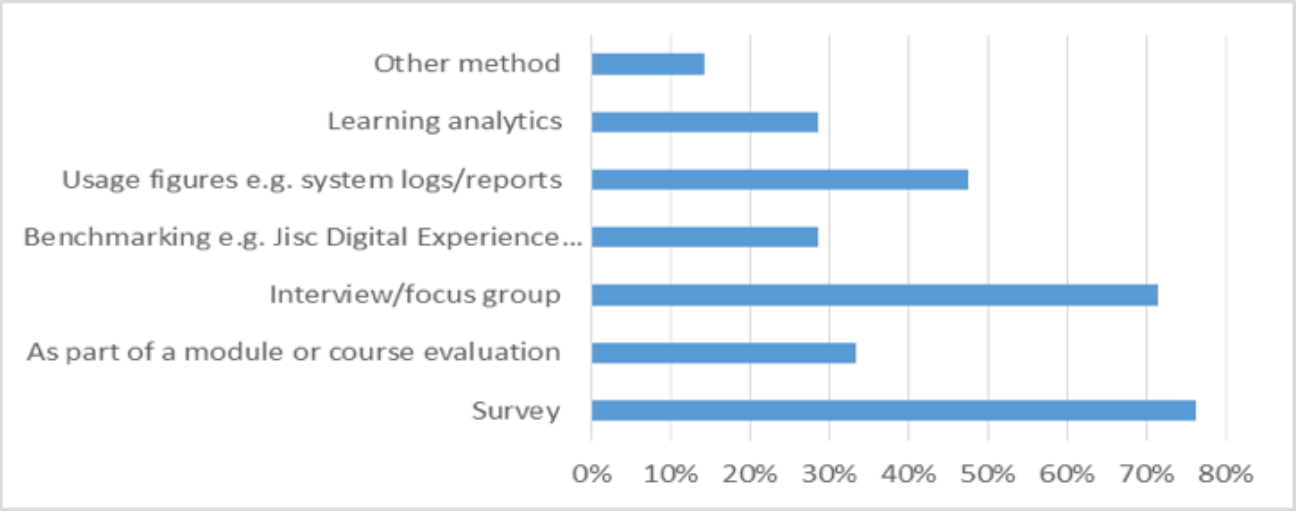


Figure 4.18a: Details of how the impact of TEL tools on pedagogic practices has been evaluated

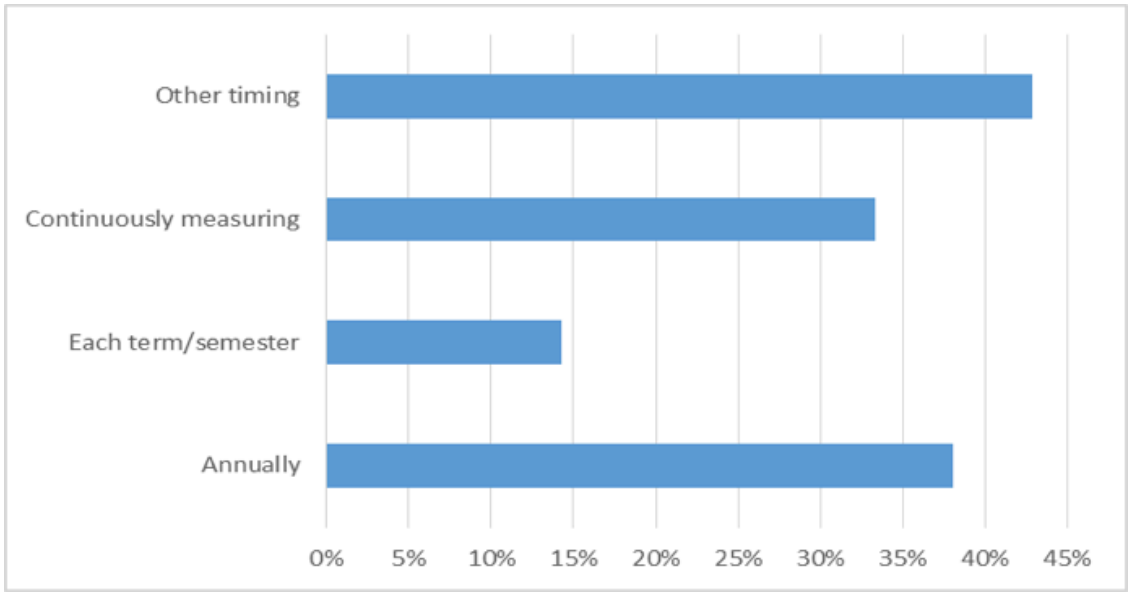


Figure 4.18b: Details of when the impact of TEL tools on pedagogic practices was evaluated

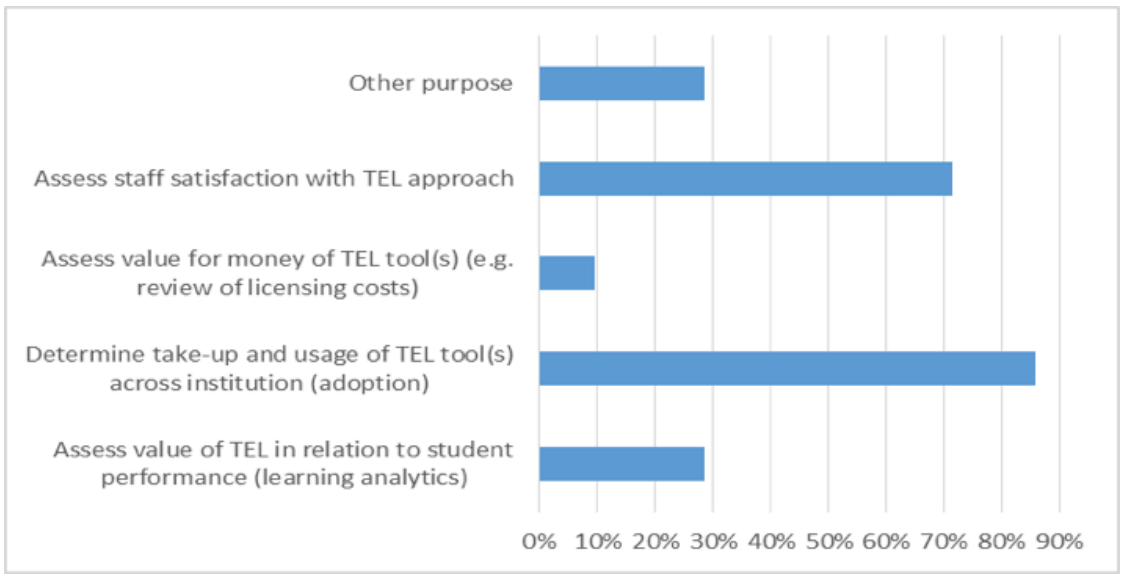


Figure 4.18c: Details of for what purpose the impact of TEL tools on pedagogic practices was evaluated

Figures 4.18a–c provides a breakdown of the categories detailing when, how and for what purpose the impact of TEL tools on pedagogic practices has been measured. The full data for this question is available in Table A4.18.

The number of institutions indicating they conduct evaluations remains a small proportion (23%) (Table 4.15), given the evidence that indicates continual lack of full exploitation of technology this is interesting to note. In terms of gathering evaluation data, *Surveys* and *interviews* are again the most popular methods for measuring the impact of TEL (Fig 4.18a). The frequency of evaluations is varied, with responses, including written responses, showing that as well as annual surveys opportunities through specific project and TEL reviews are utilised (Fig 4.18b).

Determining take-up of TEL tools and usage across an institution (adoption) – 86% – was still the most widely reported purpose for pedagogic evaluation to be conducted. Assessing *staff satisfaction* (71%) the next most popular response (Fig 4.18c). In the 2016 Survey, the reduced percentage of institutions selecting *Assess value of TEL tools in relation to student performance learning analytics* as the purpose of their evaluation activity was noted as dropping from 44% to 17%, 2018 saw an increase to 29%, still below 2014 levels.

Pre 92 and Post 92 differences are limited within the small sample set for this question.

Question 4.19: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

Questions 4.19 invited respondents to identify the main conclusions arising from the evaluations of the impact of TEL for pedagogic practices. The responses to this question reveal a concern about the limited digital capabilities of staff and the variation in engagement with and uptake of technology. These qualitative comments add to the picture of generally extensive use of technology at a limited base level, with enhanced use being impacted by lack of staff digital capabilities, lack of awareness of potential, and lack of resources and support. The responses also indicate that undertaking such evaluations is helping to identify differences in usage across discipline areas. Table 4.19 provides some indicative quotes.

Table 4.19: Illustrative comments explaining what the evaluations have revealed

Increasing division in technically competent staff who are prepared to take risk and embrace new technologies – and staff with poor digital literacy rely on support staff to carry out e-learning tasks.
Steady growth in use – although not consistent across the institution – has indicated areas to focus support and effort.
Inconsistent practice with some areas of excellent practice with others of limited use. Use of lecture capture and online reading lists is disappointingly low and many staff have low confidence levels. Marked differences depending on subject area.
In summary, the academic staff survey revealed that basic technology is used widely across the University but there is significant scope to use/adopt added value tools and services. There is an underlying appetite to use technology more to enhance learning and teaching.
A range of practice and digital capabilities. VLE is central to the delivery of all modules but some aspects of delivery need further support, e.g. support for more interactive resources, general learning design approaches particularly in relation to fully online delivery.

Summary

The pattern of different delivery modes (blended, online and open) shows that *supplementary blended learning* approaches remain more prevalent than active modes of blended learning. Provision of *Fully online courses* is primarily a school/department (especially for Post-92) or Individual Teacher (especially for Pre-92) activity. *Open online courses for public use* are offered more by Pre-92 institutions. Overall, use across the different modes of delivery remains consistent with data from 2016.

The number of institutions identifying discipline areas, which make more or less extensive use of TEL continues to drop, indicating that institutions are moving toward a more standardised use of TEL. Where reported, Medical Sciences and Business and Management continue to be the most extensive users, and Art and Design the discipline where TEL is used less extensively.

Four tools – VLEs, Electronic Management of Assignments (EMA), Text-matching and Reading List Management software were identified as being used significantly across institutions; being used in over 50% of courses in the majority of institutions. However, these results, when cross referenced to Q3.21, do indicate that provision of tools (as evidenced in Q3.21) does not lead to use. Tools that are commonly provided across the sector, but show low levels of use across courses, include e-portfolios, summative e-assessment tools, blog and personal response systems.

Making comparisons across the sector, Russell Group institutions have notably lower use of EMA across courses than the other mission groups. Conversely Lecture Capture is used much more widely in Russell Group universities compared to other mission groups.

Evaluation of the impact of TEL on both the *student learning experience* and *staff pedagogic practices* remains low across the sector. Where evaluations are taking place the aspects of the impact focused on have been *General Review of TEL services*, *Student or staff digital fluency/capability* and specific projects such as *Lecture capture*. The purpose for undertaking evaluations has been identified as *Student or staff satisfaction* and *Determining the take-up of TEL services*. Pre-92 institutions are more likely to evaluate *Lecture capture* and Post-92 *Student digital fluency/capability*.

Section 5: Support for technology enhanced learning tools

Section 5 focused on the support available for TEL within institutions, looking at the different types and locations of support units, the number of TEL support staff and how support units are changing over time. For the first time, the Survey asked institutions to identify the main unit supporting TEL and introduced a new response option in questions 5.1–5.3 to capture the existence of support units specifically for distance and online learning.

Question 5.1: Which, if any, support units are there in your institution that provide *support for TEL*? Please include both centrally provided and local units.

Table 5.1: Support units that provide support for technology enhanced learning – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Information technology support	73	74%	79%	67%	78%	70%	83%	92%	100%
TEL unit or equivalent*	66	67%	67%	67%	67%	70%	50%	50%	100%
Educational Development Unit (EDU)	53	54%	56%	60%	11%	51%	67%	58%	100%
Local support	51	52%	56%	50%	33%	53%	67%	42%	0%
Library	45	45%	44%	52%	22%	44%	67%	50%	0%

Table 5.1 presents the Top 5 responses for Question 5.1 and shows the percentage of institutions which have each of the support units listed. The full list is provided in Table A5.1. The question responses were updated to change the name of the previous response option *Learning Technology Support Unit* to *TEL unit or equivalent* and to introduce *Distance/Online Learning Unit* as a new response option.

In a change since the 2016 Survey, *IT Support* returns to being the most prevalent unit providing TEL support, having increased from 59% to 74%. All the other types of support unit have seen either a small reduction or a small increase since 2016. *Educational Development Units* continue to be less prevalent in Other HE institutions, who have located the majority of their TEL support in *IT support* and *TEL units*.

Both *Library* and *Local support* are showing a slight downward trend from a peak of 60% in the 2014 Survey, to 45% and 52% respectively. *Distance/Online Learning Unit* was introduced as a new response option in 2018 and this type of specialist unit has been reported in 23% of institutions, predominantly Pre-92 and English institutions. In the majority of cases, the *Distance/Online Learning Unit* exists in addition to other support units, primarily a *TEL unit* or *Educational Development Unit*.

Where respondents indicated that they had *Other support units*, these included a school-based distance learning unit, organisational development, web services, audio visual team, TEL systems developers and equivalents to an EDU unit.

Table 5.1b: Mean number of units providing support for TEL per institution

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)	*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Mean number of support units	3.26	3.52	3.19	2.22	3.25	3.67	3.17	3.00

Table 5.1b summarises the responses for Question 5.1, focusing on the mean number of support units per institution. The data shows that institutions provide TEL support via a range of units, typically with three per institution, with Other HE providers having a lower mean of around two units.

As shown in Table C5.1b, the mean number of support units continues to fluctuate, with 2018 seeing an increase from 2.97 to 3.26. This fluctuation appears to indicate that TEL support structures are still evolving across the sector, which is reflected in the responses to Question 5.4, with 80% of institutions having changed their TEL staffing provision in the last two years and 38% of institutions indicating that they have undergone a restructure of their department or TEL provision.

Question 5.2: How many staff supporting TEL are in the unit?

Table 5.2a: Mean number of staff working in each unit

	IT support	TEL	EDU	Library	Local support	Distance/ Online*	Other	Outsourced/ Specialist
(Base: all respondents)	*(73)*	*(66)*	*(53)*	*(45)*	*(51)*	*(23)*	*(8)*	*(4)*
Mean number of learning technologists	0.86	5.77	2.08	0.73	6.58	2.57	0.95	0.50
Mean number of IT support staff	5.54	0.53	0.15	0.94	1.78	0.04	0.88	0.50
Mean number of administrative staff	0.23	0.56	0.49	0.33	0.88	1.17	0.00	0.00
Mean number of academic staff	0.23	0.15	1.38	0.09	0.71	0.04	0.25	0.00
Mean number of other staff	0.35	0.48	0.62	3.41	0.37	3.17	0.50	0.00

Table 5.2a displays the mean number of individual staff by staff type for each support unit for the sector as a whole. For a full breakdown by country and institution type see tables A5.2aa–ah.

Overall, the key locations within the institution for *Learning Technologists* are within *TEL units or equivalent* (5.77) and *Local Support* (6.58) with both showing an increase in staff since 2016. *IT Support Staff* supporting TEL are most likely to be found within *IT Support Units* (5.54), although this number has reduced since 2016 when the mean was 9.60.

Pre-92 institutions have more *Learning Technologists* providing *Local support* (8.54) than Post-92 (4.76) and *Other* HE providers (1.67). This is a change from 2016 when numbers were comparable for Pre-92 and Post-92, and Other HE providers had reported having no local Learning Technologists.

Distance/Online Learning Units were a new response item for 2018 and the results in Table A5.2af show some variation between institutions about the type of staff within these units. The highest number of Learning Technologists in these units are found in Pre-92 institutions (3.44), with Post-92 institutions favouring *Other* types of staff. Unfortunately, the Survey did not ask respondents to provide details about the roles of the other types of staff, but it is likely these staff have instructional design/development roles.

Analysing the differences between the mission groups shows that Russell Group institutions have the highest mean number of Learning Technologists within TEL units (8.9), with the other three mission groups reporting means of 3–5. Russell Group institutions also reported the highest number of local Learning Technologists (14.38), which is more than double the second highest mean within Universities Alliance institutions (6.56)

In addition to the number of staff supporting TEL, respondents were asked to provide the FTE of staff supporting TEL in each unit. The Top 5 are provided in Table 5.2b, with the full data provided in Table A5.2b.

Table 5.2b: Mean FTE of staff working in each unit – Top 5

Response	Total		Type			Country			
	No	Mean	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Local support	51	6.33	6.44	7.05	0.33	6.10	0.50	13.00	0.00
TEL unit or equivalent*	66	4.60	6.22	3.66	0.33	4.83	2.27	4.40	0.00
Distance/online learning unit*	23	3.27	3.26	3.83	0.00	3.51	2.00	1.50	0.00
Educational Development Unit (EDU)	53	2.93	2.64	3.12	6.00	3.17	1.50	2.76	0.00
Information technology support	73	2.74	3.50	2.26	0.57	2.71	5.02	2.15	0.00

The highest FTE of staff is found within *Local support units* (6.33), followed by *TEL units or equivalent* (4.60). *Distance/ Online Learning Units* have the third highest mean FTE. However, it should be noted that this data is somewhat skewed by a single institution reporting a Distance/Online Learning unit with 25 FTE. Institutions from Wales do not reflect the rest of the sector as the majority of their FTE exists in *Other support units*, *IT support* and the *Library*.

The mean FTEs reflect the results from the 2016 Survey, with the exception of the FTE count for *Other support unit*. This FTE has reduced following the renaming of the 2016 response item *Learning Technology Support Unit* to *TEL unit or equivalent*; previously institutions had listed TEL units in this category.

Considering the institutional types, Other HE providers typically have the majority of their FTE within an *Educational Development Unit* and very little *Local support* compared to Pre-92 and Post-92 institutions.

The results from the mission groups show that Russell Group institutions have the highest mean staff FTE within TEL units (6.90) and IT support (4.67), whilst Universities Alliance have the highest mean FTE at a *Local support* level (14.00).

Figure 5.2 presents the percentage of institutions against staff FTE, put into bands of five. The majority of institutions have 15 or fewer staff FTE supporting TEL within their institution. There are seven institutions with more than 36 FTE, including four Russell Group institutions. Comparing with the 2016 data there is a trend towards larger teams reflecting the responses from Question 5.4 where 40 institutions reported that they have increased the number of TEL staff in the last two years.

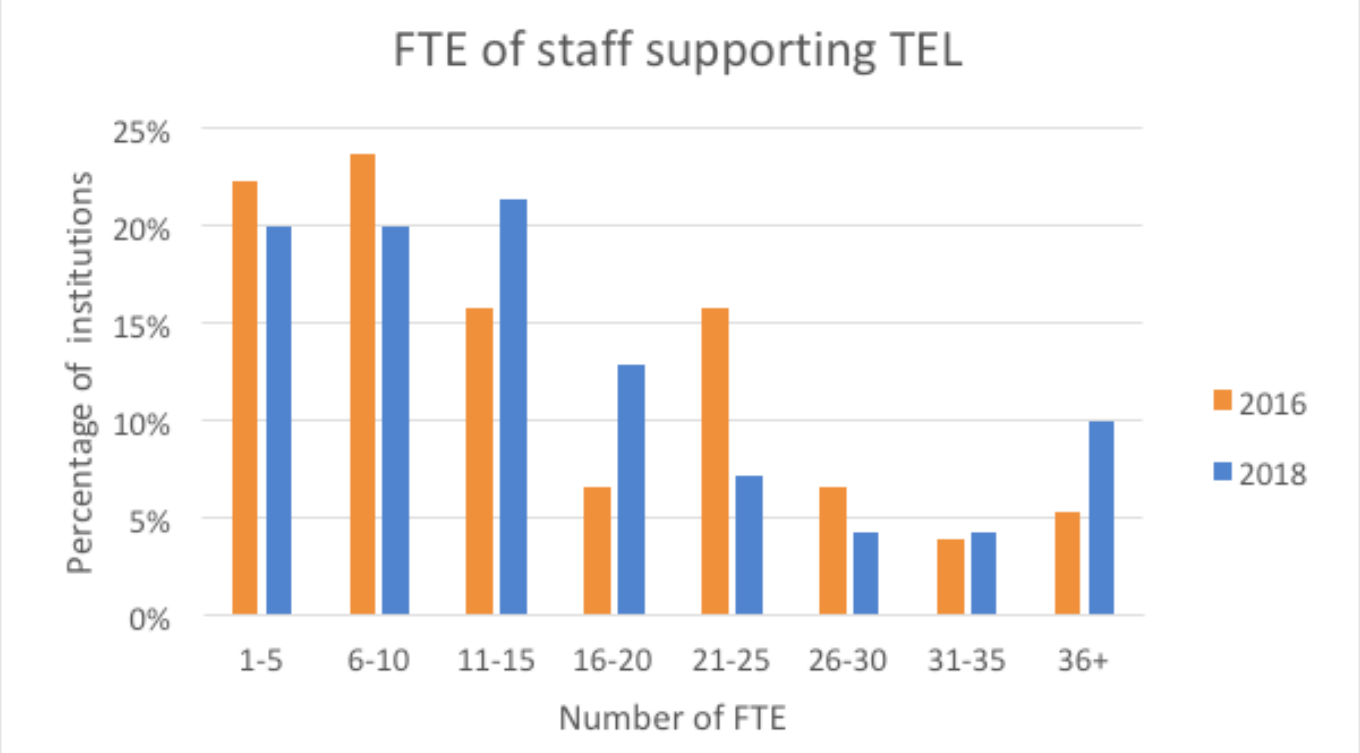


Figure 5.2 – Chart showing the FTE of staff supporting TEL

Cross referencing the responses to Question 5.2 with Question 1.3, encouraging factors for the development of TEL, it is interesting to note that those institutions who ranked *Availability of TEL support staff* as Very Important also reported the highest mean FTE of staff across all staff types.

Question 5.3: Which is the *main* unit in the institution that provides support for TEL?

Table 5.3: Main unit that provides support for TEL – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
TEL unit or equivalent*	59	60%	58%	64%	44%	64%	33%	42%	100%
Educational Development Unit (EDU)	13	13%	13%	17%	0%	11%	33%	17%	0%
No main unit	11	11%	8%	12%	22%	11%	17%	8%	0%
Information technology support	10	10%	13%	2%	33%	8%	0%	33%	0%
Local support	3	3%	4%	2%	0%	4%	0%	0%	0%

This was a new question in 2018 to identify the main support unit responsible for TEL. In the majority of cases *TEL units or equivalent* are the main support unit, which shows that whilst *IT support units* are the most prevalent (Question 5.1), their role is likely to be supporting the technical infrastructure rather than the main support for staff and students.

Three institutions reported that their *Local support* units were the main support for TEL, perhaps showing a devolved organisational structure for TEL in these institutions. Eleven institutions reported having no main unit for TEL support. Of these institutions, three reported large numbers of staff FTE at a local level, again indicating a devolved organisational structure.

Question 5.4: What changes in staffing provision for supporting TEL, if any, have been made over the *last two years*?

Table 5.4: Whether changes in staffing provision for supporting TEL have been made over the *last two years*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Changes made	80	81%	85%	76%	78%	80%	83%	83%	100%
No changes made	19	19%	15%	24%	22%	20%	17%	17%	0%

Table 5.4 shows that as with previous years, a large majority of institutions are continuing to make changes to staffing provision. A noticeable increase can be seen amongst Other HE providers with 78% reporting changes made, rising from 57% in 2016.

Table 5.4a: Changes made in staffing provision for supporting TEL over the *last two years* – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Increase in the number of staff	40	40%	50%	26%	56%	43%	17%	42%	0%
Restructure of department(s)/TEL provision	38	38%	48%	33%	11%	41%	33%	25%	0%
Change of existing roles/incorporation of other duties	30	30%	25 %	38%	22%	30%	17%	42%	0%
Reduction in the number of staff	22	22%	15%	33%	11%	19%	33%	33%	100%

Table 5.4a summarises the returns for those institutions where changes in staffing provision have been made and the table shows the Top 5 responses. Table A5.4a shows the full list.

An *increase in the number of TEL staff* continues to be the top change made to staffing provision, continuing the growth in TEL support noted in 2016. However, fewer institutions report growth (down from 51% in 2016 to 40%). This fall is particularly significant for Post-92 institutions where only 26% reported an increase in TEL staffing, compared to 50% in 2016. *Restructure of department(s)/TEL provision* retains 2nd place and continues the trend from previous surveys, showing there is still a lot of change in TEL support structures.

Responses of those institutions who indicated *Other change in staffing provision*, included an increase in the number of temporary staff to support the implementation of new initiatives, such as the introduction of a new VLE, and the reinstatement of staff previously moved to another department.

Cross referencing the responses to Question 5.4 with Question 1.3, encouraging factors for the development of TEL, 29 institutions who ranked *Availability of TEL support staff* as Very Important reported an increase in the number of staff in the last two years, which shows the impact of that factor on TEL staffing. However, 15 institutions reported a reduction in the number of TEL staff, despite considering TEL support staff as a key encouraging factor.

Question 5.5: Why have these changes been made?

Question 5.5 asked respondents to provide reasons for the changes that had been identified in Question 5.4. A number of reasons were given for the changes in staff provision over the past two years including:

- Increased recognition of teaching enhancement as a result of the TEF.
- Institutional recognition of the importance of the role that TEL plays in education and as a result placing a strategic focus on the enhancement of TEL.
- Support for new institutional level projects, particularly in relation to online and distance learning. Other areas of growth including online degree apprenticeships, online assessment and lecture capture.
- Increased demand for support as a result of the growing use of digital technologies.
- Institutional restructure, budgetary cuts and job freezes across the sector leading to a realignment of TEL teams and impacting growth and replacement of roles.
- Combining TEL staff from different parts of the institution into one team, to bring together expertise and deliver a consistent offering across the institution. This has included combining faculty learning technologists into a central team.

Question 5.6: Do you foresee changes in the staffing provision for supporting TEL in the near future?

Table 5.6: Whether changes in staffing provision for supporting TEL are foreseen in the near future

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Changes foreseen	76	77%	81%	74%	67%	74%	83%	92%	100%
No changes foreseen	23	23%	19%	26%	33%	26%	17%	8%	0%

Table 5.6 shows that the vast majority of the responding institutions foresee changes in their staffing provision in the near future, reporting similar findings to 2016 where 77% also foresaw changes.

Table 5.6a: Foreseen changes in staffing provision for supporting TEL in the near future – Top 5

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Increase in the number of staff	34	34%	44%	24%	33%	34%	17%	42%	100%
Anticipate change, but unsure as to how it might change	25	25%	19%	33%	22%	21%	50%	42%	0%
Restructure of department(s)/TEL provision	24	24%	29%	21%	11%	24%	0%	42%	0%
Change of existing roles/incorporation of other duties	23	23%	31%	17%	11%	23%	17%	33%	0%
Currently reviewing staffing provision	13	13%	13%	17%	0%	11%	0%	33%	0%

Table 5.6a summarises the returns for those institutions that do foresee changes in staffing provision and the table shows the top five responses. Table A5.6a provides the full list.

Of those that foresee change, 34% predict that this will be an increase in number of staff (increasing from 30% in 2016). This area of growth is primarily expected in Pre-92 institutions (44%). In 2018, 25% of responding institutions said they anticipated changes, but did not know how things might change, which is a decrease from 33% in 2016 (see Table C5.6a). The Top 5 responses in Table 5.6a remain the same, although *Increase in number of staff* swaps position with *Anticipate change but unsure as to what this might be*.

Two institutions reported *Other foreseen changes in staffing provision*; one mentioned greater involvement of students in driving changes, perhaps in relation to a *students as change agents* initiative, and the other reported putting together a business case for more staff as part of operational planning.

Summary of key findings

The number of units providing support for TEL has increased since the last Survey, but this appears to fluctuate every two years, which could indicate that TEL support provision is still evolving. This is reflected by the continuing changes in TEL staffing provision with 38% of respondents reporting some form of restructure of their department(s) or TEL provision. In addition, the 2018 Survey included a new response option relating to Distance/Online Learning units, which are present in 23% of institutions.

The 2018 findings also suggest a continued period of growth in TEL staffing, albeit at a slower rate than previous years, with 40% of respondents reporting an increase in the number of staff in the past two years. This is reflected in the increase in mean FTE of staff and this trend looks set to continue with the majority of institutions foreseeing further changes, primarily relating to increasing numbers of staff and restructuring of their services.

Considering the size of TEL staffing provision, the majority of institutions have fewer than 15 FTE staff supporting TEL. However, there are seven institutions with over 35 FTE, including four from the Russell Group.

Section 6: Looking to the future...

This section asked questions relating to the barriers to the development of TEL and asked respondents about new and emerging trends in their institution's use of TEL tools and services.

Question 6.1: Listed below are potential *barriers* to any (further) development of processes to promote and support TEL tools. What, in your opinion, might be the barriers in your institution over the coming years?

Table 6.1: Ranked potential barriers to any (further) development of processes to promote and support technology enhanced learning tools – Top 6

Barrier	Rank	Mean	Type			Country			
			Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(49)*	*(42)*	*(9)*	*(81)*	*(6)*	*(12)*	*(1)*
Lack of time	1	3.43	3.39	3.48	3.44	3.41	3.67	3.50	3.00
Departmental/school culture	2	3.20	3.27	3.19	2.89	3.21	3.00	3.25	3.00
Lack of academic staff knowledge	3	3.08	3.10	3.07	3.00	3.02	3.17	3.42	3.00
Institutional culture	4=	3.06	3.20	2.93	2.89	3.05	3.00	3.17	3.00
Lack of academic staff commitment	4=	3.06	3.08	3.07	2.89	3.00	3.83	3.00	4.00
Lack of internal sources of funding to support development	6	2.97	2.82	3.10	3.22	2.89	3.50	3.17	4.00

Table 6.1 summarises the responses for Question 6.1 and shows the Top 6 rankings of the 22 barriers presented in the Survey. The full data is in Table A6.1; longitudinal analysis is given in Table C6.1.

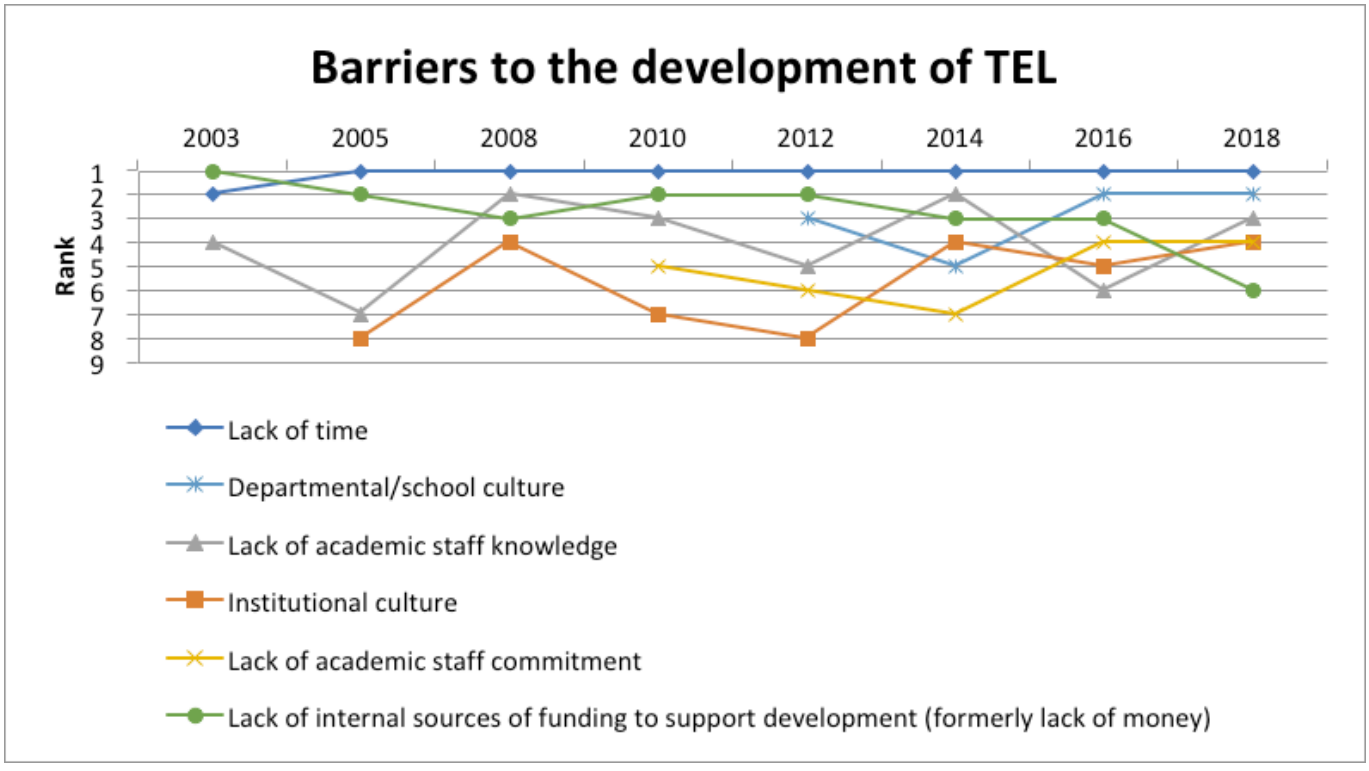


Figure 6.1: Longitudinal view of the barriers to the development of TEL

The Top 5 barriers all received mean scores above 3.00 compared to 2016, where the scores were slightly lower. This indicates a greater number of respondents facing a shared set of challenges in the support and development of TEL tools.

Since the 2005 Survey, *Lack of time* has maintained its position as the top barrier. Culture, both at an institutional and departmental level, continues to be a Top 5 barrier to the development of TEL. This could be linked to *lack of time*, as previous surveys have reported some challenges around prioritisation of other activities over teaching. *Lack of academic staff commitment* remains unchanged from the previous year and, again, could relate to the cultural influence.

The most striking difference is the rise of *Lack of academic staff knowledge* to the third highest barrier, up from 6th position in 2016. This shift in importance is linked to the responses to Question 4.19, which indicate that a lack of staff digital capabilities and a lack of awareness of the potential of TEL were seen as preventing more extensive use of TEL. In addition, evaluations of student satisfaction reported in Question 4.14 have highlighted student concerns about staff digital capabilities and their use of TEL. As seen in Figure 6.1, the importance of this barrier has fluctuated over time. The increase in importance in this year's Survey may be linked to the introduction of yet more new tools and technologies (such as lecture recording software) or to the changing TEL landscape. Just under half of respondents reported undertaking a review of an institutional TEL facility or system in the past two years (Table A3.16); for the majority this has resulted in a move to a new system or an upgrade to an existing system which may put additional pressure on staff to keep up to date.

Lack of internal sources of funding to support development was introduced in the 2016 Survey when it was rated in 3rd position; two years on, it has fallen to 6th place. This might be because more funding has been made available; equally it might have dropped in importance because of the increase in concern about staff knowledge.

The position of *Organisational structure* is another factor, which has fluctuated over the years; it has risen four places in the rankings since 2016. The shift in importance of this barrier might be linked to staffing changes and/or restructuring TEL provision which are reported in Question 5.4.

Lack of incentives seems to be less of a problem than in previous Surveys and has fallen by three places since 2016 in the same way that *Lack of external sources of funding* has also dropped. Perhaps the increased focus on concern over staff knowledge and the perceived cultural barriers account for this. *Technical and infrastructure limitations* and other technical problems, both of which were introduced for the first time in 2016, have also both dropped down the rankings since last time.

The greatest difference between the ranks between the Pre-92 and Post-92 institutions was for *other technical problems*, which was positioned 10th for Post-92 and much lower at 18th for Pre-92 institutions, which suggests seemingly better technical provision and IT support within Pre-92 universities. Similarly, a *lack of support staff* was ranked 3rd for Post-92, but much lower at 9th place for Pre-92. A greater concern for Pre-92 universities are *too few standards and guidelines*, which ranked at 15 versus position 21 for the newer universities.

Welsh, Scottish and Northern Irish institutions all rated *Lack of support staff* within their Top 5 barriers, which was ranked 8th across the sector. Also high in the Welsh institutions ranks was *Lack of incentives*.

Question 6.2: Have any recent and prospective developments in technology started to make new demands upon you in terms of the support required by users?

Table 6.2: Whether there are any recent and prospective developments in technology that have started to make new demands upon institutions in terms of the support required by users

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(49)*	*(42)*	*(9)*	*(81)*	*(6)*	*(12)*	*(1)*
Yes	65	65%	65%	71%	33%	62%	67%	83%	100%
No	35	35%	35%	29%	67%	38%	33%	17%	0%

Question 6.2 asked respondents whether there were any developments making new demands upon institutions in terms of the support required by users; 65% indicated that there were. Other HE providers were less likely to report these demands, with only 33% indicating this was the case. Respondents were then invited to identify up to three important developments (Question 6.3).

Question 6.3: Please write in details of up to three developments that are starting to make new demands upon you in terms of the support required by users – those you think are most important.

Figure 6.3: Word cloud showing the developments making new demands

Table 6.3: Recent and prospective developments in technology that are starting to make new demands in terms of the support required by users

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see demands)		*(65)*	*(30)*	*(32)*	*(3)*	*(50)*	*(4)*	*(10)*	*(1)*
Electronic Management of Assessment (e-submission, e-marking, e-feedback)	28	43%	47%	40%	33%	38%	75%	50%	100%
Lecture capture	28	43%	50%	40%	0%	40%	50%	60%	0%
VLE – new/change, embed, extend, customise, standards	16	25%	25%	23%	33%	26%	0%	30%	0%
Learning analytics	13	20%	16%	27%	0%	20%	25%	10%	100%
Distance learning/fully online courses	9	14%	22%	7%	0%	14%	0%	20%	0%

As in previous Surveys, this was an open question and respondents were invited to provide up to three responses. The responses, many of which were multipart, were then categorised. The Top 5 demands are given in Table 6.3. For a full breakdown by country and institution type see table A6.3.

The percentages are calculated as a proportion of the number of respondents. Where possible items have been categorised based on categories used in previous Surveys, but where necessary new categories have been added or combined. As a result of this, some longitudinal analysis is possible and is given in Table C6.3.

Electronic management of assessment and *Lecture capture* retain a position in the Top 2 developments making new demands, now holding joint 1st position. *Electronic management of assessment* has increased slightly from 39% in 2016 to 43% in 2018. *Lecture capture* moves up from 2nd place with an increase from 34% in 2016 to 43% in 2018. *Mobile technologies* drops out of the Top 3, for the first time since 2010, with a decrease from 31% to 11%, indicating that mobile technologies have now become embedded. For those institutions who identified *Mobile technologies* as a challenge, this was linked to the use of mobile technologies specifically in assessment, e.g. marking apps or BYOD for online assessment and e-exams, rather than the more general use of mobile technologies reported in previous years.

Moving into 3rd place is the *VLE*, up from 10% in 2016 to 25% in 2018. Institutions reported that the implementation of a new VLE, VLE upgrades and minimum requirements for VLE use were the main areas placing demands on support. *Learning analytics* continues its slow growth as a development making demands with an increase from 13% in 2016 to 20% in 2018.

The demands made by *Distance learning/fully online courses* remain fairly consistent, but this year MOOCs were missing from the responses, a clear decline since their entry in 2014. Social media/networking and cloud services also leave the list of demands for the first time since 2010.

A new entry which might be expected to make more demands in the future is Degree apprenticeships; examples of the TEL demands from this were reported as increased distance delivery and the implementation of an e-portfolio.

There are only minor differences amongst the institutional types and countries with the most notable being *Lecture capture*, which is not reported by any of the Other HE providers, although there are only small numbers of respondents for both categories. *Distance learning/online learning* seems to be causing more demand for Pre-92 institutions (22%) than Post-92 (7%) and Other HE providers (0%) and is not a concern noted by institutions in Wales and Northern Ireland. *Learning analytics* is ranked slightly higher by Post-92 institutions (27%) compared with Pre-92 institutions (16%) and is of much less concern for Scottish institutions.

Question 6.4: Do you see these developments posing any challenges over the next *two to three years* in terms of the support that will be required for staff and students?

Table 6.4: Whether institutions consider that the developments identified in Question 6.3 will pose support challenges over the next two to three years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(65)*	*(32)*	*(30)*	*(3)*	*(50)*	*(4)*	*(10)*	*(1)*
Yes	51	78%	78%	83%	33%	74%	100%	90%	100%
No	14	22%	22%	17%	67%	26%	0%	10%	0%

Question 6.4 asked respondents to confirm whether the developments identified in Question 6.3 posed any challenges for support over the next two to three years. Respondents were then invited to provide information about those challenges (Question 6.5a) and how they would overcome them (Question 6.5b).

Question 6.5a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

Figure 6.5a: Word cloud showing most commonly mentioned words for challenges

Table 6.5a: Challenges that these developments pose over the next two to three years in terms of support that will be required for staff and students

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see challenges over next 2–3 years)		*(51)*	*(25)*	*(25)*	*(1)*	*(37)*	*(4)*	*(9)*	*(1)*
E-assessment (e-submission, e-marking, e-feedback)	15	29%	36%	24%	0%	19%	75%	44%	100%
Learning analytics (inc. ethics, use of data, reporting)	10	20%	20%	20%	0%	22%	25%	0%	100%
New modes of delivery (e.g. online/ distance courses, active learning, blended learning, flipped classroom)	10	20%	24%	16%	0%	19%	0%	22%	100%
Lack of support staff/specialist skills/ resources	8	16%	12%	20%	0%	14%	25%	22%	0%
Lecture capture/recording	8	16%	24%	8%	0%	16%	0%	22%	0%

Table 6.5a gives the Top 5 most commonly cited challenges. For a full breakdown by country and institution type see Table A5.6a. As in previous Surveys, this was an open question and respondents were invited to provide up to three responses. Where possible, items have been categorised based on categories used in previous Surveys, but where necessary categories have been added or combined. As a result of this, some longitudinal analysis is possible (see Table C5.6a).

The 2018 Survey reveals several changes in the Top 5 challenges from the 2016 Survey with *Electronic Management of Assessment (EMA)* moving into the top spot, reflecting the responses to Question 6.3. Specific challenges include workflows and procedures for EMA, in particular marking, and the support pressures from whole-institution approaches to EMA.

Learning analytics jumps to 2nd place from 11th, with particular challenges noted around ethics and the role of data, although no Scottish institutions reported specific challenges around Learning analytics. Also new to the Top 5 is *new modes of delivery*, where institutions are reporting challenges in relation to supporting the development of online/ distance learning courses and the role of blended learning and active learning in the curriculum. It is notable that no Welsh institutions reported this as a particular challenge, with the majority more focussed on EMA.

Staff development, as a challenge, drops out of the Top 5 having held 1st place in 2016. However, the challenges relating to *digital literacy/capability* have increased since 2016, with Post-92 institutions (24%) noting this as being more of a challenge than for Pre-92 institutions (4%) and Other HE providers (0%).

Question 6.5b: How do you see these challenges being overcome?

Figure 6.5b: Word cloud showing most commonly mentioned words for overcoming the challenges reported in Question 6.5a

Table 6.5b: How institutions see the challenges identified in Question 6.5a being overcome

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see challenges over next 2–3 years)		(51)	(25)	(25)	(1)	(37)	(4)	(9)	(1)
Staff development (e.g. training courses)	16	31%	40%	24%	0%	24%	75%	44%	0%
Investment (time, money, resources, support staff)	12	24%	32%	16%	0%	24%	0%	33%	0%
Communities of practice – sharing good practice, success stories, case studies, champions	11	22%	24%	20%	0%	16%	50%	33%	0%
Focus on pedagogy, curriculum design/ development, adapting teaching approach	11	22%	24%	20%	0%	16%	0%	44%	100%
Review and revise support provision (increase/improve/devolve/extend)	11	22%	24%	20%	0%	16%	25%	33%	100%

Table 6.5b lists the most commonly cited solutions to the challenges identified in Question 6.5a. For a full breakdown by country and institution type see Table A5.6b. As for previous Surveys, this was an open question and respondents were invited to provide up to three responses. Where possible, items have been classified based on categories used in previous Surveys, but where necessary categories have been added or combined. As a result of this, some longitudinal analysis is possible (see Table C6.5b).

Staff development and *Investment* remain the Top 2 ways of overcoming the challenges noted in Question 6.5a. *Communities of practice*, in terms of sharing good practice, case studies and champions, moves up into joint 3rd place from 8th place in 2016 with an increase from 9% to 22%. A new entry this year is a *focus on pedagogy* and *curriculum design/development*, which goes into joint 3rd place and relates to the challenge noted in Q6.5a around new modes of delivery. *Review and revise support provision* retains a spot in the Top 5.

Considering the different institutional types, *Staff development* has increased in prominence for Pre-92 institutions, with an increase from 11% in 2014 to 40% in 2018, and is now the leading way to overcome challenges. *Investment* continues to be less important for Post-92 institutions. There was only one response from the Other HE providers and so it is not possible to draw any general conclusions for this group.

Summary of key findings

Lack of time remains the leading barrier to TEL development, consolidating its position at the top of the list, which it has held since the 2005 Survey. Culture continues to be a key barrier, with *Departmental\school culture* retaining 2nd place and *Institutional culture* moving back up to 4th place. *Lack of academic staff knowledge* moves up to 3rd position, from 6th place in 2016, and is potentially linked to the changing TEL landscape in light of the TEL system reviews reported in Section 3.

Electronic management of assessment and *Lecture capture* retain a position in the Top 2 developments making the most demand on TEL support teams, now holding joint 1st position. Mobile technologies remain in the Top 3 list, continuing its decline indicating that mobile technologies have now become embedded. Moving into 3rd place is the *VLE* with institutions reporting that the implementation of a new VLE, VLE upgrades and minimum requirements for VLE use were the main areas placing demands on support. *Learning analytics* continues its slow growth as a development making demands on TEL support teams.

There have been several changes in the Top 5 challenges facing institutions. *Electronic management of assessment* now tops the table, followed by *Learning analytics* and *new modes of delivery*, which have both entered the Top 5 for the first time. *Lecture capture/recording* and *technical infrastructure* drop out of the Top 5 challenges but remain in the Top 10. *Staff development* and *investment* continue to be the primary ways of addressing these challenges. To address the challenges relating to *new modes* of delivery, there is now greater emphasis on sharing good practice through *communities of practice* and a new item relating to *focussing on pedagogy and curriculum design*.

Appendix A: Full 2018 Data

Where new response options have been added to established questions used in previous Surveys, they have been denoted with an asterisk at the end of the response option. New questions for the 2018 Survey are identified in the main text accompanying each section of the Report.

Question 1.1: How important, if at all, have each of the following driving factors been for developing TEL and the processes that promote it in to date?

Table A1.1: Driving factors for TEL development (mean values)

Rank 2018	Driving factor	All	Type			Country			
			Pre-92	Post- 92	Other	Eng	Wal	Sco	NI
	(Base: all respondents)	*(103)*	*(51)*	*(42)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
1	Enhancing the quality of learning and teaching in general	3.84	3.80	3.88	3.90	3.84	3.86	3.83	4.00
2	Improving student satisfaction, e.g. NSS scores	3.75	3.73	3.81	3.60	3.75	3.86	3.67	4.00
3	Meeting student expectations in the use of technology	3.52	3.41	3.62	3.70	3.49	3.71	3.67	3.00
4	Improving access to online/blended learning for campus-based students	3.46	3.43	3.48	3.50	3.46	3.43	3.42	4.00
5	Widening participation/inclusiveness	3.43	3.31	3.57	3.40	3.40	3.71	3.42	4.00
6	Supporting the development of digital literacy skills or digital capability for students and staff	3.39	3.18	3.57	3.70	3.39	3.71	3.25	3.00
7	Helping to create a common user experience	3.33	3.14	3.50	3.60	3.25	3.57	3.67	4.00
8	Supporting flexible/blended curriculum development	3.31	3.27	3.33	3.40	3.28	3.29	3.58	3.00
9	Improving institutional reputation*	3.30	3.31	3.31	3.20	3.19	3.86	3.75	3.00
10	Assisting and improving the retention of students	3.27	2.86	3.69	3.60	3.28	3.29	3.17	4.00
11	Meeting the requirements of the Equality Act (2010)	3.25	3.22	3.43	3.70	3.22	3.57	3.33	3.00
12	Responding to the Teaching Excellence Framework (TEF)*	3.17	3.08	3.33	2.90	3.37	3.43	1.50	4.00
13	Keeping abreast of educational developments	3.16	3.16	3.19	3.00	3.14	3.29	3.17	3.00
14	Supporting students affected by the withdrawal of DSA provision (Disabled Students' Allowances)	3.15	3.16	3.26	2.60	3.11	3.71	3.08	3.00
15	Improving administrative processes	3.12	3.00	3.21	3.30	3.11	3.57	2.83	4.00
16	Attracting international (outside EU) students	3.11	3.16	3.12	2.80	3.08	3.43	3.08	3.00
17	Attracting home students	3.05	2.92	3.24	2.90	3.05	3.29	2.92	3.00
18	Creating or improving competitive advantage	3.04	3.02	3.05	3.10	2.96	3.43	3.42	2.00
19	Attracting new markets	3.03	3.00	3.07	3.00	2.94	3.43	3.33	4.00
20	Attracting EU students	3.01	3.00	3.05	2.90	2.99	3.29	3.00	3.00
21	Improving access to learning for international students	3.00	3.14	2.93	2.60	2.92	3.14	3.50	3.00
22	Addressing work-based learning – the employer/workforce development agenda and student employability skills	2.97	2.73	3.19	3.30	2.99	3.14	2.75	3.00
23	Achieving cost/efficiency savings	2.92	2.80	3.07	2.90	2.89	3.00	3.00	4.00
24	Improving access to learning for distance learners	2.88	2.94	2.93	2.40	2.78	3.00	3.42	4.00

25	Developing a wider regional, national or international role for your institution	2.74	2.63	2.83	2.90	2.66	2.86	3.17	3.00
26	Improving access to learning for part time students	2.72	2.41	3.03	3.00	2.66	2.57	3.17	3.00
27	The formation of other partnerships with external institutions/organisations	2.43	2.43	2.48	2.20	2.34	2.86	2.75	3.00
28	Helping to support joint/collaborative course developments with other institutions	2.21	1.96	2.57	2.00	2.17	2.86	2.75	3.00
29	Improving access to learning through the provision of open education courses (e.g. MOOCs)	1.83	2.16	1.50	1.60	1.84	1.14	2.25	1.00
30	Improving access to learning through the provision of open education resources	1.82	1.78	1.83	1.90	1.73	2.29	2.17	1.00

Question 1.2: Are there any other driving factors in your institution?

Table A1.2: Other driving factors for TEL development

Other driving factor	Frequency
(Base: all respondents)	*(18)*
Enhancing the student experience	4
Institutional strategies	4
Learning space/campus development	3
External influences	2
Achieve cost/efficiency savings	2
Flexibility and inclusivity	2
Facilitating online/distance learning	1
Employability	1
Identify students at risk	1

Question 1.3: How important, if at all are the following factors in encouraging the development of TEL and processes that promote it?

Table A1.3: Factors encouraging development of TEL (mean values)

Rank 2018	Driving factor	All	Type			Country			
			Pre-92	Post-92	Other	Eng	Wal	Sco	NI
	(Base: all respondents)	(103)	(51)	(42)	(10)	(83)	(7)	(12)	(1)
1	Availability of technology enhanced learning support staff	3.67	3.65	3.74	3.50	3.65	3.86	3.67	4.00
2	Feedback from students	3.64	3.53	3.79	3.60	3.65	3.86	3.42	4.00
3	Central university senior management support	3.51	3.57	3.50	3.30	3.46	3.86	3.67	4.00
4	School/departmental senior management support	3.42	3.45	3.43	3.20	3.36	3.71	3.58	4.00
5	Feedback from staff*	3.40	3.25	3.55	3.50	3.39	3.71	3.33	3.00
6	Availability and access to tools across the institution	3.37	3.24	3.62	3.00	3.31	3.71	3.50	4.00
7	Availability of committed local champions	3.15	3.18	3.17	2.90	3.08	3.71	3.17	4.00
8	Technological changes/developments	3.15	2.98	3.36	3.10	3.12	3.29	3.17	4.00
9	Availability of university committees and steering groups to guide development and policy	3.12	3.14	3.26	2.40	3.07	3.29	3.25	4.00
10	Availability of internal project funding	3.02	3.06	3.14	2.30	2.95	3.29	3.25	4.00
11	Threshold/minimum/baseline standards*	2.91	2.71	3.10	3.20	2.84	3.57	3.00	3.00

Rank 2018	Driving factor	All	Type			Country			
			Pre-92	Post-92	Other	Eng	Wal	Sco	NI
12	Availability and access to relevant user groups/online communities	2.84	2.71	3.10	2.50	2.80	3.14	3.00	3.00
13	Partnership with students on TEL projects (students as co-creators)	2.56	2.53	2.62	2.50	2.43	3.71	2.75	3.00
14	Availability of relevant technical standards	2.54	2.39	2.76	2.40	2.45	3.00	3.00	2.00
15	Availability of external project funding (e.g. Jisc, HEA, HEFCE, HEFCW, SFC, DfE)	2.27	2.02	2.52	2.50	2.27	2.86	2.08	1.00

Question 1.4: Are there any other factors in your institution that encourage the development of technology enhanced learning and processes that promote it?

Table A1.4: Factors that encourage TEL development

Other factor identified	Frequency
(Base: all respondents)	*(14)*
Internal and external frameworks and strategies	4
Internal departments	3
Cost of buying software and resources	1
Sharing of good practice online	1
Steering group or committee	1
Responsive staff development opportunities	1
Motivation of e-learning team	1
Student wanting/not wanting TEL	1
Commercial partner knowledge and skills	1

Section 2: Strategic questions

Question 2.1: Which, if any, *institutional strategies* inform the development of technology enhanced learning in your institution?

Table A2.1: Institutional strategies that have informed TEL development

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(42)*	*(10)*	*(83)*	*(7)*	*(11)*	*(1)*
Teaching, learning and assessment strategy	90	88%	82%	93%	100%	87%	100%	91%	100%
Corporate strategy	54	53%	46%	62%	50%	48%	71%	73%	100%
Library/learning resources strategy	43	42%	32%	50%	60%	42%	29%	46%	100%
Student learning experience strategy*	40	39%	34%	45%	40%	37%	57%	46%	0%
Information and Communication Technology (ICT) strategy	36	35%	32%	43%	20%	34%	57%	27%	100%
Technology enhanced learning or e-learning strategy	35	34%	30%	36%	50%	37%	14%	27%	0%
Estates strategy	34	33%	34%	38%	10%	30%	29%	64%	0%
Student engagement strategy*	33	32%	26%	41%	30%	34%	29%	27%	0%
Employability strategy	33	32%	28%	41%	20%	30%	29%	56%	0%
Access/widening participation strategy	28	28%	20%	36%	30%	25%	14%	46%	100%
Digital strategy/e-strategy	26	26%	26%	26%	20%	27%	29%	18%	0%
Staff development strategy	26	26%	20%	29%	40%	25%	14%	36%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Digital literacy/digital capability strategy	24	24%	14%	38%	10%	24%	29%	18%	0%
Quality enhancement strategy	22	12%	14%	29%	30%	17%	14%	64%	0%
International strategy	17	17%	22%	14%	0%	13%	14%	46%	0
Distance learning strategy	15	15%	18%	7%	30%	17%	0%	9%	0%
Other institutional strategy	14	14%	18%	12%	0%	13%	29%	9%	0
Marketing strategy	13	13%	12%	14%	10%	12%	14%	18%	0%
Information and Learning Technology (ILT) strategy	13	13%	2%	21%	30%	10%	29%	27%	0%
Human resources strategy	13	13%	6%	24%	0%	15%	0%	9%	0%
Digital media strategy	11	11%	4%	21%	0%	11%	14%	9%	0%
Open learning strategy	9	9%	12%	5%	10%	7%	14%	18%	0%
Information strategy	8	8%	6%	12%	0%	8%	0%	9%	0%
Communications strategy	8	8%	2%	17%	0%	8%	0%	9%	0%
Mobile learning strategy	7	7%	4%	12%	0%	7%	14%	0%	0%
Competition and Markets Authority (CMA) strategy	7	7%	6%	10%	0%	6%	14%	9%	0%
Not considered in any institutional strategy documents	0	0%	0%	0%	0%	0%	0%	0%	0%

Question 2.2: How is TEL governance managed within your institution? Do you have any of the following committees/working groups with an *institutional remit*, looking at TEL activity across the institution?

Table A2.2: Management of TEL governance within institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(42)*	*(10)*	*(83)*	*(7)*	*(11)*	*(1)*
Teaching and learning*	71	70%	64%	79%	60%	65%	86%	91%	100%
TEL/e-learning/blended learning	53	52%	60%	45%	40%	49%	71%	55%	100%
Learning spaces*	38	37%	50%	26%	20%	35%	42%	56%	0%
Learning analytics*	35	34%	32%	43%	10%	29%	71%	46%	100%
Lecture capture*	32	31%	32%	36%	10%	30%	57%	27%	0%
Electronic Management of Assignments (EMA)*	29	28%	26%	36%	10%	27%	43%	36%	0%
Distance learning (fully online delivery)	26	26%	30%	21%	20%	25%	0%	36%	100%
Other 1	26	26%	24%	26%	30%	25%	29%	27%	0%
Open learning/MOOC development	20	20%	36%	5%	0%	19%	14%	27%	0%
e-assessment (eg. quizzes)*	14	14%	14%	17%	0%	11%	14%	36%	0%
Other 2	12	12%	16%	10%	0%	12%	0%	18%	0%
Other 3	5	5%	8%	2%	0%	5%	0%	9%	0%
Mobile learning	2	2%	4%	0%	0%	2%	0%	0%	0%
Other 4	2	2%	4%	0%	0%	2%	0%	0%	0%
Don't have committees/working groups with an institutional remit looking at TEL	11	11%	12%	7%	20%	12%	14%	0%	0%

Question 2.3: Which *three* external strategy documents or reports have been most useful in planning TEL in your institution?

Table A2.3: Three most useful external strategy documents in planning TEL

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(50)*	*(40)*	*(10)*	*(81)*	*(7)*	*(11)*	*(1)*
Jisc: Digital Capability Framework (2015, 2017)*	39	39%	30%	48%	50%	42%	14%	36%	0%
UCISA: Survey of Technology Enhanced Learning for higher education (2012, 2014 and 2016)	37	37%	28%	45%	50%	37%	14%	55%	0%
NMC Horizon Report (2015 and 2017) Higher Education Edition	21	21%	26%	18%	10%	16%	43%	46%	0%
Jisc: Developing organisational approaches to digital capability (2017)*	19	19%	8%	30%	30%	16%	29%	27%	100%
Other external strategy document or report	17	17%	20%	15%	10%	19%	14%	9%	0%
Jisc: Student digital experience tracker 2017: the voice of 22,000 UK learners	16	16%	22%	10%	10%	15%	14%	18%	100%
HEPI: Rebooting learning for the digital age: What next for technology enhanced higher education? (2017)	15	15%	14%	18%	10%	19%	0%	0%	0%
Changing the Learning Landscape Report (2012–14)	13	13%	14%	15%	0%	15%	14%	0%	0%
HeLF Lecture Capture in UK HE 2017: A HeLF Survey Report	10	10%	8%	13%	10%	9%	14%	18%	0%
Jisc: Code of practice for learning analytics (2015)	9	9%	12%	8%	0%	6%	14%	27%	0%
HeLF: Electronic Management of Assessment Survey Report (2013)	8	8%	12%	5%	0%	9%	0%	9%	0%
UCISA: Digital Capabilities Survey Report (2015 and 2017)	8	8%	6%	10%	10%	7%	29%	0%	0%
Jisc: Enhancing the student digital experience: a strategic approach (2014)	7	7%	6%	8%	10%	7%	14%	0%	0%
Jisc/NUS Benchmarking tool – the student digital experience (2015)	6	6%	4%	5%	20%	6%	0%	0%	100%
HEFCE: e-learning strategy (2005 and 2009)	4	4%	6%	0%	10%	5%	0%	0%	0%
HEFCE: Review of the National Student Survey (2014)	4	4%	2%	5%	10%	5%	0%	0%	0%
HeLF: UK HE Research on Learning Analytics (2015 and 2017)	4	4%	4%	5%	0%	5%	0%	0%	0%
The Open University: Innovation Pedagogy Report (2014)	3	3%	4%	3%	0%	3%	0%	9%	0%
Enhancing Learning and Teaching through Technology: refreshing the HEFCW strategy 2011	2	2%	2%	3%	0%	0%	29%	0%	0%
EUA: E-Learning in European Higher Education Institutions (2014)	2	2%	4%	0%	0%	3%	0%	0%	0%
Jisc: Developing successful student-staff partnerships (2015)	2	2%	0%	5%	0%	3%	0%	0%	0%
MOOCs and Open Education: *Implications for Higher Education* (2013)	2	2%	4%	0%	0%	3%	0%	0%	0%
BIS: FELTAG report (2014)	1	1%	0%	0%	10%	1%	0%	0%	0%
BIS: Students at the Heart of the System (2011)	1	1%	0%	3%	0%	1%	0%	0%	0%
HEFCE's Strategy Statement: Opportunity, choice and excellence in higher education (2011)	1	1%	0%	3%	0%	0%	0%	9%	0%
HEPI-HEA: Student Academic Experience Survey (2015)	1	1%	0%	3%	0%	1%	0%	0%	0%
Jisc: Enhancing curriculum design with technology (2013)	1	1%	2%	0%	0%	1%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
BIS: The Maturing of the MOOC (2013)	0	0%	0%	0%	0%	0%	0%	0%	0%
Gibbs: *Implications of Dimensions of quality in a market environment* (2012)	0	0%	0%	0%	0%	0%	0%	0%	0%
HEFCE: *Collaborate to Compete* paper (2011)	0	0%	0%	0%	0%	0%	0%	0%	0%
HeLF: Tablet Survey Report (2014)	0	0%	0%	0%	0%	0%	0%	0%	0%
NUS connect: A Manifesto for Partnership (2015)	0	0%	0%	0%	0%	0%	0%	0%	0%
NUS: Charter on Technology in HE (2011)	0	0%	0%	0%	0%	0%	0%	0%	0%
NUS: Radical interventions in teaching and learning (2014)	0	0%	0%	0%	0%	0%	0%	0%	0%
Other HEFCE strategy documents	0	0%	0%	0%	0%	0%	0%	0%	0%
No external strategy documents or reports have been useful in planning TEL	8	8%	12%	3%	10%	9%	14%	0%	0%

Question 2.4: What institutional policies, if any, link strategy and implementation of TEL tools?

Table A2.4: Institutional policies which link strategy with implementation of TEL tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents		*(100)*	*(50)*	*(40)*	*(10)*	*(81)*	*(7)*	*(11)*	*(1)*
Learning, teaching and assessment policies	59	59%	52%	73%	40%	54%	57%	91%	100%
Lecture capture guidelines/policy	59	59%	70%	58%	10%	58%	71%	64%	0%
VLE usage policy (minimum requirements)	58	58%	40%	80%	60%	58%	71%	46%	100%
Faculty or departmental/school plans	44	44%	40%	55%	20%	46%	29%	36%	100%
VLE guidelines/description of VLE service	41	41%	38%	45%	40%	42%	43%	27%	100%
TEL or e-learning strategy/action plan/ framework	37	37%	38%	40%	20%	33%	29%	64%	100%
Electronic Management of Assignments (EMA) policy*	36	36%	32%	43%	30%	36%	43%	27%	0%
e-assessment policy*	24	24%	14%	38%	20%	21%	29%	26%	0%
Mobile policy (i.e. institutional policy on mobile usage in support of teaching and learning)*	12	12%	4%	25%	0%	11%	14%	18%	0%
Other	8	8%	8%	3%	30%	10%	0%	0%	0%
There are no institutional policies that link strategy and implementation	6	6%	8%	3%	10%	7%	0%	0%	0%

Section 3: Technology Enhanced Learning currently in use

Question 3.1: Is there a VLE *currently* in use in your institution?

Table A3.1: Institutional VLE currently in use

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	103	99%	100%	100%	90%	99%	100%	100%	100%
No	1	1%	0%	0%	10%	1%	0%	0%	0%

Question 3.2: Which VLE(s) is/are currently used in your institution

Table 3.2: Number of institutional VLEs currently in use

Responses	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
1	45	44%	28%	56%	78%	41%	71%	42%	100%
2	32	31%	31%	35%	11%	33%	14%	33%	0%
3	15	15%	20%	9%	11%	16%	14%	8%	0%
4	6	6%	12%	0%	0%	6%	0%	8%	0%
5	4	4%	8%	0%	0%	5%	0%	0%	0%
6	1	1%	2%	0%	0%	0%	0%	8%	0%

Table A3.2a: VLEs currently used

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Moodle	57	55%	63%	42%	78%	57%	57%	50%	0%
Blackboard Learn	44	43%	41%	51%	11%	37%	71%	58%	100%
FutureLearn	31	30%	53%	7%	11%	31%	14%	33%	0%
Canvas (by Instructure)	16	16%	22%	9%	11%	18%	0%	8%	0%
Open Education (by Blackboard)	9	9%	4%	16%	0%	8%	0%	17%	0%
Coursera	8	8%	16%	0%	0%	8%	0%	8%	0%
Other VLE – developed in house	6	6%	8%	5%	0%	5%	0%	17%	0%
SharePoint	6	6%	10%	2%	0%	7%	0%	0%	0%
edX	4	4%	8%	0%	0%	4%	0%	8%	0%
Other commercial VLE	4	4%	6%	0%	11%	5%	0%	0%	0%
Other MOOC platform	4	4%	0%	9%	0%	5%	0%	0%	0%
Blackboard Ultra*	3	3%	2%	5%	0%	2%	0%	8%	0%
Brightspace (by D2L)	3	3%	0%	7%	0%	4%	0%	0%	0%
Other intranet based – developed in house	3	3%	4%	0%	11%	4%	0%	0%	0%
Other open source	3	3%	6%	0%	0%	2%	0%	8%	0%
Sakai	2	2%	4%	0%	0%	2%	0%	0%	0%
Joule (by Moodlerooms)	1	1%	2%	0%	0%	1%	0%	0%	0%

Question 3.3: Out of the above which is the *main* VLE in use across your institution?

Table A3.3: The *main* VLE in use

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Moodle	47	46%	45%	40%	78%	51%	29%	25%	0%
Blackboard Learn	43	42%	41%	49%	11%	36%	71%	58%	100%
Canvas (by Instructure)	8	8%	10%	5%	11%	8%	0%	8%	0%
Brightspace (by D2L)	2	2%	0%	5%	0%	2%	0%	0%	0%
Joule (by Moodlerooms)	1	1%	2%	0%	0%	1%	0%	0%	0%
Other VLE – developed in house	1	1%	0%	2%	0%	0%	0%	8%	0%
Sakai	1	1%	2%	0%	0%	1%	0%	0%	0%

Question 3.4: Is the main VLE used for each of the following or not?

Table A3.4 (i): The *main* VLE and blended learning (campus-based courses)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with a main VLE		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	99	96%	94%	98%	100%	95%	100%	100%	100%
No, another VLE (mainly) used	0	0%	0%	0%	0%	0%	0%	0%	0%
No, mode not supported using VLE across institution	0	0%	0%	0%	0%	0%	0%	0%	0%
No, mode not supported across institution	4	4%	6%	2%	0%	5%	0%	0%	0%

Table A3.4 (ii): The *main* VLE and distance learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with a main VLE		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	80	77%	75%	86%	56%	76%	86%	83%	100%
No, another VLE (mainly) used	10	10%	14%	7%	0%	10%	0%	17%	0%
No, mode not supported using VLE across institution	1	1%	2%	0%	0%	1%	0%	0%	0%
No, mode not supported across institution	12	12%	10%	7%	44%	13%	14%	0%	0%

Table A3.4 (ii) (a): The *other* VLE used for distance learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with other VLE for distance learning)		*(10)*	*(7)*	*(3)*	*(0)*	*(8)*	*(0)*	*(2)*	*(0)*
Another Moodle instance	4	40%	29%	67%	0%	38%	0%	50%	0%
Another Blackboard instance	2	20%	14%	33%	0%	25%	0%	0%	0%
FutureLearn	2	20%	29%	0%	0%	13%	0%	50%	0%
Other VLE (unnamed)	1	10%	14%	0%	0%	13%	0%	0%	0%
WordPress	1	10%	14%	0%	0%	13%	0%	0%	0%

Table A3.4 (iii): The *main* VLE and open online learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a main VLE)		*(103)*	*(51)*	*(43)*	*(9)*	*(83)*	*(7)*	*(12)*	*(1)*
Yes	7	7%	8%	5%	11%	6%	29%	0%	0%
No, another VLE (mainly) used	39	38%	53%	28%	0%	39%	0%	50%	100%
No, mode not supported using VLE across institution	7	7%	6%	9%	0%	7%	0%	8%	0%
No, mode not supported across institution	50	48%	33%	58%	89%	48%	71%	42%	0%

Table A3.4 (iii) (a): The *other* VLE used for open online learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with other VLE(s) for open learning)		*(39)*	*(27)*	*(12)*	*(0)*	*(30)*	*(0)*	*(6)*	*(1)*
FutureLearn	23	59%	78%	17%	0%	67%	0%	50%	0%
Coursera	6	15%	22%	0%	0%	17%	0%	17%	0%
Open Education (by Blackboard)	6	15%	4%	42%	0%	13%	0%	17%	100%
edX	3	8%	11%	0%	0%	7%	0%	17%	0%
Brightspace (by D2L)	1	3%	0%	8%	0%	3%	0%	0%	0%
Canvas	1	3%	0%	8%	0%	3%	0%	0%	0%
CourseSites (by Blackboard)	1	3%	0%	8%	0%	0%	0%	17%	0%
Another Moodle instance	1	3%	0%	8%	0%	3%	0%	0%	0%
PebblePad	1	3%	0%	8%	0%	3%	0%	0%	0%

Question 3.5: Thinking about the (main) VLE in use, which of the following best describes how your platform is technically managed?

Table A3.5: Hosting results for *main* institutional VLE

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with a main VLE)		(103)	(51)	(43)	(9)	(83)	(7)	(12)	(1)
Institutionally hosted and managed	50	48%	55%	44%	33%	45%	86%	58%	0%
Institutionally managed but hosted by a third party	39	38%	31%	42%	56%	42%	14%	25%	0%
Cloud-based Software as a Service (SaaS) multi-tenant service	14	14%	14%	14%	11%	13%	0%	17%	100%

Table A3.5 (i): Hosting results per platform for *main* institutional VLE

Response	Institutionally hosted and managed		Institutionally managed but hosted by third party		Cloud-based Software as a Service/multi-tenant service		Total
(Base: all respondents with main VLE)	*No*	*%*	*No*	*%*	*No*	*%*	*(103)*
Moodle	27	57%	17	36%	3	6%	47
Blackboard Learn	20	47%	21	49%	2	5%	43
Canvas (by Instructure)	0	0%	0	0%	8	100%	8
Brightspace (by D2L)	1	50%	0	0%	1	50%	2
Joule (by Moodlerooms)	0	0%	1	100%	0	0%	1
Other VLE – developed in house	1	100%	0	0%	0	0%	1
Sakai	1	100%	0	0%	0	0%	1

Question 3.6: Who is the external provider that hosts your (main) VLE?

Table A3.6: External hosting provider for *main* institutional VLE

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents using external provider to host main VLE)		*(53)*	*(23)*	*(24)*	*(6)*	*(46)*	*(1)*	*(5)*	*(1)*
Blackboard Managed Hosting	23	43%	35%	58%	17%	37%	100%	80%	100%
CoSector (previously ULCC)	16	30%	35%	21%	50%	35%	0%	0%	0%
Other external provider	7	13%	13%	17%	0%	15%	0%	0%	0%
Instructure	5	9%	13%	4%	17%	9%	0%	20%	0%
Moodlerooms	1	2%	4%	0%	0%	2%	0%	0%	0%
Webanywhere	1	2%	0%	0%	17%	2%	0%	0%	0%

Question 3.7: Does your institution currently outsource its *provision* of any of the following? Provision refers to an institutional service being hosted by another organisation.

Table A3.7: Institutional services that are currently outsourced

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		(104)	(51)	(43)	(10)	(84)	(7)	(12)	(1)
Lecture capture platform	48	46%	51%	49%	10%	49%	57%	25%	0%
Digital repositories (e.g. Google Drive, Google Docs)	35	34%	37%	30%	30%	36%	29%	25%	0%
e-portfolio	35	34%	29%	40%	30%	35%	14%	42%	0%
Media streaming*	34	33%	33%	33%	30%	33%	14%	42%	0%
VLE platform – supporting the delivery of blended learning courses	33	32%	31%	30%	40%	36%	0%	17%	100%
VLE platform – supporting the delivery of open online courses	28	27%	35%	23%	0%	27%	14%	25%	100%
VLE platform – supporting the delivery of fully online courses	26	25%	26%	28%	10%	25%	29%	17%	100%
No outsourced provision	21	20%	16%	26%	20%	20%	14%	25%	0%
Learning analytics*	9	9%	4%	14%	10%	7%	0%	17%	100%
Don't know	2	2%	2%	2%	0%	2%	0%	0%	0%

Question 3.8: How is the provision of these services currently outsourced?

Table A3.8: How the institutional services identified in Question 3.7 are currently outsourced

Response	Institutionally managed but hosted by a third party		Cloud-based Software as a Service (SaaS) multi-tenant service		Don't know	
	No.	Total	No.	Total	No.	Total
Lecture capture platform	12	25%	35	73%	1	2%
Digital repositories (e.g. Google Drive, Google Docs)	10	29%	25	71%	0	0%
e-portfolio	19	54%	16	46%	0	0%
Media streaming*	12	35%	21	62%	1	3%
VLE platform – supporting the delivery of blended learning courses	20	61%	13	39%	0	0%
VLE platform – supporting the delivery of open online courses	11	39%	17	61%	0	0%
VLE platform – supporting the delivery of fully online courses	13	50%	12	46%	1	4%
Learning analytics*	4	44%	4	44%	1	12%

Table A3.8 (i): Type of outsourcing for lecture capture platform

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(48)*	*(26)*	*(21)*	*(1)*	*(41)*	*(3)*	*(4)*	*(0)*
SaaS multi-tenant service	35	73%	81%	62%	100%	71%	75%	100%	0%
Institutionally managed, hosted by other organisation	12	25%	15%	38%	0%	27%	25%	0%	0%
Don't know	1	2%	4%	0%	0%	2%	0%	0%	0%

Table A3.8 (ii): Type of outsourcing for digital repositories (e.g. Google Drive, Google Docs)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: All respondents with outsourced provision)		*(35)*	*(19)*	*(13)*	*(3)*	*(30)*	*(2)*	*(3)*	*(0)*
SaaS multi-tenant service	25	71%	79%	54%	100%	70%	100%	67%	0%
Institutionally managed, hosted by other organisation	10	29%	21%	46%	0%	30%	0%	33%	0%
Don't know	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.8 (iii): Type of outsourcing for e-portfolio

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(35)*	*(15)*	*(17)*	*(3)*	*(29)*	*(1)*	*(5)*	*(0)*
Institutionally managed, hosted by other organisation	19	54%	47%	53%	0%	62%	0%	20%	0%
SaaS multi-tenant service	16	46%	79%	54%	100%	38%	100%	80%	0%
Don't know	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.8 (iv): Type of outsourcing for media streaming*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(34)*	*(17)*	*(14)*	*(3)*	*(28)*	*(1)*	*(5)*	*(0)*
SaaS multi-tenant service	21	62%	76%	50%	33%	61%	100%	60%	0%
Institutionally managed, hosted by other organisation	12	35%	18%	50%	67%	36%	0%	40%	0%
Don't know	1	3%	6%	0%	0%	3%	0%	0%	0%

Table A3.8 (v): Type of outsourcing for VLE platform – supporting the delivery of blended learning courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with outsourced provision		*(33)*	*(16)*	*(13)*	*(4)*	*(30)*	*(0)*	*(2)*	*(1)*
Institutionally managed, hosted by other organisation	20	61%	56%	62%	75%	67%	0%	0%	0%
SaaS multi-tenant service	13	39%	44%	38%	25%	33%	0%	100%	100%
Don't know	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.8 (vi): Type of outsourcing for VLE platform – supporting the delivery of open online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(28)*	*(18)*	*(10)*	*(0)*	*(23)*	*(1)*	*(3)*	*(1)*
SaaS multi-tenant service	17	61%	61%	60%	61%	52%	100%	100%	100%
Institutionally managed, hosted by other organisation	11	39%	39%	40%	39%	48%	0%	0%	0%
Don't know	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.8 (vii): Type of outsourcing for VLE platform – supporting the delivery of fully online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(26)*	*(13)*	*(12)*	*(1)*	*(21)*	*(2)*	*(2)*	*(1)*
Institutionally managed, hosted by other organisation	13	50%	54%	50%	0%	57%	50%	0%	0%
SaaS multi-tenant service	12	46%	38%	50%	100%	43%	0%	100%	100%
Don't know	1	4%	8%	0%	0%	0%	50%	0%	0%

Table A3.8 (viii): Type of outsourcing for learning analytics*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(9)*	*(2)*	*(6)*	*(1)*	*(6)*	*(0)*	*(2)*	*(1)*
Institutionally managed, hosted by other organisation	4	44%	50%	50%	0%	50%	0%	50%	0%
SaaS multi-tenant service	4	44%	50%	33%	100%	33%	0%	50%	100%
Don't know	1	12%	0%	17%	0%	17%	0%	0%	11%

Question 3.9: Which, if any, of the services that are currently outsourced are you considering bringing back in to be institutionally managed?

Table A3.9: Services that are currently outsourced that are under consideration for bringing back in to be institutionally managed

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that currently outsource some provision)		*(80)*	*(42)*	*(30)*	*(8)*	*(42)*	*(30)*	*(6)*	*(2)*
None being considered for bringing back in house	80	100%	100%	100%	100%	100%	100%	100%	100%

Question 3.10: Is your institution formally considering the outsourcing of some or all of your *provision* for any of the following? Provision refers to an institutional service being hosted by another organisation?

Table A3.10: Formally considering the outsourcing of some or all of their provision

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	48	46%	55%	41%	20%	41%	57%	67%	100%
None being considered for outsourcing	47	45%	41%	47%	60%	49%	43%	25%	0%
Don't know	9	9%	4%	12%	20%	10%	0%	8%	0%

Table A3.10 (a): Services being formally considered for outsourcing

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
None being considered for outsourcing	47	45%	41%	47%	60%	49%	43%	25%	0%
VLE platform – supporting the delivery of blended learning courses	21	20%	24%	21%	0%	16%	57%	33%	0%
VLE platform – supporting the delivery of fully online courses	17	16%	20%	14%	10%	14%	14%	33%	0%
Learning analytics*	16	15%	14%	19%	10%	14%	0%	33%	0%
Lecture capture platform	15	14%	20%	12%	0%	11%	29%	25%	100%
Media streaming*	10	10%	8%	14%	0%	10%	14%	0%	100%
e-portfolio	9	9%	16%	2%	0%	7%	14%	17%	0%
Don't know	9	9%	4%	12%	20%	10%	0%	8%	0%
VLE platform – supporting the delivery of open online courses	5	5%	6%	5%	0%	4%	14%	8%	0%
Digital repositories (e.g. Google Drive, Google Docs)	4	4%	4%	5%	0%	4%	0%	8%	0%

Question 3.11: What option(s) are being considered for the outsourcing of this provision?

Table A3.11: Options being considered for outsourcing

Response	Institutionally managed but hosted by a third party		Cloud-based Software as a Service (SaaS) multi-tenant service		Don't know/ options still being considered	
	No.	Total	No.	Total	No.	Total
VLE platform – supporting the delivery of blended learning courses	2	10%	10	48%	9	43%
VLE platform – supporting the delivery of fully online courses	0	0%	10	59%	7	41%
Learning analytics*	1	6%	4	25%	11	69%
Lecture capture platform	1	6%	10	67%	4	27%
Media streaming*	2	20%	4	40%	4	40%
e-portfolio	1	11%	5	56%	3	33%
VLE platform – supporting the delivery of open online courses	0	0%	3	60%	2	40%
Digital repositories (e.g. Google Drive, Google Docs)	0	0%	3	75%	1	25%

Table A3.11 (i): Type of outsourcing being considered for VLE platform – supporting the delivery of blended learning courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Base: all respondents with outsourced provision		*(21)*	*(12)*	*(9)*	*(0)*	*(13)*	*(4)*	*(4)*	*(0)*
SaaS multi-tenant service	10	48%	50%	44%	0%	38%	25%	100%	0%
Don't know	9	43%	33%	56%	0%	54%	50%	0%	0%
Institutionally managed, hosted by other organisation	2	10%	17%	0%	0%	8%	25%	0%	0%

Table A3.11 (ii): Type of outsourcing being considered for VLE platform – supporting the delivery of fully online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(17)*	*(10)*	*(6)*	*(1)*	*(12)*	*(1)*	*(4)*	*(0)*
SaaS multi-tenant service	10	59%	70%	50%	0%	42%	100%	100%	0%
Don't know	7	41%	30%	50%	100%	58%	0%	0%	0%
Institutionally managed, hosted by other organisation	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.11 (iii): Type of outsourcing being considered for learning analytics*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(16)*	*(7)*	*(8)*	*(1)*	*(12)*	*(0)*	*(4)*	*(0)*
Don't know	11	69%	71%	63%	100%	75%	0%	50%	0%
SaaS multi-tenant service	4	25%	14%	37%	0%	17%	0%	50%	0%
Institutionally managed, hosted by other organisation	1	6%	14%	0%	0%	8%	0%	0%	0%

Table A3.11 (iv): Type of outsourcing being considered for lecture capture platform

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(15)*	*(10)*	*(5)*	*(0)*	*(9)*	*(2)*	*(3)*	*(1)*
SaaS multi-tenant service	10	67%	70%	60%	0%	78%	0%	67%	100%
Don't know	4	27%	30%	20%	0%	11%	100%	33%	0%
Institutionally managed, hosted by other organisation	1	6%	0%	20%	0%	11%	0%	0%	0%

Table A3.11 (v): Type of outsourcing being considered for media streaming*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(10)*	*(4)*	*(6)*	*(0)*	*(8)*	*(1)*	*(0)*	*(1)*
Don't know	4	40%	25%	50%	0%	38%	100%	0%	0%
SaaS multi-tenant service	4	40%	50%	33%	0%	38%	0%	0%	100%
Institutionally managed, hosted by other organisation	2	20%	25%	17%	0%	25%	0%	0%	0%

Table A3.11 (vi): Type of outsourcing being considered for e-portfolio

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(9)*	*(8)*	*(1)*	*(0)*	*(6)*	*(1)*	*(2)*	*(0)*
SaaS multi-tenant service	5	56%	50%	100%	0%	67%	0%	50%	0%
Don't know	3	33%	38%	0%	0%	33%	0%	50%	0%
Institutionally managed, hosted by other organisation	1	11%	12%	0%	0%	0%	100%	0%	0%

Table A3.11 (vii): Type of outsourcing being considered for VLE platform – supporting the delivery of open online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(5)*	*(3)*	*(2)*	*(0)*	*(3)*	*(1)*	*(1)*	*(0)*
SaaS multi-tenant service	3	60%	67%	50%	0%	33%	100%	100%	0%
Don't know	2	40%	33%	50%	0%	67%	0%	0%	0%
Institutionally managed, hosted by other organisation	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.11 (viii): Type of outsourcing being considered for digital repositories (e.g. Google Drive, Google Docs)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced provision)		*(4)*	*(2)*	*(2)*	*(0)*	*(3)*	*(0)*	*(1)*	*(0)*
SaaS multi-tenant service	3	75%	50%	100%	0%	67%	0%	100%	0%
Don't know	1	25%	50%	0%	0%	33%	0%	0%	0%
Institutionally managed, hosted by other organisation	0	0%	0%	0%	0%	0%	0%	0%	0%

Question 3.12: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff? Please include institutions both in the UK and abroad.

Table A3.12: Considered collaboration with other HE institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
No, have not considered	72	69%	65%	70%	90%	68%	57%	83%	100%
Don't know	14	13%	15%	12%	10%	15%	14%	0%	0%
Yes, and do collaborate as a result	7	7%	8%	7%	0%	6%	14%	8%	0%
Yes, currently under consideration so no decision reached	6	6%	4%	9%	0%	6%	0%	8%	0%
Yes, did consider but decided *not* to collaborate	5	5%	8%	2%	0%	5%	14%	0%	0%

Question 3.13: What (do you collaborate/are you considering collaborating/did you consider collaborating) on?

Table A3.13: Nature of collaboration with other HE institutions

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that considered collaboration with other HE institutions)		*(18)*	*(10)*	*(8)*	*(0)*	*(14)*	*(2)*	*(2)*	*(0)*
Designing and sharing course resources	8	44%	40%	50%	0%	50%	50%	0%	0%
Other idea for collaboration	7	39%	60%	13%	0%	36%	50%	50%	0%
Joint course collaboration, blended learning (fly out faculty, teach in situ)	5	28%	30%	25%	0%	29%	50%	0%	0%
Joint course delivery, fully online	4	22%	20%	25%	0%	21%	0%	50%	0%

Question 3.14: Has your institution formally considered collaboration with commercial partners in the delivery of TEL services or resources to staff? Please include partners both in the UK and abroad.

Table A3.14: Considered collaboration with commercial partners

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
No, have not considered	51	49%	43%	54%	60%	44%	86%	67%	0%
Yes, and do collaborate as a result	18	17%	23%	14%	0%	19%	14%	8%	0%
Yes, currently under consideration so no decision reached	18	17%	18%	16%	20%	19%	0%	8%	100%
Don't know	13	13%	12%	12%	20%	16%	0%	0%	0%
Yes, did consider but decided not to collaborate	4	4%	4%	5%	0%	2%	0%	17%	0%

Question 3.15: What (do you collaborate/are you considering collaborating/did you consider collaborating) on?

Table A3.15: Nature of collaboration with commercial partners

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that considered collaboration with commercial partners)		*(40)*	*(23)*	*(15)*	*(2)*	*(34)*	*(1)*	*(4)*	*(1)*
Fully online/distance learning	35	88%	87%	93%	50%	88%	0%	100%	100%
Design and delivery of open learning	10	25%	35%	13%	0%	29%	0%	0%	0%
Degree apprenticeships	5	13%	13%	13%	0%	12%	0%	25%	0%
Other idea for collaboration	2	5%	0%	7%	50%	3%	100%	0%	0%

Question 3.16: Have you undertaken a review of a major institutional TEL facility or system in the *last two years*?

Table A3.16: Institutional review of TEL facility or system in last two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Yes	49	47%	45%	44%	70%	46%	14%	67%	100%
No	55	53%	55%	56%	30%	54%	86%	33%	0%

Question 3.17: Which major TEL facilities or systems have you reviewed in the *last two years*?

Table A3.17: TEL facilities or systems that have been reviewed in the last two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have undertaken a review)		*(49)*	*(23)*	*(19)*	*(7)*	*(39)*	*(1)*	*(8)*	*(1)*
VLE	40	82%	70%	95%	86%	80%	100%	88%	100%
Lecture capture	23	47%	57%	47%	14%	49%	100%	38%	0%
e-portfolio	13	27%	13%	37%	43%	26%	100%	25%	0%
Learning analytics	13	27%	26%	37%	0%	21%	100%	38%	100%
Electronic Management of Assignments (EMA)*	9	18%	26%	16%	0%	15%	100%	25%	0%
Media streaming*	9	18%	17%	16%	29%	18%	0%	25%	0%
Other facility or system	7	14%	17%	16%	0%	18%	0.0%	0.0%	0%
MOOC platform	6	12%	17%	11%	0%	15%	0%	0%	0%
e-assessment	6	12%	22%	5%	0%	13%	0%	13%	0%
Mobile learning	2	4%	4%	5%	0%	3%	0%	13%	0%

Table A3.17 (i): Cross-tabulation of *main institutional VLE* with *VLE review conducted in the last two years*

Main institutional VLE	Conducted review in last two years		
	No.	*Main VLE total (3.3)*	%
Blackboard Learn	16	*43*	37%
Moodle	15	*47*	32%
Canvas (by Instructure)	5	*8*	63%
Brightspace (by D2L)	2	*2*	100%
Joule (by Moodlerooms)	1	*1*	100%
Sakai	1	*1*	100%

Note: n=49 for Table 3.17 (i)

Question 3.18: Please write the outcome of the review on these TEL facilities or systems

Table 3.18 (i): Outcomes of the VLE review

Top 5	Frequency
Switch to a different VLE platform	**10**
• From Moodle to Canvas (by Instructure)	(2)
• From Blackboard to Canvas (by Instructure)	(2)
• From Moodle to Brightspace (by Desire2Learn)	(2)
• From Blackboard to Brightspace (by Desire2Learn)	(1)
• From Pearson Learning Studio to Canvas (by Instructure)	(1)
• From Sakai to Canvas (by Instructure)	(1)
• From not specified to Canvas (by Instructure)	(1)
Continue with the same VLE platform	**8**
• Blackboard Learn	(4)
• Moodle	(3)
• Brightspace (by Desire2Learn)	(1)
Continue with the same platform and upgrade to latest version	**7**
• Moodle	(5)
• Blackboard	(2)
Review process not yet completed	**4**
• Blackboard Learn	(4)
Switch to external hosting for same VLE platform	**4**
• Move to Blackboard Managed Hosting (for Blackboard Learn)	(3)
• Move to external hosting provider (for Moodle)	(1)

Note: n=40 for Table 3.18 (i)

Table 3.18 (ii): Outcomes of the lecture capture review

Top 5	Frequency
New system implementation/pilot	**11**
• Planet eStream	(1)
• Panopto	(6)
• Not specified	(3)
• Institutional solution	(1)
Change of system	**3**
• Medial to Panopto	(1)
• Echo360 to Panopto	(1)
• Kaltura to Panopto	(1)
Upgrade current platform	**2**
• Panopto	(2)
Stay with current platform	**2**
• Panopto	(2)
In progress	**2**

Note: n=23 for Table 3.18 (ii)

Table 3.18 (iii): Outcomes of the e-portfolio review

Top 5	Frequency
Change/introduction of system	**4**
• PebblePad to Campus Press	(1)
• Mahara to Brighspace ePortfolio	(1)
• Mahara to WordPress	(1)
• PebblePad	(1)
In progress	**4**
Upgrade current system	**2**
• Mahara	(1)
Continue with current system	**2**
• Blackboard e-portfolio	(1)
• PebblePad	(1)
Move to self-hosting	**1**
• Mahara	(1)

Note: n=13 for Table 3.18 (iii)

Table 3.18 (iv): Outcomes of the learning analytics review

Outcomes	Frequency
Jisc Partnership	3
Pilot of service	3
In progress	3
Continue with tool	1
Platform adopted	1
University built system	1
Visualisations through tableau	1

Note: n=13 for Table 18 (iv)

Table 3.18 (v): Outcomes of the EMA review*

Outcomes	Frequency
Submission recommendation	**6**
• Turnitin into Moodle	(2)
• Blackboard Grades	(1)
• Turnitin into Blackboard	(1)
• Blackboard and Turnitin	(1)
• Moodle	(1)
Move to fully online submission, grading and feedback	**3**

Note: n=9 for Table 3.18 (v)

Table 3.18 (vi): Outcomes of the media streaming review*

Outcomes	Frequency
Move system	**3**
• From Adobe Flash to Planet E Stream	(1)
• Migrated to alternative media streaming provider	(1)
• From elix to Planet eStream	(1)
Stayed with current system	**2**
• CoSector	(1)
• Vimeo (and Panopto)	(1)
System upgrade	**1**
• Panopto upgrade	(1)
New system	**1**
Combined with lecture capture tool	**1**

Note: n=8 for Table 18 (vi)

Table 3.18 (vii): Other

Top 4	Frequency
Polling Software	**3**
• Turning Point to Mentimeter	(1)
• Poll Everywhere	(1)
• Turning technologies (ResponseWare)	(1)
Review in progress (system not specified)	**2**
Moved systems (system not specified)	**1**
Remain with Turnitin but review after new systems implemented	**1**

Note: n=7 for Table 3.18 (vii)

Table 3.18 (viii): Outcomes of the E-Assessment review

Top 4	Frequency
Platform	**3**
• Blackboard Grades Journey	(1)
• Moodle	(1)
• Turnitin	(1)
Review of policy and procedures	**1**
Investigate further Wiseflow	**1**
Upgrade and partial move	**1**
• Examstarts and QuestionMark Perception (SaaS)	(1)

Note: n=6 for Table 3.18 (viii)

Table 3.18 (ix): Outcomes of the MOOC platform review

Outcomes	Frequency
Development planning and implementation of MOOCs	**4**
• FutureLearn	(3)
• Cousera, Edx and Open Edx	(1)
Continue with current provider	**1**
• FutureLearn (1)	
Switch MOOC Platform	**1**
• From Canvas to Brightspace	(1)

Note: n=6 for Table 3.18 (ix)

Table 3.18 (x): Outcomes of the mobile learning review

Outcomes	Frequency
Key services now mobile friendly	**1**
Pending	**1**

Note: n=2 for Table 3.18 (x)

Question 3.19: Are you planning to undertake a review of a major institutional TEL facility or system within the *next two years*?

Table A3.19: Institutional review of TEL facility or system in next two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(104)*	*(51)*	*(43)*	*(10)*	*(84)*	*(7)*	*(12)*	*(1)*
Planning a review in the next year	38	37%	33%	44%	20%	35%	29%	58%	37%
Planning a review in the next two years	30	29%	39%	12%	50%	26%	71%	17%	29%
Not planning a review in the next two years	36	35%	28%	44%	30%	39%	0%	25%	35%

Question 3.20: Which major TEL facilities or systems are you planning on reviewing in the next two years?

Table A3.20: TEL facilities or systems to be reviewed in the next two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents planning a review)		*(68)*	*(37)*	*(24)*	*(7)*	*(51)*	*(7)*	*(9)*	*(1)*
VLE	44	65%	60%	71%	71%	71%	71%	33%	0%
Lecture capture*	31	46%	38%	63%	29%	39%	71%	56%	100%
e-assessment*	27	40%	43%	46%	0%	33%	57%	68%	0%
Learning analytics	25	37%	41%	38%	14%	33%	57%	44%	0%
Electronic Management of Assignments (EMA)*	23	34%	41%	33%	0%	29%	43%	56%	0%
e-portfolio	20	29%	27%	25%	57%	33%	14%	22%	0%
Media streaming*	19	28%	32%	25%	14%	24%	29%	44%	100%
Mobile learning	10	15%	14%	21%	0%	14%	29%	11%	0%
Other facility or system	6	9%	5%	17%	0%	10%	14%	0%	0%
MOOC platform	5	7%	11%	4%	0%	10%	0%	0%	0%

Table A3.20 (i): Cross-tabulation of *main institutional VLE* with *VLE review to be conducted in the next two years*

Main institutional VLE	VLE review to be conducted in next two years		
	No.	*Main VLE total (3.3)*	%
Blackboard Learn	25	*43*	58%
Moodle	17	*47*	36%
Canvas (by Instructure)	1	*8*	13%
Other VLE – developed in house	1	*1*	100%

Note: n=44 for Table 3.20 (i)

Question 3.21: Which centrally-supported TEL tools are used by *students* in your institution?

Table A3.21: Centrally-supported software tools used by students

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Virtual Learning Environment (VLE)	97	94%	92%	98%	90%	93%	100%	100%	100%
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	92	89%	94%	91%	60%	88%	100%	92%	100%
Asynchronous communication tools (e.g. discussion forums)	87	84%	86%	81%	90%	82%	86%	100%	100%
Document sharing tool (e.g. Google Docs, Office 365)	83	81%	80%	86%	60%	80%	86%	83%	100%
Formative e-assessment tool (e.g. quizzes)	83	81%	84%	79%	70%	76%	100%	100%	100%
Lecture capture tools	77	75%	84%	77%	20%	73%	100%	67%	100%
e-portfolio	75	73%	66%	81%	70%	72%	57%	83%	100%
Summative e-assessment tools (e.g. quizzes)	73	71%	72%	72%	60%	66%	86%	92%	100%
Blog	70	68%	68%	74%	40%	61%	86%	100%	100%
Electronic Management of Assignments (EMA)*	69	67%	72%	63%	60%	67%	71%	58%	100%
Personal response systems (including handsets or web-based apps)	69	67%	76%	67%	20%	63%	86%	83%	100%
Reading list management software	66	64%	66%	70%	30%	61%	57%	83%	100%
Media streaming system	65	63%	56%	72%	60%	61%	57%	75%	100%
Webinar	55	53%	62%	49%	30%	52%	57%	58%	100%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Mobile apps	53	51%	48%	58%	40%	48%	43%	75%	100%
Synchronous collaborative tools (e.g. virtual classroom)	50	49%	50%	58%	0%	48%	29%	58%	100%
Wiki	49	48%	50%	51%	20%	40%	86%	75%	100%
Screen casting	44	43%	40%	44%	50%	37%	43%	75%	100%
Learning analytics tools	32	31%	22%	44%	20%	31%	43%	17%	100%
Content management systems	28	27%	28%	28%	20%	24%	29%	42%	100%
Digital/learning repository	27	26%	22%	30%	30%	27%	0%	42%	0%
Other centrally-supported TEL tool	20	19%	22%	19%	10%	16%	29%	33%	100%
Social networking	19	18%	12%	26%	20%	17%	29%	25%	0%
Podcasting	17	17%	20%	12%	20%	12%	57%	25%	0%
Electronic essay exams	16	16%	22%	12%	0%	13%	14%	33%	0%
Social bookmarking/content curation tools	10	10%	6%	12%	20%	11%	0%	8%	0%

Table A3.21a: Centrally-supported virtual learning environment

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: All respondents with centrally-supported VLE)		*(97)*	*(46)*	*(42)*	*(9)*	*(77)*	*(7)*	*(12)*	*(1)*
Moodle	49	51%	54%	40%	78%	53%	29%	50%	0%
Blackboard	42	43%	43%	50%	11%	38%	71%	58%	100%
Canvas	9	9%	13%	5%	11%	10%	0%	8%	0%
Brightspace (by Desire2Learn)	3	3%	0%	7%	0%	4%	0%	0%	0%
Sakai	2	2%	4%	0%	0%	3%	0%	0%	0%
Sharepoint	1	1%	2%	0%	0%	1%	0%	0%	0%
WordPress	1	1%	2%	0%	0%	0%	0%	8%	0%
Aula	1	1%	2%	0%	0%	1%	0%	0%	0%
FutureLearn	1	1%	0%	2%	0%	1%	0%	0%	0%
Blackboard Learn Ultra	1	1%	2%	0%	0%	1%	0%	0%	0%
Blackboard Open Education	1	1%	0%	2%	0%	1%	0%	0%	0%

Table A3.21b: Centrally-supported text-matching tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported text-matching tools)		*(92)*	*(47)*	*(39)*	*(6)*	*(73)*	*(7)*	*(11)*	*(1)*
Turnitin	86	93%	94%	97%	67%	93%	100%	91%	100%
SafeAssign	11	12%	9%	15%	17%	11%	14%	18%	0%
Urkund	4	4%	4%	0%	33%	4%	0%	9%	0%
Ephorus	1	1%	2%	0%	0%	1%	0%	0%	0%

Table A3.21c: Centrally-supported asynchronous communication tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: All respondent with centrally-supported asynchronous communication tools)		*(87)*	*(43)*	*(35)*	*(9)*	*(68)*	*(6)*	*(12)*	*(1)*
Blackboard	33	38%	37%	46%	11%	34%	67%	42%	100%
Moodle	33	38%	40%	29%	67%	40%	17%	42%	0%
VLE (unnamed)	10	11%	12%	14%	0%	10%	17%	17%	0%
Yammer	5	6%	12%	0%	0%	6%	17%	0%	0%
Canvas	5	6%	9%	0%	11%	6%	0%	8%	0%
Forums (unnamed)	3	3%	2%	3%	11%	4%	0%	0%	0%
MS Office 365	3	3%	5%	3%	0%	4%	0%	0%	0%
PebblePad	1	1%	0%	3%	0%	0%	0%	8%	0%
Campus Pack	1	1%	2%	0%	0%	0%	17%	0%	0%
Google+	1	1%	0%	3%	0%	1%	0%	0%	0%
Aula	1	1%	0%	0%	11%	1%	0%	0%	0%
Social media (unnamed)	1	1%	0%	0%	11%	1%	0%	0%	0%
WordPress	1	1%	2%	0%	0%	0%	0%	8%	0%
Unitu	1	1%	0%	3%	0%	1%	0%	0%	0%
Brightspace (by Desire2Learn)	1	1%	0%	3%	0%	1%	0%	0%	0%
In house developed	1	1%	2%	0%	0%	1%	0%	0%	0%
Blackboard Collaborate	1	1%	0%	3%	0%	1%	0%	0%	0%
Google Groups	1	1%	2%	0%	0%	1%	0%	0%	0%

Table A3.21d: Centrally-supported document sharing tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported document sharing tool)		*(83)*	*(40)*	*(37)*	*(6)*	*(66)*	*(6)*	*(10)*	*(1)*
MS Office 365	69	83%	83%	84%	83%	79%	100%	100%	100%
Google Drive	22	27%	25%	27%	33%	30%	17%	10%	0%
Blackboard	2	2%	3%	3%	0%	3%	0%	0%	0%
Box	2	2%	5%	0%	0%	3%	0%	0%	0%
OneDrive	2	2%	3%	3%	0%	3%	0%	0%	0%
In house developed	1	1%	3%	0%	0%	2%	0%	0%	0%
Drop Box	1	1%	3%	0%	0%	2%	0%	0%	0%
Email	1	1%	3%	0%	0%	2%	0%	0%	0%
Overleaf	1	1%	3%	0%	0%	2%	0%	0%	0%

Table A3.21e: Centrally-supported formative e-assessment tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported formative e-assessment tool)		*(83)*	*(42)*	*(34)*	*(7)*	*(63)*	*(7)*	*(12)*	*(1)*
Moodle	32	39%	43%	32%	43%	41%	14%	42%	0%
Blackboard	31	37%	38%	41%	14%	33%	57%	42%	100%
TopHat	9	11%	10%	15%	0%	10%	14%	17%	0%
VLE (unnamed)	9	11%	10%	15%	0%	10%	14%	17%	0%
Canvas	8	10%	17%	0%	14%	11%	0%	8%	0%
Questionmark Perception	6	7%	14%	0%	0%	3%	29%	17%	0%
Aropa	4	5%	7%	3%	0%	2%	29%	8%	0%
Unnamed package	3	4%	2%	3%	14%	5%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Respondus Lockdown browser	3	4%	2%	6%	0%	5%	0%	0%	0%
Maple TA	2	2%	5%	0%	0%	2%	0%	8%	0%
PebblePad	2	2%	0%	6%	0%	0%	0%	17%	0%
Articulate	1	1%	0%	3%	0%	0%	0%	8%	0%
Brightspace (by Desire2Learn)	1	1%	0%	3%	0%	2%	0%	0%	0%
ExamSoft	1	1%	2%	0%	0%	2%	0%	0%	0%
Google Forms	1	1%	0%	0%	14%	2%	0%	0%	0%
iSpring	1	1%	2%	0%	0%	2%	0%	0%	0%
Kahoot	1	1%	0%	0%	14%	2%	0%	0%	0%
Microsoft Forms	1	1%	2%	0%	0%	2%	0%	0%	0%
Numbas	1	1%	2%	0%	0%	2%	0%	0%	0%
Office Mix	1	1%	0%	3%	0%	0%	14%	0%	0%
Poll Everywhere	1	1%	0%	0%	14%	2%	0%	0%	0%
Qualtrics	1	1%	0%	3%	0%	2%	0%	0%	0%
STACK	1	1%	2%	0%	0%	0%	14%	0%	0%
Virtual Patients (OpenLabyrinth)	1	1%	2%	0%	0%	2%	0%	0%	0%
WebPA	1	1%	2%	0%	0%	0%	14%	0%	0%
Wiseflow	1	1%	2%	0%	0%	2%	0%	0%	0%
Wordwall	1	1%	0%	3%	0%	0%	14%	0%	0%

Table A3.21f: Centrally-supported lecture capture tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported lecture capture tools)		*(77)*	*(42)*	*(33)*	*(2)*	*(61)*	*(7)*	*(8)*	*(1)*
Panopto	47	61%	52%	70%	100%	66%	86%	13%	0%
Echo360	14	18%	29%	6%	0%	20%	0%	25%	0%
In house developed	3	4%	5%	3%	0%	3%	0%	13%	0%
Mediasite	2	3%	5%	0%	0%	3%	0%	0%	0%
Opencast	2	3%	5%	0%	0%	3%	0%	0%	0%
Planet eStream	2	3%	2%	3%	0%	2%	14%	0%	0%
Techsmith Relay	2	3%	2%	3%	0%	0%	0%	13%	100%
Camtasia Relay	2	3%	0%	6%	0%	0%	0%	25%	0%
Adobe Connect	1	1%	0%	3%	0%	2%	0%	0%	0%
Blackboard Collaborate Ultra	1	1%	0%	3%	0%	0%	0%	13%	0%
Kaltura	1	1%	0%	3%	0%	2%	0%	0%	0%
Medial Lecture Capture	1	1%	0%	3%	0%	0%	0%	13%	0%
UbiCast	1	1%	0%	3%	0%	2%	0%	0%	0%
Relay (not specified)	1	1%	0%	3%	0%	2%	0%	0%	0%
Not known	1	1%	0%	3%	0%	2%	0%	0%	0%

Table A3.21g: Centrally-supported e-portfolio

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported e-portfolio)		*(75)*	*(33)*	*(35)*	*(7)*	*(60)*	*(4)*	*(10)*	*(1)*
Mahara	37	49%	55%	43%	57%	52%	50%	40%	0%
PebblePad	23	31%	33%	34%	0%	32%	25%	30%	0%
Blackboard	6	8%	6%	9%	14%	7%	25%	0%	100%
WordPress	3	4%	3%	3%	14%	2%	0%	20%	0%
Campus Pack	2	3%	0%	3%	14%	3%	0%	0%	0%
CampusPress	2	3%	0%	6%	0%	3%	0%	0%	0%
Google Sites	2	3%	3%	3%	0%	3%	0%	0%	0%
MyProgress	2	3%	3%	3%	0%	3%	0%	0%	0%
Office 365	2	3%	3%	3%	0%	3%	0%	0%	0%
OneNote	2	3%	3%	3%	0%	3%	0%	0%	0%
Studentfolio	2	3%	0%	3%	14%	3%	0%	0%	0%
VLE (unnamed)	2	3%	0%	6%	0%	2%	0%	10%	0%
Adobe Portfolio	1	1%	0%	3%	0%	2%	0%	0%	0%
Brightspace (by Desire2Learn)	1	1%	0%	3%	0%	2%	0%	0%	0%
Canvas	1	1%	3%	0%	0%	2%	0%	0%	0%
Moodle	1	1%	3%	0%	0%	2%	0%	0%	0%
MyShowcase	1	1%	3%	0%	0%	0%	0%	10%	0%
NHS ePortfolio	1	1%	3%	0%	0%	0%	0%	10%	0%
Smart Assessor	1	1%	0%	3%	0%	2%	0%	0%	0%
Various (not specified)	1	1%	0%	3%	0%	2%	0%	0%	0%
In house developed	1	1%	3%	0%	0%	2%	0%	0%	0%

Table A3.21h: Centrally-supported summative e-assessment tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported summative e-assessment tools)		*(73)*	*(36)*	*(31)*	*(6)*	*(55)*	*(6)*	*(11)*	*(1)*
Blackboard	28	38%	33%	48%	17%	36%	50%	36%	100%
Moodle	25	34%	36%	29%	50%	38%	17%	27%	0%
QuestionMark Perception	9	12%	25%	0%	0%	7%	50%	18%	0%
VLE (unnamed)	7	10%	6%	16%	0%	7%	17%	18%	0%
Canvas	6	8%	11%	3%	17%	9%	0%	9%	0%
WebPA	4	5%	8%	3%	0%	4%	17%	9%	0%
Maple T.A	3	4%	8%	0%	0%	4%	0%	9%	0%
Respondus	3	4%	3%	6%	0%	5%	0%	0%	0%
Turnitin	3	4%	3%	6%	0%	4%	0%	9%	0%
WiseFlow	3	4%	6%	3%	0%	5%	0%	0%	0%
Unnamed package	2	3%	0%	3%	17%	4%	0%	0%	0%
PebblePad	2	3%	0%	6%	0%	0%	0%	18%	0%
Brightspace (by Desire2Learn)	1	1%	0%	3%	0%	2%	0%	0%	0%
Cirrus Assessment	1	1%	3%	0%	0%	2%	0%	0%	0%
E-Folio	1	1%	3%	0%	0%	2%	0%	0%	0%
Google Forms	1	1%	0%	0%	17%	2%	0%	0%	0%
Medial	1	1%	0%	3%	0%	0%	0%	9%	0%
MyKnowledge Map	1	1%	3%	0%	0%	2%	0%	0%	0%
Numbas	1	1%	3%	0%	0%	2%	0%	0%	0%
Rogo	1	1%	3%	0%	0%	2%	0%	0%	0%

Table A3.21i: Centrally-supported blog

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with centrally-supported blog)		*(70)*	*(34)*	*(32)*	*(4)*	*(51)*	*(6)*	*(12)*	*(1)*
Blackboard	29	41%	41%	44%	25%	39%	67%	33%	100%
WordPress	26	37%	29%	47%	25%	45%	0%	25%	0%
Moodle	11	16%	21%	6%	50%	18%	0%	17%	0%
Campus Pack	7	10%	18%	3%	0%	8%	33%	8%	0%
PebblePad	5	7%	0%	16%	0%	6%	0%	17%	0%
VLE (unnamed)	4	6%	3%	9%	0%	4%	0%	17%	0%
CampusPress	3	4%	6%	3%	0%	4%	0%	8%	0%
Various (not specified)	3	4%	6%	3%	0%	6%	0%	0%	0%
Blogger	2	3%	3%	3%	0%	4%	0%	0%	0%
In house developed	2	3%	3%	3%	0%	4%	0%	0%	0%
Canvas	1	1%	3%	0%	0%	2%	0%	0%	0%
Google Sites	1	1%	3%	0%	0%	2%	0%	0%	0%
Brightspace (by Desire2Learn)	1	1%	0%	3%	0%	2%	0%	0%	0%
edublogs	1	1%	0%	3%	0%	2%	0%	0%	0%
Mahara	1	1%	3%	0%	0%	0%	0%	8%	0%
Open Source platform (not specified)	1	1%	3%	0%	0%	2%	0%	0%	0%
Tumblr	1	1%	0%	0%	25%	2%	0%	0%	0%
Adobe Creative Suite	1	1%	0%	0%	25%	2%	0%	0%	0%
OU blog	1	1%	0%	3%	0%	0%	17%	0%	0%

Table A3.21j: Centrally-supported Electronic Management of Assignments*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported electronic management of assignments)		*(69)*	*(36)*	*(27)*	*(6)*	*(56)*	*(5)*	*(7)*	*(1)*
Turnitin	31	45%	50%	48%	0%	41%	100%	29%	100%
Blackboard	27	39%	42%	41%	17%	36%	80%	29%	100%
Moodle	24	35%	33%	30%	67%	36%	20%	43%	0%
In house developed	10	14%	22%	4%	17%	18%	0%	0%	0%
Canvas	4	6%	11%	0%	0%	5%	0%	14%	0%
VLE (unnamed)	3	4%	3%	7%	0%	4%	0%	14%	0%
PebblePad	3	4%	0%	0%	0%	0%	0%	0%	0%
Medial	2	3%	0%	7%	0%	2%	0%	14%	0%
Tribal SITS	2	3%	3%	4%	0%	4%	0%	0%	0%
Wiseflow	2	3%	6%	0%	0%	4%	0%	0%	0%
Campus Pack	1	1%	3%	0%	0%	2%	0%	0%	0%
eVision	1	1%	0%	4%	0%	2%	0%	0%	0%
Google Classroom	1	1%	0%	0%	17%	2%	0%	0%	0%
Google Suite	1	1%	3%	0%	0%	2%	0%	0%	0%
QuestionMark Perception	1	1%	3%	0%	0%	2%	0%	0%	0%
Sharestream	1	1%	0%	4%	0%	0%	0%	0%	100%
Various (not specified)	1	1%	0%	4%	0%	2%	0%	0%	0%

Table A3.21k: Centrally-supported personal response systems

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported personal response systems)		*(69)*	*(38)*	*(29)*	*(2)*	*(52)*	*(6)*	*(10)*	*(1)*
TurningPoint (by Turning Technologies)	32	46%	47%	45%	50%	40%	83%	50%	100%
Poll Everywhere	15	22%	16%	28%	50%	25%	0%	20%	0%
Mentimeter	7	10%	11%	10%	0%	12%	0%	10%	0%
Responseware (by Turning Technologies)	7	10%	16%	3%	0%	13%	0%	0%	0%
Socrative	6	9%	5%	14%	0%	10%	0%	10%	0%
Personal Response Systems (by Turning Technologies)	5	7%	8%	7%	0%	8%	0%	10%	0%
Qwizdom	4	6%	5%	7%	0%	4%	17%	10%	0%
Top Hat	4	6%	5%	7%	0%	4%	0%	20%	0%
Nearpod	3	4%	3%	7%	0%	4%	0%	0%	100%
Various (not specified)	3	4%	0%	10%	0%	6%	0%	0%	0%
Kahoot	2	3%	3%	3%	0%	4%	0%	0%	0%
MeeToo	2	3%	3%	3%	0%	4%	0%	0%	0%
Echo 360 ALP	1	1%	0%	3%	0%	2%	0%	0%	0%
In house developed	1	1%	3%	0%	0%	0%	0%	10%	0%
Moodle App	1	1%	3%	0%	0%	2%	0%	0%	0%
Participoll	1	1%	3%	0%	0%	2%	0%	0%	0%
Plickers	1	1%	0%	3%	0%	2%	0%	0%	0%
TurningPoint Cloud (by Turning Technologies)	1	1%	0%	3%	0%	0%	0%	10%	0%
Qwizdom QVR	1	1%	3%	0%	0%	0%	17%	0%	0%

Table A3.21l: Centrally-supported reading list management software

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported reading list management software)		*(66)*	*(33)*	*(30)*	*(3)*	*(51)*	*(4)*	*(10)*	*(1)*
Talis Aspire	42	64%	67%	63%	33%	67%	75%	50%	0%
Rebus	7	11%	0%	23%	0%	10%	0%	10%	100%
Leganto	6	9%	15%	3%	0%	6%	0%	30%	0%
In house developed	3	5%	6%	3%	0%	6%	0%	0%	0%
Ex Libris	2	3%	3%	3%	0%	0%	0%	20%	0%
Alto	1	2%	0%	0%	33%	2%	0%	0%	0%
PaperPile	1	2%	3%	0%	0%	2%	0%	0%	0%
EndNote	1	2%	3%	0%	0%	2%	0%	0%	0%
Lib Guides	1	2%	0%	3%	0%	2%	0%	0%	0%
Link2Lists	1	2%	3%	0%	0%	2%	0%	0%	0%
Mendeley	1	2%	3%	0%	0%	2%	0%	0%	0%
Sierra	1	2%	0%	3%	0%	2%	0%	0%	0%
Torchbox	1	2%	3%	0%	0%	2%	0%	0%	0%
Worldcat	1	2%	0%	0%	33%	2%	0%	0%	0%
Not Known	1	2%	3%	0%	0%	0%	25%	0%	0%

Table A3.21m: Centrally-supported media steaming system

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported media steaming system)		*(65)*	*(28)*	*(31)*	*(6)*	*(51)*	*(4)*	*(9)*	*(1)*
Medial	17	26%	25%	32%	0%	22%	75%	33%	0%
Panopto	13	20%	18%	23%	17%	24%	25%	0%	0%
Planet eStream	11	17%	7%	16%	67%	22%	0%	0%	0%
Kaltura	10	15%	21%	13%	0%	16%	0%	22%	0%
Box of Broadcasts	4	6%	14%	0%	0%	6%	25%	0%	0%
YouTube	4	6%	4%	10%	0%	6%	0%	11%	0%
In house developed	2	3%	7%	0%	0%	2%	0%	11%	0%
Adobe	1	2%	4%	0%	0%	2%	0%	0%	0%
Brightcove	1	2%	4%	0%	0%	2%	0%	0%	0%
Clickview	1	2%	0%	3%	0%	2%	0%	0%	0%
Echo360	1	2%	4%	0%	0%	2%	0%	0%	0%
Edshare	1	2%	0%	3%	0%	0%	0%	11%	0%
Ensemble	1	2%	4%	0%	0%	2%	0%	0%	0%
Google Suite	1	2%	4%	0%	0%	2%	0%	0%	0%
Mediasite	1	2%	4%	0%	0%	2%	0%	0%	0%
Microsoft Video	1	2%	4%	0%	0%	2%	0%	0%	0%
Opencast and engage player	1	2%	4%	0%	0%	2%	0%	0%	0%
Sharestream	1	2%	0%	3%	0%	0%	0%	0%	100%
Soundcloud	1	2%	0%	3%	0%	2%	0%	0%	0%
TriplePlay	1	2%	0%	3%	0%	0%	0%	11%	0%
Vimeo	1	2%	4%	0%	0%	2%	0%	0%	0%
Not known	1	2%	0%	0%	17%	0%	0%	11%	0%

Table A3.21n: Centrally-supported webinar

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: All respondents with centrally-supported webinar)		*(55)*	*(31)*	*(21)*	*(3)*	*(43)*	*(4)*	*(7)*	*(1)*
Adobe Connect	17	31%	32%	29%	33%	37%	25%	0%	0%
Blackboard Collaborate	15	27%	26%	33%	0%	30%	0%	14%	100%
Skype for business	11	20%	16%	24%	33%	16%	50%	29%	0%
Blackboard Collaborate Ultra	9	16%	13%	24%	0%	14%	25%	29%	0%
Big Blue Button	8	15%	16%	10%	33%	14%	0%	29%	0%
Webex	4	7%	10%	5%	0%	7%	0%	14%	0%
GotoMeeting	3	5%	3%	5%	33%	7%	0%	0%	0%
Skype	3	5%	6%	5%	0%	5%	25%	0%	0%
Jabber	1	2%	3%	0%	0%	2%	0%	0%	0%
Fuze	1	2%	3%	0%	0%	2%	0%	0%	0%
Office 365	1	2%	0%	5%	0%	2%	0%	0%	0%
Zoom	1	2%	3%	0%	0%	2%	0%	0%	0%

Table A3.21o: Centrally-supported mobile apps

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported mobile apps)		(53)	(24)	(25)	(4)	(40)	(3)	(9)	(1)
Blackboard Mobile Learn	21	40%	46%	36%	25%	33%	100%	44%	100%
CampusM	12	23%	38%	12%	0%	25%	0%	22%	0%
In house	8	15%	8%	16%	50%	18%	33%	0%	0%
MyDay – Collabco	6	11%	8%	12%	25%	13%	33%	0%	0%
Moodle App	5	9%	8%	12%	0%	13%	0%	0%	0%
Canvas	4	8%	13%	0%	25%	8%	0%	11%	0%
Panopto	3	6%	0%	12%	0%	8%	0%	0%	0%
PebblePocket	3	6%	0%	12%	0%	3%	0%	22%	0%
Turnitin	3	6%	4%	8%	0%	5%	0%	0%	100%
Various	3	6%	4%	8%	0%	3%	0%	22%	0%
Blackboard Instructor	3	6%	4%	8%	0%	8%	0%	0%	0%
ModoLabs	2	4%	0%	8%	0%	5%	0%	0%	0%
Office365	2	4%	4%	4%	0%	5%	0%	0%	0%
Blackboard Grader	2	4%	0%	8%	0%	3%	0%	0%	100%
Campus Life	1	2%	0%	4%	0%	3%	0%	0%	0%
Lynda.com	1	2%	0%	4%	0%	3%	0%	0%	0%
Mahara Mobile	1	2%	0%	4%	0%	3%	0%	0%	0%
Mendeley	1	2%	4%	0%	0%	3%	0%	0%	0%
Turning Point Cloud	1	2%	0%	4%	0%	0%	0%	11%	0%
Poll Everywhere	1	2%	0%	4%	0%	3%	0%	0%	0%
Skype	1	2%	0%	4%	0%	0%	0%	11%	0%
Studiosity	1	2%	0%	4%	0%	0%	0%	0%	100%
TopHat	1	2%	0%	4%	0%	0%	0%	11%	0%
Unibus	1	2%	0%	4%	0%	3%	0%	0%	0%
VLE (unnamed)	1	2%	0%	4%	0%	3%	0%	0%	0%
Blackboard Collaborate	1	2%	4%	0%	0%	3%	0%	0%	0%
Slack	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A3.21p: Centrally-supported synchronous collaborative tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported synchronous collaborative tools)		*(50)*	*(25)*	*(25)*	*(0)*	*(40)*	*(2)*	*(7)*	*(1)*
Blackboard Collaborate	18	36%	32%	40%	NA	35%	50%	43%	0%
Adobe Connect	13	26%	28%	24%	NA	30%	0%	14%	0%
Blackboard Collaborate Ultra	10	20%	16%	24%	NA	18%	50%	14%	100%
Big Blue Button	7	14%	12%	16%	NA	15%	0%	14%	0%
WebEx	7	14%	16%	12%	NA	15%	0%	14%	0%
Skype for business	5	10%	4%	16%	NA	10%	0%	14%	0%
Skype	2	4%	4%	4%	NA	3%	50%	0%	0%
Office 365	1	2%	0%	4%	NA	3%	0%	0%	0%
Moodle	1	2%	0%	4%	NA	3%	0%	0%	0%
GoToWebinar	1	2%	4%	0%	NA	3%	0%	0%	0%
Google Docs	1	2%	4%	0%	NA	0%	50%	0%	0%
Zoom	1	2%	4%	0%	NA	3%	0%	0%	0%
Google Hangouts	1	2%	4%	0%	NA	3%	0%	0%	0%

Table A3.21q: Centrally-supported wiki

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported wiki)		*(49)*	*(25)*	*(22)*	*(2)*	*(33)*	*(6)*	*(9)*	*(1)*
Blackboard Learn	22	45%	44%	45%	50%	48%	50%	33%	0%
Moodle	12	24%	24%	27%	0%	30%	0%	22%	0%
Confluence	6	12%	16%	9%	0%	9%	0%	22%	100%
Campus Pack	6	12%	20%	5%	0%	9%	33%	11%	0%
Canvas	3	6%	12%	0%	0%	6%	0%	11%	0%
VLE (unnamed)	3	6%	4%	9%	0%	6%	0%	11%	0%
WordPress	2	4%	4%	5%	0%	0%	0%	22%	0%
Office 365	1	2%	0%	5%	0%	3%	0%	0%	0%
In house developed	1	2%	4%	0%	0%	3%	0%	0%	0%
Mediwiki	1	2%	4%	0%	0%	3%	0%	0%	0%
Various (not specified)	1	2%	0%	5%	0%	3%	0%	0%	0%
OU wiki	1	2%	0%	5%	0%	0%	17%	0%	0%
Not known	1	2%	0%	0%	50%	0%	0%	11%	0%

Table A3.21r: Centrally-supported screen casting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported wiki)		*(49)*	*(25)*	*(22)*	*(2)*	*(33)*	*(6)*	*(9)*	*(1)*
Blackboard Learn	22	45%	44%	45%	50%	48%	50%	33%	0%
Moodle	12	24%	24%	27%	0%	30%	0%	22%	0%
Confluence	6	12%	16%	9%	0%	9%	0%	22%	100%
Campus Pack	6	12%	20%	5%	0%	9%	33%	11%	0%
Canvas	3	6%	12%	0%	0%	6%	0%	11%	0%
VLE (unnamed)	3	6%	4%	9%	0%	6%	0%	11%	0%
WordPress	2	4%	4%	5%	0%	0%	0%	22%	0%
Office 365	1	2%	0%	5%	0%	3%	0%	0%	0%
In house developed	1	2%	4%	0%	0%	3%	0%	0%	0%
Mediwiki	1	2%	4%	0%	0%	3%	0%	0%	0%
Various (not specified)	1	2%	0%	5%	0%	3%	0%	0%	0%
OU wiki	1	2%	0%	5%	0%	0%	17%	0%	0%
Not known	1	2%	0%	0%	50%	0%	0%	11%	0%

Table A3.21s: Centrally-supported learning analytics tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported learning analytics tools)		(32)	(11)	(19)	(2)	(26)	(3)	(2)	(1)
In house development	9	28%	36%	26%	0%	31%	33%	0%	0%
Blackboard	5	16%	18%	16%	0%	8%	33%	50%	100%
JISC	4	13%	9%	11%	50%	8%	33%	50%	0%
Canvas	2	6%	9%	0%	50%	8%	0%	0%	0%
EesySoft	2	6%	18%	0%	0%	4%	33%	0%	0%
Google	2	6%	9%	0%	50%	8%	0%	0%	0%
Tableau	2	6%	0%	11%	0%	8%	0%	0%	0%
Currently in pilot/development	2	6%	0%	11%	0%	8%	0%	0%	0%
Attendance Monitoring system	1	3%	0%	5%	0%	4%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Brightspace (by Desire2Learn)	1	3%	0%	5%	0%	4%	0%	0%	0%
Civitas Illume/Inspire for Advisors	1	3%	0%	5%	0%	4%	0%	0%	0%
DTP solution path	1	3%	0%	5%	0%	4%	0%	0%	0%
SAS	1	3%	9%	0%	0%	4%	0%	0%	0%
Seats	1	3%	0%	5%	0%	4%	0%	0%	0%
Stream	1	3%	0%	5%	0%	4%	0%	0%	0%
Tribal	1	3%	9%	0%	0%	0%	33%	0%	0%
VLE (unnamed)	1	3%	0%	5%	0%	4%	0%	0%	0%

Table A3.21t: Centrally-supported content management system

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with centrally-supported content management system)		*(28)*	*(14)*	*(12)*	*(2)*	*(20)*	*(2)*	*(5)*	*(1)*
Blackboard	9	32%	29%	33%	50%	35%	50%	20%	0%
SharePoint	4	14%	7%	17%	50%	20%	0%	0%	0%
Moodle	2	7%	7%	8%	0%	5%	50%	0%	0%
OneDrive	2	7%	14%	0%	0%	5%	0%	20%	0%
VLE (unnamed)	2	7%	7%	8%	0%	0%	0%	40%	0%
Asset Bank	1	4%	7%	0%	0%	5%	0%	0%	0%
Box	1	4%	7%	0%	0%	0%	0%	20%	0%
CampusPress	1	4%	0%	8%	0%	5%	0%	0%	0%
In house developed	1	4%	7%	0%	0%	5%	0%	0%	0%
Folding Space	1	4%	0%	0%	50%	5%	0%	0%	0%
Google Drive	1	4%	7%	0%	0%	5%	0%	0%	0%
Libguides	1	4%	0%	8%	0%	5%	0%	0%	0%
MS Office 365	1	4%	7%	0%	0%	0%	0%	20%	0%
Plone	1	4%	7%	0%	0%	5%	0%	0%	0%
eVision	1	4%	0%	8%	0%	5%	0%	0%	0%
SITS	1	4%	0%	8%	0%	5%	0%	0%	0%
TERMINALFOUR	1	4%	0%	8%	0%	5%	0%	0%	0%
Torchbox	1	4%	7%	0%	0%	5%	0%	0%	0%
WordPress	1	4%	7%	0%	0%	5%	0%	0%	0%
Xythos	1	4%	0%	8%	0%	0%	0%	0%	100%

Table A3.21u: Centrally-supported digital/learning repository

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported digital/learning repository)		*(27)*	*(11)*	*(13)*	*(3)*	*(22)*	*(0)*	*(5)*	*(0)*
Blackboard	6	22%	27%	23%	0%	27%	NA	0%	NA
Moodle	6	22%	27%	0%	100%	18%	NA	40%	NA
Equella	4	15%	9%	23%	0%	18%	NA	0%	NA
Lynda.com	3	11%	0%	23%	0%	14%	NA	0%	NA
ePrints	2	7%	9%	8%	0%	9%	NA	0%	NA
VLE (unnamed)	2	7%	9%	8%	0%	5%	NA	20%	NA
Adapt	1	4%	9%	0%	0%	5%	NA	0%	NA
Box	1	4%	9%	0%	0%	5%	NA	0%	NA
Box of Broadcasts	1	4%	9%	0%	0%	5%	NA	0%	NA

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Canvas	1	4%	9%	0%	0%	5%	NA	0%	NA
Drupal	1	4%	9%	0%	0%	5%	NA	0%	NA
Edshare	1	4%	0%	8%	0%	0%	NA	20%	NA
Google Drive	1	4%	9%	0%	0%	5%	NA	0%	NA
In house developed using T4	1	4%	0%	8%	0%	0%	NA	20%	NA
IntraLibrary	1	4%	0%	8%	0%	5%	NA	0%	NA
Library e-Resources	1	4%	9%	0%	0%	5%	NA	0%	NA
McGraw-Hil	1	4%	9%	0%	0%	5%	NA	0%	NA
MS Office 365	1	4%	9%	0%	0%	5%	NA	0%	NA
Sharepoint	1	4%	0%	8%	0%	5%	NA	0%	NA
Talis	1	4%	9%	0%	0%	5%	NA	0%	NA

Table A3.21v: Centrally-supported other TEL tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported other TEL tool)		*(20)*	*(11)*	*(8)*	*(1)*	*(13)*	*(2)*	*(4)*	*(1)*
Padlet	2	10%	0%	25%	0%	8%	0%	25%	0%
WeVideo	2	10%	0%	25%	0%	15%	0%	0%	0%
Eesysoft	2	10%	9%	13%	0%	8%	50%	0%	0%
Xerte	2	10%	18%	0%	0%	8%	50%	0%	0%
Blackboard Ally	1	5%	0%	13%	0%	8%	0%	0%	0%
LimeSurvey	1	5%	0%	13%	0%	8%	0%	0%	0%
Atbar	1	5%	0%	13%	0%	8%	0%	0%	0%
Readspeaker	1	5%	0%	13%	0%	8%	0%	0%	0%
Box of Broadcasts	1	5%	0%	13%	0%	8%	0%	0%	0%
BlippAR	1	5%	0%	13%	0%	8%	0%	0%	0%
EvaSys	1	5%	0%	13%	0%	8%	0%	0%	0%
Box	1	5%	9%	0%	0%	0%	0%	25%	0%
EPrints (CentAUR)	1	5%	9%	0%	0%	8%	0%	0%	0%
LiftUpp	1	5%	9%	0%	0%	8%	0%	0%	0%
Voicethread	1	5%	9%	0%	0%	8%	0%	0%	0%
Meet	1	5%	9%	0%	0%	8%	0%	0%	0%
Nearpod	1	5%	0%	13%	0%	8%	0%	0%	0%
Office 365	1	5%	0%	0%	100%	8%	0%	0%	0%
Qualtrics	1	5%	9%	0%	0%	8%	0%	0%	0%
Skype for Business	1	5%	9%	0%	0%	0%	0%	25%	0%
Studiosity	1	5%	0%	13%	0%	0%	0%	0%	100%
Respondus	1	5%	0%	13%	0%	0%	0%	0%	100%
StudyMate	1	5%	0%	13%	0%	0%	0%	0%	100%
Virtual Patients (OpenLabyrinth)	1	5%	9%	0%	0%	8%	0%	0%	0%
WebPA	1	5%	0%	13%	0%	0%	0%	25%	0%
Bristol Online Surveys	1	5%	0%	13%	0%	8%	0%	0%	0%

Table A3.21w: Centrally-supported social networking

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported social networking)		*(19)*	*(6)*	*(11)*	*(2)*	*(14)*	*(2)*	*(3)*	*(0)*
Yammer	8	42%	33%	55%	0%	36%	100%	33%	NA
Twitter	7	37%	50%	36%	0%	36%	0%	67%	NA
Facebook	6	32%	17%	36%	50%	29%	0%	67%	NA
Google Communities	2	11%	17%	9%	0%	14%	0%	0%	NA
Canvas	1	5%	0%	0%	50%	7%	0%	0%	NA
Instagram	1	5%	0%	0%	50%	7%	0%	0%	NA
Learnium	1	5%	0%	9%	0%	7%	0%	0%	NA
MS Teams	1	5%	17%	0%	0%	7%	0%	0%	NA

Table A3.21x: Centrally-supported podcasting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported podcasting)		*(17)*	*(10)*	*(5)*	*(2)*	*(10)*	*(4)*	*(3)*	*(0)*
Panopto	5	29%	30%	20%	50%	40%	25%	0%	NA
In house developed	2	12%	10%	20%	0%	0%	0%	67%	NA
Adobe Connect	1	6%	10%	0%	0%	10%	0%	0%	NA
Apple and Windows Native Software	1	6%	0%	0%	50%	10%	0%	0%	NA
Blackboard	1	6%	10%	0%	0%	0%	25%	0%	NA
Kaltura	1	6%	10%	0%	0%	10%	0%	0%	NA
Campus Pack (by Learning Objects)	1	6%	10%	0%	0%	0%	25%	0%	NA
Mediasite	1	6%	10%	0%	0%	10%	0%	0%	NA
Planet eStream	1	6%	0%	20%	0%	10%	0%	0%	NA
Soundcloud	1	6%	10%	0%	0%	10%	0%	0%	NA
Various software (not specified)	1	6%	0%	20%	0%	0%	25%	0%	NA
VLE (unnamed)	1	6%	0%	20%	0%	0%	0%	33%	NA

Table A3.21y: Centrally-supported electronic essay exams

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported electronic essay exams)		*(16)*	*(11)*	*(5)*	*(0)*	*(11)*	*(1)*	*(4)*	*(0)*
Blackboard	6	38%	18%	80%	NA	27%	100%	50%	NA
Word	2	13%	18%	0%	NA	9%	0%	25%	NA
Moodle	2	13%	9%	20%	NA	18%	0%	0%	NA
QuestionMark Perception	2	13%	18%	0%	NA	18%	0%	0%	NA
Cirrus Assessment	1	6%	9%	0%	NA	9%	0%	0%	NA
Exam Online	1	6%	9%	0%	NA	0%	0%	25%	NA
WISEflow	1	6%	9%	0%	NA	9%	0%	0%	NA
In house developed	1	6%	9%	0%	NA	9%	0%	0%	NA
Turnitin	1	6%	9%	0%	NA	9%	0%	0%	NA

Table A3.21z: Centrally-supported social bookmarking/content curation tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with centrally-supported social bookmarking/content curation tools)		*(10)*	*(3)*	*(5)*	*(2)*	*(9)*	*(0)*	*(1)*	*(0)*
Mendeley	3	30%	33%	20%	50%	33%	NA	NA	NA
Refworks	3	30%	33%	40%	0%	33%	NA	NA	NA
EndNote	2	20%	0%	20%	50%	22%	NA	NA	NA
Laganto	1	10%	33%	0%	0%	11%	NA	NA	NA
YouTube	1	10%	33%	0%	0%	11%	NA	NA	NA
Panopto viewer	1	10%	33%	0%	0%	11%	NA	NA	NA
PaperPile	1	10%	33%	0%	0%	11%	NA	NA	NA
Talis Aspire	1	10%	0%	20%	0%	11%	NA	NA	NA
Not known	1	10%	0%	0%	50%	0%	NA	NA	NA

Question 3.22: And which, if any, TEL tools that are used by students are *not* centrally-supported? For example, those used by particular departments or even individuals.

Table A3.22: Software tools used by students who are not centrally-supported

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Social networking	43	42%	40%	49%	20%	40%	57%	42%	100%
Document sharing tool (e.g. Google Docs, Office 365)	41	40%	42%	37%	40%	41%	29%	42%	0%
Blog	37	36%	34%	37%	40%	36%	29%	42%	0%
Personal response systems (including handsets or web-based apps)	27	26%	32%	23%	10%	25%	29%	33%	0%
Mobile apps	25	24%	18%	33%	20%	25%	0%	25%	100%
Asynchronous communication tools (e.g. discussion forums)	19	18%	22%	14%	20%	18%	14%	25%	0%
None used	18	18%	18%	16%	20%	16%	29%	25%	0%
Other non centrally-supported TEL tool	15	15%	14%	14%	20%	14%	14%	17%	0%
e-portfolio	14	14%	16%	14%	0%	14%	14%	8%	0%
Media streaming system	12	12%	10%	16%	0%	13%	0%	8%	0%
Synchronous collaborative tools (e.g. virtual classroom)	12	12%	14%	12%	0%	13%	0%	8%	0%
Formative e-assessment tool (e.g. quizzes)	11	11%	18%	5%	0%	10%	0%	25%	0%
Podcasting	11	11%	14%	7%	10%	10%	0%	25%	0%
Social bookmarking/content curation tools	11	11%	8%	9%	30%	11%	0%	17%	0%
Summative e-assessment tools (e.g. quizzes)	11	11%	16%	5%	10%	11%	0%	17%	0%
Virtual Learning Environment (VLE)	11	11%	18%	5%	0%	12%	0%	8%	0%
Webinar	11	11%	18%	2%	10%	11%	0%	17%	0%
Screen casting	10	10%	12%	5%	20%	10%	0%	17%	0%
Content management systems	7	7%	6%	5%	20%	7%	0%	8%	0%
Lecture capture tools	7	7%	8%	5%	10%	7%	0%	8%	0%
Wiki	6	6%	6%	5%	10%	6%	0%	8%	0%
Digital/learning repository	5	5%	4%	7%	0%	6%	0%	0%	0%
Reading list management software	4	4%	6%	2%	0%	5%	0%	0%	0%
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	4	4%	8%	0%	0%	4%	0%	8%	0%
Electronic Management of Assignments (EMA)*	3	3%	6%	0%	0%	2%	0%	8%	0%
Learning analytics tools	3	3%	6%	0%	0%	4%	0%	0%	0%
Electronic essay exams	1	1%	2%	0%	0%	1%	0%	0%	0%

Table A3.22a: Non-centrally-supported social networking

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported social networking)		*(43)*	*(20)*	*(21)*	*(2)*	*(33)*	*(4)*	*(5)*	*(1)*
Facebook	38	88%	85%	90%	100%	85%	100%	100%	100%
Twitter	28	65%	70%	62%	50%	67%	50%	60%	100%
LinkedIn	7	16%	10%	19%	50%	15%	0%	40%	0%
WhatsApp	7	16%	10%	24%	0%	15%	25%	20%	0%
Snapchat	6	14%	15%	14%	0%	9%	25%	20%	100%
Google	3	7%	10%	5%	0%	6%	0%	20%	0%
Instagram	3	7%	10%	5%	0%	9%	0%	0%	0%
Padlet	1	2%	5%	0%	0%	0%	0%	20%	0%
Pinterest	1	2%	5%	0%	0%	0%	25%	0%	0%
Tumblr	1	2%	0%	5%	0%	3%	0%	0%	0%
Weibo	1	2%	5%	0%	0%	3%	0%	0%	0%
Various	4	9%	10%	10%	0%	12%	0%	0%	0%

Table A3.22b: Non-centrally-supported document sharing tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported document sharing tool)		*(41)*	*(21)*	*(16)*	*(4)*	*(34)*	*(2)*	*(5)*	*(0)*
Google Docs/Drive	33	80%	90%	81%	25%	79%	100%	80%	0%
Dropbox	10	24%	33%	13%	25%	26%	0%	20%	0%
Office365/OneDrive	10	24%	33%	13%	25%	26%	0%	20%	0%
iCloud/iWork	3	7%	10%	6%	0%	9%	0%	0%	0%
Padlet	1	2%	5%	0%	0%	3%	0%	0%	0%
Box	1	2%	5%	0%	0%	3%	0%	0%	0%
Various	3	7%	0%	13%	25%	6%	0%	20%	0%

Table A3.22c: Non-centrally-supported blog

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with non-centrally-supported blog)		*(37)*	*(17)*	*(16)*	*(4)*	*(30)*	*(2)*	*(5)*	*(0)*
WordPress	28	76%	94%	69%	25%	77%	100%	60%	0%
Blogger	8	22%	29%	13%	25%	23%	0%	20%	0%
Weebly	2	5%	12%	0%	0%	3%	0%	20%	0%
Facebook	1	3%	0%	6%	0%	0%	0%	20%	0%
Google	1	3%	0%	6%	0%	3%	0%	0%	0%
Tumblr	1	3%	6%	0%	0%	3%	0%	0%	0%
Various (packages not stated)	5	14%	0%	19%	50%	13%	0%	20%	0%

Table A3.22d: Non-centrally-supported personal response systems

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported personal response systems)		*(27)*	*(16)*	*(10)*	*(1)*	*(21)*	*(2)*	*(4)*	*(0)*
Socrative	14	52%	63%	40%	0%	48%	100%	50%	0%
Poll Everywhere	11	41%	38%	40%	100%	38%	50%	50%	0%
Mentimeter	10	37%	50%	20%	0%	29%	0%	100%	0%
Kahoot	6	22%	31%	10%	0%	19%	50%	25%	0%
Nearpod	4	15%	19%	10%	0%	14%	0%	25%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Turning Point	3	11%	13%	10%	0%	14%	0%	0%	0%
Meetoo	2	7%	6%	10%	0%	10%	0%	0%	0%
Padlet	2	7%	6%	10%	0%	10%	0%	0%	0%
AnswerGarden	1	4%	6%	0%	0%	5%	0%	0%	0%
Echo 360	1	4%	0%	10%	0%	5%	0%	0%	0%
Plickers	1	4%	0%	0%	100%	5%	0%	0%	0%
Quodl	1	4%	6%	0%	0%	5%	0%	0%	0%
Slido	1	4%	6%	0%	0%	5%	0%	0%	0%
UniDoodle	1	4%	6%	0%	0%	5%	0%	0%	0%
Zeetings	1	4%	6%	0%	0%	5%	0%	0%	0%
Various	3	11%	6%	20%	0%	14%	0%	0%	0%

Table A3.22e: Non-centrally-supported mobile apps

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported mobile apps)		*(25)*	*(9)*	*(14)*	*(2)*	*(21)*	*(0)*	*(3)*	*(1)*
Blackboard Student	2	8%	0%	14%	0%	5%	0%	33%	0%
Dropbox	2	8%	11%	0%	50%	10%	0%	0%	0%
Evernote	2	8%	11%	7%	0%	5%	0%	0%	100%
Explain Everything	2	8%	22%	0%	0%	10%	0%	0%	0%
OneNote	2	8%	11%	7%	0%	10%	0%	0%	0%
Padlet	2	8%	22%	0%	0%	10%	0%	0%	0%
Quizlet	2	8%	11%	7%	0%	5%	0%	0%	100%
Adobe Spark	1	4%	0%	7%	0%	5%	0%	0%	0%
Adobe Voice	1	4%	11%	0%	0%	5%	0%	0%	0%
Audio Notetaker	1	4%	0%	7%	0%	0%	0%	0%	100%
Bitly	1	4%	11%	0%	0%	5%	0%	0%	0%
Brainscape	1	4%	11%	0%	0%	5%	0%	0%	0%
Campus M	1	4%	11%	0%	0%	5%	0%	0%	0%
Canvas	1	4%	11%	0%	0%	5%	0%	0%	0%
Cite This for Me	1	4%	0%	7%	0%	0%	0%	0%	100%
Clyp	1	4%	11%	0%	0%	5%	0%	0%	0%
Duolingo	1	4%	11%	0%	0%	5%	0%	0%	0%
Facebook	1	4%	0%	7%	0%	5%	0%	0%	0%
GoodReader	1	4%	0%	7%	0%	0%	0%	0%	100%
Google	1	4%	11%	0%	0%	5%	0%	0%	0%
In house developed	1	4%	0%	7%	0%	5%	0%	0%	0%
Instagram	1	4%	11%	0%	0%	5%	0%	0%	0%
Khan Academy	1	4%	0%	7%	0%	5%	0%	0%	0%
MOJO Kit	1	4%	0%	7%	0%	5%	0%	0%	0%
Moodle	1	4%	0%	7%	0%	5%	0%	0%	0%
PebblePad	1	4%	0%	7%	0%	5%	0%	0%	0%
Pinterest	1	4%	11%	0%	0%	5%	0%	0%	0%
Prezi	1	4%	0%	7%	0%	0%	0%	0%	100%
RefME	1	4%	0%	7%	0%	0%	0%	0%	100%
Scopus	1	4%	11%	0%	0%	5%	0%	0%	0%
Seeing AI	1	4%	11%	0%	0%	5%	0%	0%	0%
SimpleMind	1	4%	0%	7%	0%	0%	0%	0%	100%
Snapchat	1	4%	0%	7%	0%	5%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Socrative	1	4%	0%	7%	0%	0%	0%	0%	100%
SoloLearn	1	4%	0%	7%	0%	0%	0%	0%	100%
Twitter	1	4%	0%	7%	0%	5%	0%	0%	0%
Weebly	1	4%	11%	0%	0%	5%	0%	0%	0%
WhatsApp	1	4%	0%	7%	0%	5%	0%	0%	0%
WordPress	1	4%	11%	0%	0%	5%	0%	0%	0%
Various	8	32%	33%	29%	50%	33%	0%	33%	0%
Don't Know	1	4%	0%	7%	0%	5%	0%	0%	0%

Table A3.22f: Non-centrally-supported asynchronous communication tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with non-centrally-supported asynchronous communication tools)		*(19)*	*(11)*	*(6)*	*(2)*	*(15)*	*(1)*	*(3)*	*(0)*
Facebook	9	47%	45%	67%	0%	40%	100%	67%	0%
Padlet	4	21%	18%	17%	50%	27%	0%	0%	0%
Twitter	4	21%	18%	33%	0%	20%	0%	33%	0%
WhatsApp	4	21%	9%	50%	0%	27%	0%	0%	0%
Google+	2	11%	18%	0%	0%	7%	0%	33%	0%
Moodle Forums	2	11%	18%	0%	0%	13%	0%	0%	0%
Slack	2	11%	18%	0%	0%	7%	0%	33%	0%
Google	1	5%	0%	17%	0%	7%	0%	0%	0%
Google Classroom	1	5%	9%	0%	0%	7%	0%	0%	0%
Instagram	1	5%	0%	17%	0%	7%	0%	0%	0%
Snapchat	1	5%	0%	17%	0%	7%	0%	0%	0%
Yammer	1	5%	9%	0%	0%	7%	0%	0%	0%
Various (packages not stated)	2	11%	9%	0%	50%	7%	0%	33%	0%

Table A3.22g: Non-centrally-supported other TEL tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported other TEL tool)		*(15)*	*(7)*	*(6)*	*(2)*	*(12)*	*(1)*	*(2)*	*(0)*
Padlet	3	20%	14%	33%	0%	25%	0%	0%	0%
Prezi	2	13%	14%	17%	0%	17%	0%	0%	0%
SurveyMonkey	2	13%	0%	33%	0%	17%	0%	0%	0%
AnswerGarden	1	7%	0%	17%	0%	8%	0%	0%	0%
ArcMap	1	7%	0%	17%	0%	8%	0%	0%	0%
Audacity	1	7%	0%	17%	0%	8%	0%	0%	0%
Calendly	1	7%	0%	17%	0%	8%	0%	0%	0%
GoAnimate	1	7%	0%	17%	0%	8%	0%	0%	0%
Google	1	7%	0%	17%	0%	8%	0%	0%	0%
iPeer	1	7%	14%	0%	0%	0%	0%	50%	0%
Labster	1	7%	0%	17%	0%	0%	100%	0%	0%
Liftupp	1	7%	14%	0%	0%	0%	0%	50%	0%
PeerWise	1	7%	14%	0%	0%	0%	0%	50%	0%
Powtoon	1	7%	0%	17%	0%	8%	0%	0%	0%
QGIS	1	7%	0%	17%	0%	8%	0%	0%	0%
Slack	1	7%	14%	0%	0%	8%	0%	0%	0%
TodaysMeet	1	7%	0%	17%	0%	8%	0%	0%	0%
VideoScribe	1	7%	0%	17%	0%	8%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Voki	1	7%	0%	17%	0%	8%	0%	0%	0%
Various	3	20%	29%	0%	50%	17%	0%	50%	0%
Don't know	5	33%	29%	33%	50%	42%	0%	0%	0%

Table A3.22h: Non-centrally-supported e-portfolio

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported e-portfolio)		*(14)*	*(8)*	*(6)*	*(0)*	*(12)*	*(1)*	*(1)*	*(0)*
WordPress	4	29%	38%	17%	0%	17%	100%	100%	0%
Mahara	2	14%	13%	17%	0%	17%	0%	0%	0%
OneNote	2	14%	13%	17%	0%	17%	0%	0%	0%
Bulb	1	7%	13%	0%	0%	8%	0%	0%	0%
Google	1	7%	0%	17%	0%	8%	0%	0%	0%
In house developed	1	7%	0%	17%	0%	8%	0%	0%	0%
Instagram	1	7%	0%	17%	0%	8%	0%	0%	0%
MyKnowledgeMap	1	7%	13%	0%	0%	8%	0%	0%	0%
OneFile	1	7%	13%	0%	0%	8%	0%	0%	0%
Pathbrite	1	7%	0%	17%	0%	8%	0%	0%	0%
PebblePad	1	7%	0%	17%	0%	8%	0%	0%	0%
Pinterest	1	7%	13%	0%	0%	8%	0%	0%	0%
Portfolium	1	7%	0%	17%	0%	8%	0%	0%	0%
Tumblr	1	7%	0%	17%	0%	8%	0%	0%	0%
Vimeo	1	7%	0%	17%	0%	8%	0%	0%	0%

Table A3.22i: Non-centrally-supported media steaming system

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported media steaming system)		*(12)*	*(5)*	*(7)*	*(0)*	*(11)*	*(0)*	*(1)*	*(0)*
YouTube	10	83%	100%	71%	0%	82%	0%	100%	0%
Vimeo	5	42%	40%	43%	0%	45%	0%	0%	0%
Facebook	2	17%	40%	0%	0%	18%	0%	0%	0%
dailymotion	1	8%	0%	14%	0%	0%	0%	100%	0%
Mevo	1	8%	0%	14%	0%	0%	0%	100%	0%
NewTek TriCaster Mini	1	8%	0%	14%	0%	9%	0%	0%	0%
Twitter	1	8%	20%	0%	0%	9%	0%	0%	0%
Various	1	8%	0%	14%	0%	9%	0%	0%	0%

Table A3.22j: Non-centrally-supported synchronous collaborative tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported synchronous collaborative tools)		*(12)*	*(7)*	*(5)*	*(0)*	*(11)*	*(0)*	*(1)*	*(0)*
Skype	7	58%	71%	40%	0%	64%	0%	0%	0%
Google Hangouts	3	25%	29%	20%	0%	18%	0%	100%	0%
Zoom	2	17%	14%	20%	0%	18%	0%	0%	0%
Adobe Connect	1	8%	14%	0%	0%	9%	0%	0%	0%
Bespoke	1	8%	14%	0%	0%	9%	0%	0%	0%
BigMarker	1	8%	14%	0%	0%	9%	0%	0%	0%
Blackboard Collaborate	1	8%	0%	20%	0%	9%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Google Classroom	1	8%	0%	20%	0%	9%	0%	0%	0%
WebEx	1	8%	14%	0%	0%	9%	0%	0%	0%
WebPA	1	8%	0%	20%	0%	9%	0%	0%	0%

Table A3.22k: Non-centrally-supported formative e-assessment tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported formative e-assessment tool)		*(11)*	*(9)*	*(2)*	*(0)*	*(8)*	*(0)*	*(3)*	*(0)*
Moodle	3	27%	33%	0%	0%	38%	0%	0%	0%
Socrative	3	27%	11%	100%	0%	38%	0%	0%	0%
Google Forms	2	18%	22%	0%	0%	13%	0%	33%	0%
In house developed	2	18%	22%	0%	0%	13%	0%	33%	0%
Kahoot	2	18%	11%	50%	0%	25%	0%	0%	0%
AnswerGarden	1	9%	11%	0%	0%	13%	0%	0%	0%
EdPuzzle	1	9%	11%	0%	0%	13%	0%	0%	0%
Numbas	1	9%	11%	0%	0%	13%	0%	0%	0%
OpenLabyrinth	1	9%	11%	0%	0%	13%	0%	0%	0%
PeerWise	1	9%	11%	0%	0%	0%	0%	33%	0%
Questionmark Perception	1	9%	11%	0%	0%	13%	0%	0%	0%
VLE	1	9%	11%	0%	0%	13%	0%	0%	0%

Table A3.22l: Non-centrally-supported podcasting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported podcasting)		*(11)*	*(7)*	*(3)*	*(1)*	*(8)*	*(0)*	*(3)*	*(0)*
SoundCloud	3	27%	14%	67%	0%	25%	0%	33%	0%
Audacity	2	18%	29%	0%	0%	13%	0%	33%	0%
BBC	1	9%	14%	0%	0%	13%	0%	0%	0%
Clyp	1	9%	14%	0%	0%	13%	0%	0%	0%
GarageBand	1	9%	14%	0%	0%	0%	0%	33%	0%
iTunes/iTunesU	1	9%	14%	0%	0%	13%	0%	0%	0%
REAPER	1	9%	14%	0%	0%	13%	0%	0%	0%
TED	1	9%	14%	0%	0%	13%	0%	0%	0%
YouTube	1	9%	14%	0%	0%	13%	0%	0%	0%
Various	3	27%	14%	33%	100%	25%	0%	33%	0%

Table A3.22m: Non-centrally-supported social bookmarking/content curation tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported social bookmarking/content curation tools)		*(11)*	*(4)*	*(4)*	*(3)*	*(9)*	*(0)*	*(2)*	*(0)*
Diigo	2	18%	25%	25%	0%	11%	0%	50%	0%
Facebook	2	18%	0%	0%	67%	22%	0%	0%	0%
Mendeley	2	18%	25%	25%	0%	22%	0%	0%	0%
Pinterest	2	18%	25%	25%	0%	22%	0%	0%	0%
Canva	1	9%	25%	0%	0%	11%	0%	0%	0%
Delicious	1	9%	0%	25%	0%	11%	0%	0%	0%
Pearltrees	1	9%	0%	25%	0%	11%	0%	0%	0%
RefWorks	1	9%	25%	0%	0%	11%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Twitter	1	9%	0%	0%	33%	11%	0%	0%	0%
XtLearn	1	9%	0%	25%	0%	11%	0%	0%	0%
Various	2	18%	25%	0%	33%	11%	0%	50%	0%
Don't know	1	9%	0%	25%	0%	11%	0%	0%	0%

Table A3.22n: Non-centrally-supported summative e-assessment tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported summative e-assessment tools)		*(11)*	*(8)*	*(2)*	*(1)*	*(9)*	*(0)*	*(2)*	*(0)*
Moodle	2	18%	25%	0%	0%	22%	0%	0%	0%
Questionmark Perception	2	18%	25%	0%	0%	22%	0%	0%	0%
Rogo	2	18%	25%	0%	0%	22%	0%	0%	0%
CodeRunner	1	9%	13%	0%	0%	0%	0%	50%	0%
ExamOnline	1	9%	13%	0%	0%	0%	0%	50%	0%
In house developed	1	9%	13%	0%	0%	0%	0%	50%	0%
Kahoot	1	9%	0%	0%	100%	11%	0%	0%	0%
Maple T.A.	1	9%	13%	0%	0%	11%	0%	0%	0%
Quizlet	1	9%	0%	0%	100%	11%	0%	0%	0%
Socrative	1	9%	0%	0%	100%	11%	0%	0%	0%
STACK	1	9%	13%	0%	0%	0%	0%	50%	0%
Web-PA	1	9%	13%	0%	0%	11%	0%	0%	0%
WISEFlow	1	9%	0%	50%	0%	11%	0%	0%	0%
Don't know	1	9%	0%	50%	0%	11%	0%	0%	0%

Table A3.22o: Non-centrally-supported virtual learning environment

Response	Total	Type	Country						
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported VLE)		*(11)*	*(9)*	*(2)*	*(0)*	*(10)*	*(0)*	*(1)*	*(0)*
Moodle	4	36%	33%	50%	0%	30%	0%	100%	0%
Canvas	2	18%	22%	0%	0%	20%	0%	0%	0%
Bespoke	1	9%	11%	0%	0%	10%	0%	0%	0%
Blackboard	1	9%	0%	50%	0%	10%	0%	0%	0%
Blackboard CourseSites	1	9%	11%	0%	0%	10%	0%	0%	0%
myWBS	1	9%	11%	0%	0%	10%	0%	0%	0%
WebEx	1	9%	11%	0%	0%	10%	0%	0%	0%

Table A3.22p: Non-centrally-supported webinar

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported webinar)		*(11)*	*(9)*	*(1)*	*(1)*	*(9)*	*(0)*	*(2)*	*(0)*
WebEx	4	36%	44%	0%	0%	44%	0%	0%	0%
Adobe Connect	3	27%	33%	0%	0%	33%	0%	0%	0%
Google Hangouts	3	27%	22%	100%	0%	22%	0%	50%	0%
YouTube	3	27%	33%	0%	0%	33%	0%	0%	0%
GoToMeeting	2	18%	22%	0%	0%	22%	0%	0%	0%
Skype	2	18%	22%	0%	0%	11%	0%	50%	0%
Zoom	2	18%	22%	0%	0%	11%	0%	50%	0%
Various	1	9%	0%	0%	100%	0%	0%	50%	0%

Table A3.22q: Non-centrally-supported screen casting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported screen casting)		*(10)*	*(6)*	*(2)*	*(2)*	*(8)*	*(0)*	*(2)*	*(0)*
Screencast-O-Matic	5	50%	50%	50%	50%	50%	0%	50%	0%
Camtasia	2	20%	33%	0%	0%	25%	0%	0%	0%
Captivate	1	10%	17%	0%	0%	0%	0%	50%	0%
Jing	1	10%	17%	0%	0%	13%	0%	0%	0%
Office Mix	1	10%	17%	0%	0%	13%	0%	0%	0%
QuickTime	1	10%	17%	0%	0%	13%	0%	0%	0%
ScreenFlow	1	10%	17%	0%	0%	13%	0%	0%	0%
Storyline	1	10%	17%	0%	0%	13%	0%	0%	0%
TinyTake	1	10%	17%	0%	0%	13%	0%	0%	0%
Various	2	20%	0%	50%	50%	13%	0%	50%	0%

Table A3.22r: Non-centrally-supported content management system

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondent with non-centrally-supported content management system)		*(7)*	*(3)*	*(2)*	*(2)*	*(6)*	*(0)*	*(1)*	*(0)*
WordPress	4	57%	100%	50%	0%	67%	0%	0%	0%
Wix	2	29%	33%	0%	50%	33%	0%	0%	0%
Box	1	14%	33%	0%	0%	17%	0%	0%	0%
Dropbox	1	14%	33%	0%	0%	17%	0%	0%	0%
iCloud	1	14%	33%	0%	0%	17%	0%	0%	0%
Moodle	1	14%	33%	0%	0%	17%	0%	0%	0%
OneDrive	1	14%	33%	0%	0%	17%	0%	0%	0%
Pinterest	1	14%	0%	50%	0%	17%	0%	0%	0%
Various	1	14%	0%	0%	50%	0%	0%	100%	0%

Table A3.22s: Non-centrally-supported lecture capture tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported lecture capture tools)		*(7)*	*(4)*	*(2)*	*(1)*	*(6)*	*(0)*	*(1)*	*(0)*
Echo360	2	29%	25%	50%	0%	33%	0%	0%	0%
BYOD	1	14%	0%	0%	100%	17%	0%	0%	0%
Google	1	14%	0%	50%	0%	17%	0%	0%	0%
Office Mix	1	14%	0%	50%	0%	17%	0%	0%	0%
Padcaster	1	14%	25%	0%	0%	0%	0%	100%	0%
Panopto	1	14%	25%	0%	0%	17%	0%	0%	0%
YouTube	1	14%	25%	0%	0%	17%	0%	0%	0%

Table A3.22t: Non-centrally-supported wiki

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported wiki)		*(6)*	*(3)*	*(2)*	*(1)*	*(5)*	*(0)*	*(1)*	*(0)*
MediaWiki	1	17%	33%	0%	0%	20%	0%	0%	0%
Moodle	1	17%	33%	0%	0%	20%	0%	0%	0%
Padlet	1	17%	0%	50%	0%	20%	0%	0%	0%
PBWorks	1	17%	0%	50%	0%	20%	0%	0%	0%
WordPress	1	17%	0%	50%	0%	20%	0%	0%	0%
Various	2	33%	0%	50%	100%	20%	0%	100%	0%
Don't know	1	17%	33%	0%	0%	20%	0%	0%	0%

Table A3.22u: Non-centrally-supported digital/learning repository

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported digital/learning repository)		*(5)*	*(2)*	*(3)*	*(0)*	*(5)*	*(0)*	*(0)*	*(0)*
Digimap	1	20%	0%	33%	0%	20%	0%	0%	0%
Google Books	1	20%	50%	0%	0%	20%	0%	0%	0%
Google Scholar	1	20%	50%	0%	0%	20%	0%	0%	0%
In house developed	1	20%	0%	33%	0%	20%	0%	0%	0%
iTunes U	1	20%	50%	0%	0%	20%	0%	0%	0%
Khan Academy	1	20%	0%	33%	0%	20%	0%	0%	0%
Pluralsight	1	20%	50%	0%	0%	20%	0%	0%	0%
YouTube	1	20%	0%	33%	0%	20%	0%	0%	0%

Table A3.22v: Non-centrally-supported reading list management software

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported reading list management software)		*(4)*	*(3)*	*(1)*	*(0)*	*(4)*	*(0)*	*(0)*	*(0)*
Talis Aspire	2	50%	67%	0%	0%	50%	0%	0%	0%
ClinicalKey	1	25%	33%	0%	0%	25%	0%	0%	0%
Various	1	25%	0%	100%	0%	25%	0%	0%	0%

Table A3.22w: Non-centrally-supported text-matching tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported text-matching tools)		*(4)*	*(4)*	*(0)*	*(0)*	*(3)*	*(0)*	*(1)*	*(0)*
Turnitin	3	75%	75%	0%	0%	67%	0%	100%	0%
Ephorus	1	25%	25%	0%	0%	33%	0%	0%	0%
iThenticate	1	25%	25%	0%	0%	33%	0%	0%	0%

Table A3.22x: Non-centrally-supported electronic management of assignments*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported electronic management of assignments)		*(3)*	*(3)*	*(0)*	*(0)*	*(2)*	*(0)*	*(1)*	*(0)*
In house developed	2	67%	67%	0%	0%	50%	0%	100%	0%
Moodle	1	33%	33%	0%	0%	50%	0%	0%	0%

Table A3.22y: Non-centrally-supported learning analytics tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported learning analytics tools)		*(3)*	*(3)*	*(0)*	*(0)*	*(3)*	*(0)*	*(0)*	*(0)*
In house developed	2	67%	67%	0%	0%	67%	0%	0%	0%
Google Analytics	1	33%	33%	0%	0%	33%	0%	0%	0%

Table A3.22z: Non-centrally-supported electronic essay exams

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with non-centrally-supported electronic essay exams)		*(1)*	*(1)*	*(0)*	*(0)*	*(1)*	*(0)*	*(0)*	*(0)*
Inspera	1	1	1	0%	0%	1	0%	0%	0%

Question 3.23: How does your institution use student or staff owned mobile devices in support of learning, teaching and assessment activities?

Table A3.23: How mobile devices are used

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(103)*	*(50)*	*(43)*	*(10)*	*(83)*	*(7)*	*(12)*	*(1)*
Accessing course/learning content and resources, e.g. when students and staff are offsite	90	87%	84%	91%	90%	88%	86%	83%	100%
Accessing course administration/information, e.g. timetabling	87	84%	76%	93%	90%	86%	86%	75%	100%
Participating in interactive class teaching sessions, e.g. polling, class quizzes	83	81%	84%	81%	60%	80%	86%	83%	100%
Accessing library resources	77	75%	72%	79%	70%	73%	71%	83%	100%
Accessing grade and other academic progress information	74	72%	72%	77%	50%	70%	86%	75%	100%
Completing surveys in class	66	64%	54%	77%	60%	64%	86%	50%	100%
Assessing student work (e.g. whilst observing performance of skills, presentations, activities)	49	48%	32%	67%	40%	48%	43%	42%	100%
Recording and uploading data, e.g. when on fieldwork trips	49	48%	34%	67%	30%	48%	57%	33%	100%
Providing feedback on student work	45	44%	34%	63%	10%	43%	57%	33%	100%
Subject specific learning apps	39	38%	36%	40%	40%	40%	29%	25%	100%
Other use of mobile devices	10	10%	10%	9%	10%	11%	0%	8%	0%
Institution does not aim to use mobile devices	4	4%	6%	0%	10%	2%	14%	8%	0%

Question 3.24: How does your institution *promote* the use of student or staff owned mobile devices in support of learning, teaching and assessment activities?

Table A3.24: How use of mobile devices is promoted

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(102)*	*(50)*	*(43)*	*(9)*	*(82)*	*(7)*	*(12)*	*(1)*
Institutional Bring Your Own Device (BYOD) policy and supporting mobile device usage on campus	47	46%	42%	49%	56%	44%	57%	58%	0%
Loaning of devices to staff or students	43	42%	38%	51%	22%	41%	71%	33%	0%
Institution does not promote the use of mobile devices	21	21%	28%	9%	33%	21%	14%	25%	0%
Other promotion of mobile devices	17	17%	22%	14%	0%	17%	0%	17%	100%
Free provision of devices to staff/students	15	15%	10%	21%	11%	15%	29%	8%	0%
Funding for mobile learning projects	10	10%	6%	14%	11%	12%	0%	0%	0%
Institutional switch-on policy to encourage use of devices by staff and students for learning, teaching and assessment	6	6%	0%	14%	0%	6%	0%	8%	0%

Section 4: Course delivery and evaluation of Technology Enhanced Learning

Question 4.1: Does your institution offer any of the following types of courses?

Table A4.1a: Blended learning: lecture notes and supplementary resources for courses studied in class are available

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	70	73%	73%	77%	56%	69%	100%	82%	100%
Yes, across some schools/departments	18	19%	17%	18%	33%	21%	0%	18%	0%
Yes, by some individual teachers	7	7%	8%	5%	11%	9%	0%	0%	0%
Not yet, but we are planning to	0	0%	0%	0%	0%	0%	0%	0%	0%
Not offered and no plans to do so	1	1%	2%	0%	0%	1%	0%	0%	0%
Don't know/not applicable	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A4.1b: Blended learning: parts of the course are studied in class and other parts require students to engage in active learning online (e.g. engaging in collaborative or assessed tasks)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	17	18%	10%	26%	22%	14%	50%	18%	100%
Yes, across some schools/departments	41	43%	48%	39%	33%	40%	17%	82%	0%
Yes, by some individual teachers	34	35%	35%	36%	33%	41%	33%	0%	0%
Not yet, but we are planning to	3	3%	4%	0%	11%	4%	0%	0%	0%
Not offered and no plans to do so	1	1%	2%	0%	0%	1%	0%	0%	0%
Don't know/not applicable	0	0%	0%	0%	0%	0%	0%	0%	0%

Table A4.1c: Fully online courses

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	5	5%	8%	3%	0%	4%	0%	9%	100%
Yes, across some schools/departments	48	50%	48%	59%	22%	47%	67%	64%	0%
Yes, by some individual teachers	23	24%	27%	21%	22%	27%	17%	9%	0%
Not yet, but we are planning to	9	9%	8%	5%	33%	10%	0%	9%	0%
Not offered and no plans to do so	10	10%	6%	13%	22%	10%	17%	9%	0%
Don't know/not applicable	1	1%	2%	0%	0%	1%	0%	0%	0%

Table A4.1d: Open online learning courses for all students at your institution (internal access only)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	4	4%	6%	3%	0%	4%	0%	9%	0%
Yes, across some schools departments	18	19%	25%	8%	33%	22%	17%	0%	0%
Yes, by some individual teachers	17	18%	17%	23%	0%	13%	17%	46%	100%
Not yet, but we are planning to	18	19%	17%	18%	33%	22%	0%	9%	0%
Not offered and no plans to do so	29	30%	23%	41%	22%	32%	33%	18%	0%
Don't know/not applicable	9	9%	10%	8%	11%	6%	33%	18%	0%
Not answered	1	1%	2%	0%	0%	1%	0%	0%	0%

Table A4.1e: Open online boundary courses: free external access to the course materials for the public, but assessment restricted to students registered at your institution only

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	0	0%	0%	0%	0%	0%	0%	0%	0%
Yes, across some schools/departments	11	12%	15%	10%	0%	13%	17%	0%	0%
Yes, by some individual teachers	8	8%	10%	8%	0%	8%	17%	9%	0%
Not yet, but we are planning to	10	10%	6%	15%	11%	10%	0%	18%	0%
Not offered and no plans to do so	54	56%	50%	59%	78%	54%	67%	64%	100%
Don't know/not applicable	11	12%	19%	3%	11%	13%	0%	9%	0%
Not answered	2	2%	0%	5%	0%	3%	0%	0%	0%

Table A4.1f: Open online learning courses for public (free external access)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	3	3%	6%	0%	0%	3%	0%	9%	0%
Yes, across some schools/departments	23	24%	35%	15%	0%	26%	17%	18%	0%
Yes, by some individual teachers	15	16%	19%	15%	0%	18%	0%	9%	0%
Not yet, but we are planning to	9	9%	2%	13%	33%	9%	0%	18%	0%
Not offered and no plans to do so	40	42%	31%	49%	67%	37%	83%	46%	100%
Don't know/not applicable	6	6%	6%	8%	0%	8%	0%	0%	0%

Table A4.1g: Other programme or course

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes, extensively across the institution	0	0%	0%	0%	0%	0%	0%	0%	0%
Yes, across some schools/departments	2	2%	2%	3%	0%	3%	0%	0%	0%
Yes, by some individual teachers	1	1%	0%	3%	0%	1%	0%	0%	0%
Not yet, but we are planning to	0	0%	0%	0%	0%	0%	0%	0%	0%
Not offered and no plans to do so	5	5%	4%	8%	0%	5%	17%	0%	0%
Don't know/not applicable	12	13%	10%	15%	11%	13%	33%	0%	0%
No other programmes or course	76	79%	83%	72%	89%	78%	50%	100%	100%

Question 4.3: Are there any particular subject areas that make *more extensive* use of technology enhanced learning tools than your institutional norm?

Table A4.3: Subjects that make more extensive use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes	48	50%	58%	41%	44%	51%	33%	46%	100%
No	48	50%	42%	59%	56%	49%	67%	54%	0%

Questions 4.4 and 4.5: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of TEL tools and why you think this is so.

Table A4.4: Subject areas that make *more extensive* use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with subjects that make more extensive use of TEL tools)		*(48)*	*(28)*	*(16)*	*(4)*	*(40)*	*(2)*	*(5)*	*(1)*
Medical sciences (Medicine, Nursing, Health)	27	56%	57%	63%	25%	53%	50%	80%	100%
Business and management	15	31%	29%	38%	25%	35%	0%	0%	100%
Other subject 1	13	27%	18%	31%	75%	33%	0%	0%	0%
Education, teacher training	12	25%	21%	31%	25%	18%	100%	60%	0%
Natural sciences	10	21%	32%	6%	0%	18%	100%	20%	0%
Computing	6	13%	7%	19%	25%	15%	0%	0%	0%
Law	6	13%	7%	25%	0%	8%	0%	40%	100%
Languages	5	10%	7%	19%	0%	13%	0%	0%	0%
Engineering, technology	4	8%	4%	13%	25%	10%	0%	0%	0%
Social sciences	3	6%	4%	13%	0%	5%	0%	20%	0%
Other subject 2	2	4%	4%	0%	25%	5%	0%	0%	0%
Architecture	1	2%	4%	0%	0%	3%	0%	0%	0%
Humanities (Geography, History)	1	2%	4%	0%	0%	3%	0%	0%	0%
Mathematics	1	2%	4%	0%	0%	0%	0%	20%	0%

Question 4.6: Are there any particular subject areas that make *less extensive* use of technology enhanced learning tools than your institutional norm?

Table 4.6: Subjects that make less extensive use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(96)*	*(48)*	*(39)*	*(9)*	*(78)*	*(6)*	*(11)*	*(1)*
Yes	34	35%	27%	49%	22%	40%	17%	18%	0%
No	62	65%	73%	51%	78%	60%	83%	82%	100%

Questions 4.7 and 4.8: Please select *up to three* subject areas and in the following question you will be asked in what way they make *less use* of technology enhanced learning tools and why you think that this is so.

Table A4.7: Subject areas that make *less extensive* use of technology enhanced learning tools than the institutional norm

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with subjects that make less extensive use of TEL tools)		*(34)*	*(13)*	*(19)*	*(2)*	*(31)*	*(1)*	*(2)*	*(0)*
Art and design	11	32%	8%	53%	0%	36%	0%	0%	0%
Other subject 1	8	24%	31%	16%	50%	26%	0%	0%	0%
Mathematics	7	21%	39%	5%	50%	23%	0%	0%	0%
Humanities (Geography, History)	6	18%	8%	26%	0%	19%	0%	0%	0%
Engineering, technology	4	12%	0%	21%	0%	10%	0%	50%	0%
Social sciences	4	12%	31%	0%	0%	10%	100%	0%	0%
Computing	3	9%	15%	5%	0%	10%	0%	0%	0%
Education, teacher training	3	9%	8%	11%	0%	7%	0%	50%	0%
Law	3	9%	8%	11%	0%	7%	100%	0%	0%
Other subject 2	3	9%	15%	0%	50%	10%	0%	0%	0%
Business and management	2	6%	0%	11%	0%	7%	0%	0%	0%
Natural sciences	2	6%	8%	5%	0%	3%	0%	50%	0%
Architecture	1	3%	0%	5%	0%	3%	0%	0%	0%
Languages	1	3%	8%	0%	0%	0%	100%	0%	0%
Medical sciences (Medicine, Nursing, Health)	1	3%	0%	5%	0%	3%	0%	0%	0%

Question 4.9: Approximately, what proportion of courses within your institution use each of the following TEL tools?

Table A4.9: Percentage of courses using TEL tools

TEL tool	Proportion of courses using TEL tool							
(Base: all respondents, 94)	100%	75%–99%	50%–74%	25%– 49%	5%–24%	1%–4%	0%	Don't Know
Asynchronous communication tools (e.g. discussion forums)	2	5	16	26	34	3	0	14
Blog	0	1	5	15	37	18	1	22
Content management systems	6	13	4	10	9	12	12	35
Digital/learning repository	6	14	3	9	9	15	14	31
Document sharing tool (e.g. Google Docs, Office 365)	2	9	14	11	16	20	0	29
Electronic essay exams	1	3	4	10	9	23	31	19
e-portfolio	1	3	4	7	43	22	9	11

TEL tool	Proportion of courses using TEL tool							
	100%	75%–99%	50%–74%	25%– 49%	5%–24%	1%–4%	0%	Don't Know
Electronic management of assignments (EMA)*	18	44	7	9	4	1	5	12
Formative e-assessment tool (e.g.quizzes	1	7	16	28	28	5	0	15
Summative e-assessment tools (eg quizzes)	0	4	10	19	29	17	4	17
Learning analytics tools	4	4	4	9	7	19	28	25
Lecture capture tools	5	18	11	17	23	10	9	7
Media streaming system	1	4	5	20	33	14	5	17
Mobile apps	6	5	10	6	20	20	6	26
Personal response systems (including handsets or web-based apps)	0	3	1	25	31	20	4	16
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	13	52	17	6	2	2	1	6
Podcasting	0	1	5	6	15	35	5	32
Reading list management software	16	28	13	12	5	1	13	13
Screen casting	1	0	4	12	25	30	2	27
Social bookmarking/content curation tools	0	0	2	11	14	26	6	42
Social networking	1	0	3	17	26	20	1	32
Synchronous collaborative tools (e.g. virtual classroom)	1	0	1	11	26	34	5	22
Virtual Learning Environment (VLE)	42	50	2	1	1	1	0	3
Webinar	1	0	3	7	26	34	4	26
Wiki	1	0	1	4	23	45	3	22

Table A4.9a: Asynchronous communication tools (e.g. discussion forums)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	2	2%	2%	0%	11%	3%	0%	0%	0%
75% – 99%	5	5%	2%	11%	0%	4%	20%	10%	0%
50% – 74%	15	16%	19%	16%	0%	17%	0%	20%	0%
25% – 49%	24	26%	26%	26%	22%	27%	20%	20%	0%
5% – 24%	32	34%	26%	42%	44%	33%	40%	30%	100%
1% – 4%	3	3%	4%	0%	11%	4%	0%	0%	0%
0%	0	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	13	14%	21%	5%	11%	13%	20%	20%	0%

Table A4.9b: Blog

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	0%	0%	0%	0%	0%	0%	0%	0%
75% – 99%	1	1%	0%	3%	0%	0%	0%	10%	0%
50% – 74%	5	5%	0%	11%	11%	6%	0%	0%	0%
25% – 49%	14	15%	13%	16%	22%	17%	0%	0%	0%
5% – 24%	35	37%	38%	40%	22%	37%	60%	20%	100%
1% – 4%	17	18%	26%	11%	11%	18%	20%	20%	0%
0%	1	1%	2%	0%	0%	1%	0%	0%	0%
Don't know	21	22%	21%	21%	33%	21%	20%	40%	0%

Table A4.9c: Content management systems

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	6	6%	6%	3%	22%	8%	0%	0%	0%
75% – 99%	12	13%	6%	18%	22%	13%	0%	10%	100%
50% – 74%	4	4%	0%	11%	0%	4%	0%	10%	0%
25% – 49%	9	10%	13%	8%	0%	10%	0%	10%	0%
5% – 24%	8	9%	11%	5%	11%	9%	0%	10%	0%
1% – 4%	11	12%	13%	13%	0%	9%	40%	20%	0%
0%	11	12%	13%	11%	11%	12%	20%	10%	0%
Don't know	33	35%	38%	32%	33%	36%	40%	30%	0%

Table A4.9d: Digital/learning repository

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	6	6%	4%	5%	22%	8%	0%	0%	0%
75% – 99%	13	14%	11%	16%	22%	13%	20%	20%	0%
50% – 74%	3	3%	6%	0%	0%	4%	0%	0%	0%
25% – 49%	8	9%	11%	8%	0%	10%	0%	0%	0%
5% – 24%	8	9%	4%	13%	11%	10%	0%	0%	0%
1% – 4%	14	15%	19%	13%	0%	10%	40%	40%	0%
0%	13	14%	13%	13%	22%	13%	20%	10%	100%
Don't know	29	31%	32%	32%	22%	32%	20%	30%	0%

Table A4.9e: Document sharing tool (e.g. Google Docs, Office 365)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	2	2%	2%	0%	11%	2%	0%	0%	0%
75% – 99%	8	9%	2%	13%	22%	9%	0%	10%	0%
50% – 74%	13	14%	9%	21%	11%	14%	0%	20%	0%
25% – 49%	10	11%	15%	5%	11%	12%	20%	0%	0%
5% – 24%	15	16%	17%	18%	0%	15%	20%	10%	100%
1% – 4%	19	20%	23%	16%	22%	22%	20%	10%	0%
0%	0	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	27	29%	32%	26%	22%	26%	40%	50%	0%

Table A4.9f: Electronic essay exams

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	0%	3%	0%	1%	0%	0%	0%
75% – 99%	3	3%	2%	3%	11%	4%	0%	0%	0%
50% – 74%	4	4%	6%	3%	0%	5%	0%	0%	0%
25% – 49%	9	10%	9%	11%	11%	9%	0%	10%	100%
5% – 24%	8	9%	11%	8%	0%	8%	0%	20%	0%
1% – 4%	22	23%	30%	21%	0%	22%	60%	20%	0%
0%	29	31%	19%	40%	56%	35%	0%	20%	0%
Don't know	18	19%	23%	13%	22%	17%	40%	30%	0%

Table A4.9g: e-portfolio

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	0%	0%	11%	1%	0%	0%	0%
75% – 99%	3	3%	0%	3%	22%	3%	0%	10%	0%
50% – 74%	4	4%	0%	8%	11%	5%	0%	0%	0%
25% – 49%	7	7%	9%	8%	0%	8%	0%	10%	0%
5% – 24%	40	43%	30%	61%	33%	45%	20%	30%	100%
1% – 4%	21	22%	34%	11%	11%	22%	40%	20%	0%
0%	8	9%	15%	3%	0%	8%	20%	10%	0%
Don't know	10	11%	13%	8%	11%	9%	20%	20%	0%

Table A4.9h: Electronic Management of Assignments (EMA)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	17	18%	9%	26%	33%	18%	0%	20%	0%
75% – 99%	41	44%	45%	45%	33%	48%	60%	10%	0%
50% – 74%	7	7%	9%	8%	0%	6%	20%	10%	0%
25% – 49%	8	9%	15%	0%	11%	9%	0%	10%	0%
5% – 24%	4	4%	2%	8%	0%	4%	0%	10%	0%
1% – 4%	1	1%	2%	0%	0%	1%	0%	0%	0%
0%	5	5%	4%	8%	0%	4%	0%	20%	0%
Don't know	11	12%	15%	5%	22%	10%	20%	20%	0%

Table A4.9i: Formative e-assessment tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	2%	0%	0%	1%	0%	0%	0%
75% – 99%	7	7%	6%	11%	0%	8%	0%	10%	0%
50% – 74%	15	16%	17%	11%	33%	17%	20%	10%	0%
25% – 49%	26	28%	26%	32%	22%	27%	40%	20%	100%
5% – 24%	26	28%	28%	32%	11%	30%	20%	20%	0%
1% – 4%	5	5%	2%	5%	22%	6%	0%	0%	0%
0%	0	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	14	15%	19%	11%	11%	12%	20%	40%	0%

Table A4.9j: Summative e-assessment tool

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	0%	0%	0%	0%	0%	0%	0%	0%
75% – 99%	4	4%	2%	8%	0%	5%	0%	0%	0%
50% – 74%	9	10%	9%	5%	33%	10%	20%	0%	0%
25% – 49%	18	19%	19%	18%	22%	19%	0%	20%	100%
5% – 24%	27	29%	36%	26%	0%	26%	60%	40%	0%
1% – 4%	16	17%	9%	26%	22%	21%	0%	0%	0%
0%	4	4%	4%	3%	11%	4%	0%	10%	0%
Don't know	16	17%	21%	13%	11%	15%	20%	30%	0%

Table A4.9k: Learning analytics tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	4	4%	2%	8%	0%	3%	0%	10%	100%
75% – 99%	4	4%	4%	5%	0%	4%	20%	0%	0%
50% – 74%	4	4%	0%	8%	11%	5%	0%	0%	0%
25% – 49%	8	9%	9%	8%	11%	9%	20%	0%	0%
5% – 24%	7	7%	6%	11%	0%	8%	0%	10%	0%
1% – 4%	18	19%	23%	16%	11%	21%	20%	10%	0%
0%	26	28%	26%	24%	56%	27%	20%	40%	0%
Don't know	23	25%	30%	21%	11%	24%	20%	30%	0%

Table A4.9l: Lecture capture tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	5	5%	9%	0%	11%	6%	0%	0%	0%
75% – 99%	17	18%	32%	5%	0%	19%	40%	0%	0%
50% – 74%	10	11%	13%	11%	0%	10%	0%	20%	0%
25% – 49%	16	17%	15%	24%	0%	17%	20%	10%	100%
5% – 24%	22	23%	19%	32%	11%	21%	40%	40%	0%
1% – 4%	9	10%	2%	21%	0%	10%	0%	10%	0%
0%	8	9%	2%	3%	67%	9%	0%	10%	0%
Don't know	7	7%	9%	5%	11%	8%	0%	10%	0%

Table A4.9m: Media streaming system

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	0%	0%	11%	1%	0%	0%	0%
75% – 99%	4	4%	6%	0%	11%	4%	20%	0%	0%
50% – 74%	5	5%	6%	5%	0%	6%	0%	0%	0%
25% – 49%	19	20%	15%	21%	44%	22%	0%	10%	100%
5% – 24%	31	33%	30%	42%	11%	28%	80%	50%	0%
1% – 4%	13	14%	13%	16%	11%	17%	0%	0%	0%
0%	5	5%	6%	5%	0%	5%	0%	10%	0%
Don't know	16	17%	23%	11%	11%	17%	0%	10%	0%

Table A4.9n: Mobile apps

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	6	6%	6%	5%	11%	5%	0%	10%	100%
75% – 99%	5	5%	6%	5%	0%	6%	0%	0%	0%
50% – 74%	9	10%	4%	16%	11%	9%	0%	20%	0%
25% – 49%	6	6%	4%	5%	22%	8%	0%	0%	0%
5% – 24%	19	20%	19%	26%	0%	22%	20%	10%	0%
1% – 4%	19	20%	28%	11%	22%	22%	20%	10%	0%
0%	6	6%	6%	5%	11%	5%	0%	20%	0%
Don't know	24	25%	26%	26%	22%	23%	60%	30%	0%

Table A4.9o: Personal response systems (including handsets or web-based apps)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	0%	0%	0%	0%	0%	0%	0%	0%
75% – 99%	3	3%	4%	3%	0%	3%	0%	10%	0%
50% – 74%	1	1%	0%	0%	11%	1%	0%	0%	0%
25% – 49%	23	25%	30%	18%	22%	27%	40%	0%	0%
5% – 24%	29	31%	26%	42%	11%	30%	20%	40%	100%
1% – 4%	19	20%	19%	24%	11%	19%	20%	30%	0%
0%	4	4%	4%	0%	22%	5%	0%	0%	0%
Don't know	15	16%	17%	13%	22%	15%	20%	20%	0%

Table A4.9p: Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	12	13%	13%	11%	22%	12%	0%	30%	0%
75% – 99%	49	52%	51%	61%	22%	53%	100%	20%	100%
50% – 74%	16	17%	21%	13%	11%	18%	0%	20%	0%
25% – 49%	6	6%	2%	8%	22%	5%	0%	20%	0%
5% – 24%	2	2%	0%	5%	0%	3%	0%	0%	0%
1% – 4%	2	2%	2%	3%	0%	3%	0%	0%	0%
0%	1	1%	0%	0%	11%	1%	0%	0%	0%
Don't know	6	6%	11%	0%	11%	6%	0%	10%	0%

Table A4.9q: Podcasting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	0%	0%	0%	0%	0%	0%	0%	0%
75% – 99%	1	1%	2%	0%	0%	0%	20%	0%	0%
50% – 74%	5	5%	4%	8%	0%	5%	0%	10%	0%
25% – 49%	6	6%	6%	3%	22%	8%	0%	0%	0%
5% – 24%	14	15%	11%	18%	22%	15%	20%	10%	0%
1% – 4%	33	35%	40%	34%	11%	36%	40%	20%	100%
0%	5	5%	2%	5%	22%	5%	0%	10%	0%
Don't know	30	32%	34%	32%	22%	31%	20%	50%	0%

Table A4.9r: Reading list management software

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	15	16%	15%	16%	22%	14%	20%	20%	100%
75% – 99%	26	28%	26%	37%	0%	30%	40%	10%	0%
50% – 74%	12	11%	15%	13%	0%	14%	0%	10%	0%
25% – 49%	11	12%	15%	8%	11%	10%	20%	20%	0%
5% – 24%	5	5%	6%	5%	0%	4%	0%	20%	0%
1% – 4%	1	1%	0%	0%	11%	1%	0%	0%	0%
0%	12	13%	9%	11%	44%	14%	0%	10%	0%
Don't know	12	13%	15%	11%	11%	13%	20%	10%	0%

Table A4.9s Screen casting

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	1%	0%	0%	11%	1%	0%	0%	0%
75% – 99%	1	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	4	4%	6%	3%	0%	3%	20%	10%	0%
25% – 49%	11	12%	11%	11%	22%	13%	20%	0%	0%
5% – 24%	23	25%	17%	37%	11%	24%	20%	20%	100%
1% – 4%	26	30%	34%	24%	33%	32%	20%	20%	0%
0%	2	2%	0%	3%	11%	1%	0%	10%	0%
Don't know	25	27%	32%	24%	11%	26%	20%	40%	0%

Table A4.9t Social bookmarking/content curation tools

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	0	0%	0%	0%	0%	0%	0%	0%	0%
75% – 99%	0	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	2	2%	2%	0%	11%	3%	0%	0%	0%
25% – 49%	10	11%	11%	11%	11%	12%	20%	0%	0%
5% – 24%	13	14%	11%	18%	11%	15%	0%	10%	0%
1% – 4%	24	26%	32%	21%	11%	26%	20%	20%	100%
0%	6	6%	2%	3%	44%	6%	0%	10%	0%
Don't know	39	42%	43%	47%	11%	29%	60%	60%	0%

Table A4.9u Social networking

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	0%	0%	11%	1%	0%	0%	0%
75% – 99%	0	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	3	3%	0%	5%	11%	3%	0%	0%	100%
25% – 49%	16	17%	19%	18%	0%	18%	20%	10%	0%
5% – 24%	24	26%	19%	26%	56%	28%	0%	20%	0%
1% – 4%	19	20%	32%	11%	0%	21%	20%	20%	0%
0%	1	1%	0%	3%	0%	0%	0%	10%	0%
Don't know	30	32%	30%	37%	22%	30%	60%	40%	0%

Table A4.9v Synchronous collaborative tools (e.g. virtual classroom)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	2%	0%	0%	1%	0%	0%	0%
75% – 99%	0	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	1	1%	2%	0%	0%	1%	0%	0%	0%
25% – 49%	10	11%	4%	18%	11%	9%	0%	20%	100%
5% – 24%	24	26%	28%	23%	22%	26%	20%	30%	0%
1% – 4%	32	34%	38%	34%	11%	39%	0%	20%	0%
0%	5	5%	2%	5%	22%	5%	0%	10%	0%
Don't know	21	22%	23%	18%	33%	19%	80%	20%	0%

Table A4.9w Virtual Learning Environment (VLE)

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	39	42%	34%	47%	56%	45%	20%	30%	0%
75% – 99%	47	50%	53%	50%	33%	45%	80%	70%	100%
50% – 74%	2	2%	2%	3%	0%	3%	0%	0%	0%
25% – 49%	1	1%	2%	0%	0%	1%	0%	0%	0%
5% – 24%	1	1%	2%	0%	0%	1%	0%	0%	0%
1% – 4%	1	1%	2%	0%	0%	1%	0%	0%	0%
0%	0	0%	0%	0%	0%	0%	0%	0%	0%
Don't know	3	3%	6%	0%	0%	4%	0%	0%	0%

Table A4.9x Webinar

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	2%	0%	0%	1%	0%	0%	0%
75% – 99%	0	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	3	3%	2%	3%	11%	4%	0%	0%	0%
25% – 49%	7	7%	4%	11%	11%	6%	0%	10%	100%
5% – 24%	24	26%	28%	24%	22%	27%	20%	20%	0%
1% – 4%	32	34%	40%	32%	11%	25%	60%	20%	0%
0%	4	4%	0%	5%	22%	4%	0%	10%	0%
Don't know	23	25%	23%	26%	22%	23%	20%	40%	0%

Table A4.9y Wiki

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(94)*	*(47)*	*(38)*	*(9)*	*(78)*	*(5)*	*(10)*	*(1)*
100%	1	1%	2%	0%	0%	1%	0%	0%	0%
75% – 99%	0	0%	0%	0%	0%	0%	0%	0%	0%
50% – 74%	1	1%	0%	0%	11%	1%	0%	0%	0%
25% – 49%	4	4%	2%	5%	11%	5%	0%	0%	0%
5% – 24%	22	23%	21%	29%	11%	23%	40%	20%	0%
1% – 4%	42	45%	49%	42%	33%	44%	40%	50%	100%
0%	3	3%	2%	5%	0%	4%	0%	0%	0%
Don't know	21	22%	23%	18%	33%	22%	20%	30%	0%

Question 4.10: Has the institution evaluated the impact of TEL on the *student learning experience* across the institution as a whole over the *past two years*? This can include particular aspects of TEL across the institution.

Table A4.10: Evaluation of the impact of TEL on the student learning experience across the institution as a whole over the past two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(93)*	*(47)*	*(37)*	*(9)*	*(77)*	*(5)*	*(10)*	*(10)*
Yes	40	43%	43%	43%	44%	43%	60%	40%	0%
No institutional evaluation, but individual departments/schools have evaluated*	11	12%	15%	8%	11%	10%	20%	20%	0%
No evaluation*	42	45%	43%	49%	44%	47%	20%	40%	100%

Question 4.12: What aspects of the impact of technology enhanced learning on the *student learning experience* have you evaluated over the past two years?

Table A4.12: What aspects of the impact of technology enhanced learning on the student learning experience have you evaluated over the past two years?

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(40)*	*(20)*	*(16)*	*(4)*	*(33)*	*(3)*	*(4)*	*(0)*
General review of TEL services*	28	70%	80%	69%	25%	67%	100%	75%	-
Take-up/usage/adoption by students of lecture capture	24	60%	75%	50%	25%	61%	67%	50%	-
Student digital fluency/capability*	21	53%	45%	75%	0%	55%	33%	50%	-
Electronic Management of Assignments (EMA)*	14	35%	40%	25%	50%	33%	33%	50%	-
e-assessment*	11	28%	35%	19%	25%	27%	0%	50%	-
Other aspect evaluated*	8	20%	15%	13%	75%	24%	0%	0%	-
Mobile learning	6	15%	10%	19%	25%	18%	0%	0%	-
Use of learning analytics in supporting students	6	15%	25%	6%	0%	18%	0%	0%	-
Effectiveness of flipped learning	2	5%	5%	6%	0%	6%	0%	0%	-

Question 4.13: *How* has the impact has been measured, *when*, and for *what purpose*?

Table A4.13: Details of *how* the impact of TEL tools and systems on the student learning experience has been measured, *when* and for *what purpose*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(40)*	*(20)*	*(16)*	*(4)*	*(33)*	*(3)*	*(4)*	*(0)*
***How* impact was measured:**									
Survey	32	80%	80%	81%	75%	88%	67%	25%	-
Interview/focus group	24	60%	70%	56%	25%	64%	33%	50%	-
Usage figures, e.g. system logs/reports*	22	55%	60%	44%	75%	57%	67%	25%	-
Benchmarking, e.g. Jisc Digital Experience Tracker*	19	48%	45%	63%	0%	42%	67%	75%	-
As part of a module or course evaluation*	17	43%	45%	38%	50%	33%	67%	100%	-
Learning analytics*	7	18%	15%	25%	0%	18%	0%	25%	-
Other method	4	10%	10%	6%	25%	12%	0%	0%	-
Crowd-sourcing feedback from users via social media	1	3%	5%	0%	0%	3%	0%	0%	-

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
		(40)	*(20)*	*(16)*	*(4)*	*(33)*	*(3)*	*(4)*	*(0)*
***When* impact was measured:**									
Annually	24	60%	45%	81%	50%	61%	33%	75%	-
Continuously measuring*	13	33%	25%	38%	50%	30%	33%	50%	-
Each term/semester	9	23%	25%	19%	25%	15%	33%	75%	-
Other timing	8	20%	35%	6%	0%	24%	0%	0%	-
Summer	0	0%	0%	0%	0%	0%	0%	0%	-
***Purpose* for which impact was measured:**									
Assess student satisfaction with TEL approach	30	75%	80%	75%	50%	76%	67%	75%	-
Determine take-up and usage of TEL tool(s) across institution (adoption)	29	73%	60%	81%	100%	73%	67%	75%	-
Assess value of TEL in relation to student performance (learning analytics)	10	25%	20%	25%	50%	21%	67%	25%	-
Assess value for money of TEL tool(s) (e.g. review of licencing costs)	10	25%	15%	38%	25%	24%	0%	50%	-
Other purpose	7	18%	25%	6%	25%	18%	0%	25%	-

Question 4.14: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

Table A4.14: Broad conclusions from the evaluations undertaken into the impact of TEL on the student learning experience

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact and provided details of outcome)		*(35)*	*(18)*	*(14)*	*(3)*	*(28)*	*(3)*	*(4)*	*(0)*
Organisation of services and tools	11	31%	28%	36%	0%	25%	67%	25%	0%
Student usage	10	29%	22%	36%	67%	36%	33%	25%	0%
Lecture capture	10	29%	44%	14%	0%	21%	67%	50%	0%
Consistency	7	20%	22%	14%	0%	14%	0%	50%	0%
Staff digital capabilities	6	17%	6%	29%	33%	11%	33%	50%	0%
Student satisfaction	6	17%	11%	29%	0%	18%	33%	0%	0%

Question 4.15: Has the institution evaluated the impact of TEL on *staff pedagogic practices* across the institution as a whole over the *past two years*? This can include particular aspects of TEL across the institution.

Table A4.15: Evaluation of the impact of TEL on staff pedagogic practices across the institution as a whole over the past two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(92)*	*(47)*	*(37)*	*(9)*	*(76)*	*(5)*	*(10)*	*(1)*
Yes	21	23%	24%	24%	11%	22%	20%	30%	0%
No institutional evaluation, but individual departments/schools have evaluated*	12	13%	17%	8%	11%	12%	20%	20%	0%
No evaluation*	59	64%	59%	68%	78%	66%	60%	50%	100%

Question 4.17: What aspects of staff pedagogic practices have you evaluated over the *past two years*?

Table A4.17: Aspects of staff pedagogic practices that have been evaluated in the last two years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(21)*	*(11)*	*(9)*	*(1)*	*(17)*	*(1)*	*(3)*	*(0)*
General review of TEL services*	13	62%	73%	44%	100%	65%	100%	33%	-
Staff digital fluency/capability	10	48%	46%	56%	0%	47%	100%	33%	-
Take-up/usage/adoption by students of lecture capture	7	33%	27%	44%	0%	41%	0%	0%	-
e-assessment	7	33%	36%	22%	100%	29%	0%	67%	-
Electronic Management of Assignments (EMA) including e-marking and e-feedback*	5	24%	36%	11%	0%	18%	100%	33%	-
Other aspect evaluated	4	19%	18%	11%	100%	24%	0%	0%	-
Effectiveness of flipped learning	3	14%	9%	22%	0%	18%	0%	0%	-
Mobile learning	2	10%	9%	0%	100%	12%	0%	0%	-
Use of learning analytics in supporting students	2	10%	18%	0%	0%	6%	0%	33%	-

Question 4.18: *How* has the impact on *pedagogic practices* been measured, *when* and for *what purpose*?

Table A4.18: Details of *how* the impact of TEL tools and systems on the pedagogic practices has been measured, *when* and for *what purpose*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that have evaluated impact)		*(21)*	*(11)*	*(9)*	*(1)*	*(17)*	*(1)*	*(3)*	*(0)*
***How* impact was measured:**									
Survey	16	76%	82%	67%	100%	71%	100%	100%	-
Interview/focus group	15	71%	91%	44%	100%	76%	100%	33%	-
Usage figures, e.g. system logs/reports*	10	48%	36%	56%	100%	41%	100%	33%	-
As part of a module or course evaluation*	7	33%	36%	22%	100%	35%	100%	0%	-
Benchmarking, e.g. Jisc Digital Experience Tracker*	6	29%	27%	33%	0%	24%	100%	33%	-
Learning analytics*	6	29%	27%	22%	100%	24%	100%	33%	-
Other method	3	14%	18%	11%	0%	18%	0%	0%	-
Crowd-sourcing feedback from users via social media	0	0%	0%	0%	0%	0%	0%	0%	-
***When* impact was measured:**									
Other timing	9	43%	55%	33%	0%	47%	0%	33%	-
Annually	8	38%	27%	56%	0%	35%	0%	67%	-
Continuously measuring*	7	33%	36%	22%	100%	29%	100%	33%	-
Each term/semester	3	14%	9%	22%	0%	12%	0%	33%	-
Summer	0	0%	0%	0%	0%	0%	0%	0%	-
***Purpose* for which impact was measured:**									
Determine take-up and usage of TEL tool(s) across institution (adoption)	18	86%	73%	100%	100%	82%	100%	100%	-
Assess student satisfaction with TEL approach	15	71%	82%	56%	100%	71%	100%	67%	-
Assess value of TEL in relation to student performance (learning analytics)	6	29%	27%	22%	100%	24%	100%	33%	-
Other purpose	6	29%	27%	33%	0%	29%	100%	0%	-
Assess value for money of TEL tool(s) (e.g. review of licencing costs)	2	10%	9%	11%	0%	12%	0%	0%	-

Section 5: Support for technology enhanced learning tools

Question 5.1: First of all, which, if any, support units are there in your institution that provide *support for TEL*? Please include both centrally provided and local units.

Table A5.1: Support units that provide support for technology enhanced learning

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Information technology support	73	74%	79%	67%	78%	70%	83%	92%	100%
TEL unit or equivalent*	66	67%	67%	67%	67%	70%	50%	50%	100%
Educational Development Unit (EDU)	53	54%	56%	60%	11%	51%	67%	58%	100%
Local support	51	52%	56%	50%	33%	53%	67%	42%	0%
Library	45	45%	44%	52%	22%	44%	67%	50%	0%
Distance/online learning unit*	23	23%	33%	14%	11%	25%	17%	17%	0%
Other support unit	8	8%	10%	7%	0%	8%	17%	8%	0%
Outsourced supplier or specialist	4	4%	6%	2%	0%	5%	0%	0%	0%

Table A5.1b: Mean number of units providing support for TEL per institution

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)	*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Mean number of support units	3.26	3.52	3.19	2.22	3.25	3.67	3.17	3.00

Question 5.2: How many staff supporting TEL are in the unit?

Table A5.2aa: Mean number of staff working in Information Technology support unit

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with IT support unit)	*(73)*	*(38)*	*(28)*	*(7)*	*(56)*	*(5)*	*(11)*	*(1)*
Mean number of learning technologists	0.86	1.26	0.39	0.57	0.84	1.20	0.82	1.00
Mean number of IT support staff	5.54	4.03	7.40	6.29	4.66	6.20	10.20	0.00
Mean number of administrative staff	0.23	0.39	0.07	0.00	0.18	0.20	0.55	0.00
Mean number of academic staff	0.23	0.05	0.00	0.00	0.00	0.00	0.18	0.00
Mean number of other staff	0.35	0.34	0.44	0.00	0.23	0.40	0.93	0.00

Table A5.2ab: Mean number of staff working in TEL unit or equivalent

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with TEL unit)	*(66)*	*(32)*	*(28)*	*(6)*	*(56)*	*(3)*	*(6)*	*(1)*
Mean number of learning technologists	5.77	6.91	5.22	2.30	6.15	3.00	3.42	7.00
Mean number of IT support staff	0.53	0.22	0.00	0.33	0.61	0.00	0.17	0.00
Mean number of administrative staff	0.56	0.59	0.00	0.17	0.58	0.33	0.58	0.00
Mean number of academic staff	0.15	0.28	0.04	0.00	0.16	0.50	0.00	0.00
Mean number of other staff	0.48	0.81	0.21	0.00	0.52	0.00	0.50	0.00

Table A5.2ac: Mean number of staff working in educational development unit

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with EDU)	*(53)*	*(27)*	*(25)*	*(1)*	*(41)*	*(4)*	*(7)*	*(1)*
Mean number of learning technologists	2.08	2.28	1.92	1.00	1.65	5.50	2.71	2.00
Mean number of IT support staff	0.15	0.15	0.00	0.00	0.15	0.00	0.29	0.00
Mean number of administrative staff	0.49	0.56	0.00	0.00	0.46	0.25	0.86	0.00
Mean number of academic staff	1.38	0.89	1.92	1.00	1.37	0.89	1.57	0.00
Mean number of other staff	0.62	0.41	0.88	0.00	0.56	0.25	1.29	0.00

Table A5.2ad: Mean number of staff working in library

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with library)	*(45)*	*(21)*	*(22)*	*(2)*	*(35)*	*(4)*	*(6)*	*(0)*
Mean number of learning technologists	0.73	1.33	0.23	0.00	0.60	3.00	0.00	0.00
Mean number of IT support staff	0.94	0.50	0.00	5.00	1.07	1.25	0.00	0.00
Mean number of administrative staff	0.33	0.19	0.00	2.50	0.26	0.75	0.50	0.00
Mean number of academic staff	0.09	0.05	0.14	0.00	0.09	0.36	0.00	0.00
Mean number of other staff	3.41	4.24	2.94	0.00	3.03	2.50	6.28	0.00

Table A5.2ae: Mean number of staff working in local (devolved) support units

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with local support units)	*(51)*	*(27)*	*(21)*	*(3)*	*(42)*	*(4)*	*(5)*	*(0)*
Mean number of learning technologists	6.58	8.54	4.76	1.67	6.51	7.50	6.40	0.00
Mean number of IT support staff	1.78	0.93	0.00	0.00	0.69	0.25	12.20	0.00
Mean number of administrative staff	0.88	1.67	0.00	0.00	1.07	0.00	0.00	0.00
Mean number of academic staff	0.71	1.00	0.38	0.33	0.83	0.00	0.20	0.00
Mean number of other staff	0.37	0.04	0.86	0.00	0.40	0.00	0.40	0.00

Table A5.2af: Mean number of staff working in distance/online learning unit

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with distance/online learning unit)	*(23)*	*(16)*	*(6)*	*(1)*	*(20)*	*(1)*	*(2)*	*(0)*
Mean number of learning technologists	2.57	3.44	0.67	0.00	2.80	0.00	1.50	0.00
Mean number of IT support staff	0.04	0.00	0.00	0.00	0.05	0.00	0.00	0.00
Mean number of administrative staff	1.17	1.56	0.00	0.00	1.15	0.00	2.00	0.00
Mean number of academic staff	0.04	0.06	0.00	0.00	0.05	0.00	0.00	0.00
Mean number of other staff	3.17	2.00	6.83	0.00	3.50	3.00	0.00	0.00

Table A5.2ag: Mean number of staff working in other support units

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with other support units)	*(8)*	*(5)*	*(3)*	*(0)*	*(6)*	*(1)*	*(1)*	*(0)*
Mean number of learning technologists	0.95	1.52	0.00	0.00	0.50	4.60	0.00	0.00
Mean number of IT support staff	0.88	1.40	0.00	0.00	1.17	0.00	0.00	0.00
Mean number of administrative staff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mean number of academic staff	0.25	0.20	0.33	0.00	0.00	0.00	1.00	0.00
Mean number of other staff	0.50	0.20	1.00	0.00	0.17	1.00	2.00	0.00

Table A5.2ah: Mean number of staff working for outsourced supplier or specialist

Response	Mean	Type			Country			
		Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents with outsourced supplier or specialist)	*(4)*	*(3)*	*(1)*	*(0)*	*(4)*	*(0)*	*(0)*	*(0)*
Mean number of learning technologists	0.50	0.67	0.00	0.00	0.50	0.00	0.00	0.00
Mean number of IT support staff	0.50	0.67	0.00	0.00	0.50	0.00	0.00	0.00
Mean number of administrative staff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mean number of academic staff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mean number of other staff	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table A5.2b: Mean FTE of staff working in each unit

Response	Mean		Type			Country			
	No	Mean	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Information technology support	73	2.74	3.50	2.26	0.57	2.71	5.02	2.15	0.00
TEL unit or equivalent*	66	4.60	6.22	3.66	0.33	4.83	2.27	4.40	0.00
Educational Development Unit (EDU)	53	2.93	2.64	3.12	6.00	3.17	1.50	2.76	0.00
Library	45	2.63	2.29	3.19	0.00	1.96	4.13	5.53	0.00
Local support	51	6.33	6.44	7.05	0.33	6.10	0.50	13.00	0.00
Distance/online learning unit*	23	3.27	3.26	3.83	0.00	3.51	2.00	1.50	0.00
Other support unit	8	2.20	2.92	1.00	0.00	1.33	6.60	3.00	0.00
Outsourced supplier or specialist	4	1.25	0.67	3.00	0.00	1.25	0.00	0.00	0.00

Table A5.2b: Mean FTE of staff working in each unit

Response	Total		Type			Country			
	No	Mean	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Local support	51	6.33	6.44	7.05	0.33	6.10	0.50	13.00	0.00
TEL unit or equivalent*	66	4.60	6.22	3.66	0.33	4.83	2.27	4.40	0.00
Distance/online learning unit*	23	3.27	3.26	3.83	0.00	3.51	2.00	1.50	0.00
Educational Development Unit (EDU)	53	2.93	2.64	3.12	6.00	3.17	1.50	2.76	0.00
Information technology support	73	2.74	3.50	2.26	0.57	2.71	5.02	2.15	0.00
Library	45	2.63	2.29	3.19	0.00	1.96	4.13	5.53	0.00
Other support unit	8	2.20	2.92	1.00	0.00	1.33	6.60	3.00	0.00
Outsourced supplier or specialist	4	1.25	0.67	3.00	0.00	1.25	0.00	0.00	0.00

Question 5.3: Which is the *main* unit in the institution that provides support for TEL?

Table A5.3: Main unit that provides support for TEL

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
TEL unit or equivalent*	59	60%	58%	64%	44%	64%	33%	42%	100%
Educational Development Unit (EDU)	13	13%	13%	17%	0%	11%	33%	17%	0%
No main unit	11	11%	8%	12%	22%	11%	17%	8%	0%
Information technology support	10	10%	13%	2%	33%	8%	0%	33%	0%
Local support	3	3%	4%	2%	0%	4%	0%	0%	0%
Other support unit	2	2%	4%	0%	0%	1%	17%	0%	0%
Library	1	1%	0%	2%	0%	1%	0%	0%	0%
Distance/online learning unit*	0	0%	0%	0%	0%	0%	0%	0%	0%
Outsourced supplier or specialist	0	0%	0%	0%	0%	0%	0%	0%	0%

Question 5.4: What changes in staffing provision for supporting TEL, if any, have been made over the *last two years*?

Table A5.4: Whether changes in staffing provision for supporting TEL have been made over the *last two years*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Changes made	80	81%	85%	76%	78%	80%	83%	83%	100%
No changes made	19	19%	15%	24%	22%	20%	17%	17%	0%

Table A5.4a: Changes made in staffing provision for supporting TEL over the *last two years*

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Increase in the number of staff	40	40%	50%	26%	56%	43%	17%	42%	0%
Restructure of department(s)/TEL provision	38	38%	48%	33%	11%	41%	33%	25%	0%
Change of existing roles/incorporation of other duties	30	30%	25 %	38%	22%	30%	17%	42%	0%
Reduction in the number of staff	22	22%	15%	33%	11%	19%	33%	33%	100%
No changes in staffing provision	19	19%	14%	23%	22%	20%	17%	17%	0%
Recruitment delay/freeze	14	14%	10%	21%	0%	16%	17%	0%	0%
Other change in staffing provision	6	6%	2%	10%	11%	4%	0%	25%	0%

Question 5.6: Do you foresee changes in the staffing provision for supporting TEL in the near future?

Table 5.6: Whether changes in staffing provision for supporting TEL are foreseen in the near future

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Changes foreseen	76	77%	81%	74%	67%	74%	83%	92%	100%
No changes foreseen	23	23%	19%	26%	33%	26%	17%	8%	0%

Table A5.6a: Foreseen changes in staffing provision for supporting TEL in the near future

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(99)*	*(48)*	*(42)*	*(9)*	*(80)*	*(6)*	*(12)*	*(1)*
Increase in the number of staff	34	34%	44%	24%	33%	34%	17%	42%	100%
Anticipate change, but unsure as to how it might change	25	25%	19%	33%	22%	21%	50%	42%	0%
Restructure of department(s)/TEL provision	24	24%	29%	21%	11%	24%	0%	42%	0%
Change of existing roles/incorporation of other duties	23	23%	31%	17%	11%	23%	17%	33%	0%
Currently reviewing staffing provision	13	13%	13%	17%	0%	11%	0%	33%	0%
Recruitment delay/freeze	6	6%	4%	10%	0%	8%	0%	0%	0%
Reduction in the number of staff	5	5%	4%	7%	0%	6%	0%	0%	0%
Other change in the future	2	2%	4%	0%	0%	1%	0%	8%	0%

Section 6: Looking to the future...

Question 6.1: Listed below are potential *barriers* to any (further) development of processes to promote and support TEL tools. What, in your opinion, might be the barriers in your institution over the coming years?

Table A6.1: Ranked potential barriers to any (further) development of processes to promote and support technology enhanced learning tools

Barrier	Rank	Mean	Type			Country			
			Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(49)*	*(42)*	*(9)*	*(81)*	*(6)*	*(12)*	*(1)*
Lack of time	1	3.43	3.39	3.48	3.44	3.41	3.67	3.50	3.00
Departmental/school culture	2	3.20	3.27	3.19	2.89	3.21	3.00	3.25	3.00
Lack of academic staff knowledge	3	3.08	3.10	3.07	3.00	3.02	3.17	3.42	3.00
Institutional culture	4=	3.06	3.20	2.93	2.89	3.05	3.00	3.17	3.00
Lack of academic staff commitment	4=	3.06	3.08	3.07	2.89	3.00	3.83	3.00	4.00
Lack of internal sources of funding to support development	6	2.97	2.82	3.10	3.22	2.89	3.50	3.17	4.00
Lack of recognition for career development	7	2.96	3.02	3.02	2.33	2.90	3.33	3.08	4.00
Lack of support staff	8	2.92	2.80	3.10	2.78	2.80	3.50	3.33	4.00
Competing strategic initiatives	9	2.80	2.80	2.83	2.67	2.74	3.00	3.00	4.00
Lack of academic staff development opportunities	10	2.60	2.65	2.43	3.11	2.48	3.33	2.92	4.00
Organisational structure	11	2.54	2.51	2.57	2.56	2.52	2.83	2.50	3.00
Changing administrative processes	12	2.50	2.63	2.40	2.22	2.53	2.83	2.08	3.00
Lack of incentives	13	2.46	2.51	2.57	1.67	2.33	3.50	2.75	3.00
Lack of strategy and leadership	14	2.44	2.39	2.60	2.00	2.43	2.67	2.42	2.00
Lack of external sources of funding (e.g. HEA, HEFCE, Jisc) to support project development	15	2.31	2.16	2.43	2.56	2.30	2.83	2.08	3.00
Technical and infrastructure limitations (e.g. wireless)	16=	2.22	2.00	2.55	1.89	2.23	2.00	2.17	3.00
Other technical problems	16=	2.22	1.98	2.60	1.78	2.22	2.50	2.00	3.00
Lack of student engagement	18	2.03	1.94	2.17	1.89	1.94	2.83	2.17	3.00
Too few standards and guidelines	19	1.95	2.16	1.86	1.22	1.96	2.33	1.67	2.00
Lack of institutional support for open learning	20	1.93	1.82	1.90	2.67	1.88	2.00	2.08	4.00
Inappropriate policies and procedures	21	1.89	1.96	1.90	1.44	1.93	2.33	1.33	3.00
Too many/diffuse/diverse standards and guidelines	22	1.65	1.61	1.76	1.33	1.63	1.67	1.67	3.00

Question 6.2: Have any recent and prospective developments in technology started to make new demands upon you in terms of the support required by users?

Table A6.2: Whether there are any recent and prospective developments in technology that have started to make new demands upon institutions in terms of the support required by users

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(100)*	*(49)*	*(42)*	*(9)*	*(81)*	*(6)*	*(12)*	*(1)*
Yes	65	65%	65%	71%	33%	62%	67%	83%	100%
No	35	35%	35%	29%	67%	38%	33%	17%	0%

Question 6.3: Please write in details of up to three developments that are starting to make new demands upon you in terms of the support required by users – those you think are most important.

Table A6.3: Recent and prospective developments in technology that are starting to make new demands in terms of the support required by users

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see demands)		*(65)*	*(30)*	*(32)*	*(3)*	*(50)*	*(4)*	*(10)*	*(1)*
Electronic management of assessment (e-submission, e-marking, e-feedback)	28	43%	47%	40%	33%	38%	75%	50%	100%
Lecture capture	28	43%	50%	40%	0%	40%	50%	60%	0%
VLE – new/change, embed, extend, customise, standards	16	25%	25%	23%	33%	26%	0%	30%	0%
Learning analytics	13	20%	16%	27%	0%	20%	25%	10%	100%
Distance learning/fully online courses	9	14%	22%	7%	0%	14%	0%	20%	0%
Multimedia (use, provision, management, support)	8	12%	9%	13%	33%	14%	0%	10%	0%
Increased demand for support	7	11%	13%	10%	0%	12%	0%	10%	0%
Mobile technologies/bring your own device (support, access to systems/content)	7	11%	9%	7%	67%	10%	25%	10%	0%
Degree apprenticeships	5	8%	6%	10%	0%	10%	0%	0%	0%
Digital literacy/capability	5	8%	6%	10%	0%	10%	0%	0%	0%
Office 365	5	8%	9%	7%	0%	2%	50%	20%	0%
Blended learning	4	6%	6%	7%	0%	8%	0%	0%	0%
Classroom interactivity (e.g. voting technologies)	4	6%	3%	10%	0%	4%	25%	10%	0%
E-portfolio	4	6%	0%	13%	0%	8%	0%	0%	0%
Interoperability/Integration of systems	4	6%	6%	3%	33%	4%	25%	10%	0%
Learning spaces	4	6%	6%	7%	0%	4%	0%	20%	0%
Real-time communication (e.g. video conferencing/webinar software)	4	6%	9%	3%	0%	4%	0%	10%	100%
Accessibility (in particular captioning and response to the change in Disabled Students' Allowance)	3	5%	6%	0%	33%	6%	0%	0%	0%
Digital exams	3	5%	9%	0%	0%	6%	0%	0%	0%
Staff development	3	5%	6%	3%	0%	2%	0%	20%	0%
Video assessment	3	5%	6%	3%	0%	6%	0%	0%	0%
Curriculum development/design	2	3%	0%	7%	0%	4%	0%	0%	0%
New pedagogies/modes of delivery (e.g. flipped classroom)	2	3%	3%	3%	0%	4%	0%	0%	0%
Attendance monitoring	1	2%	0%	3%	0%	2%	0%	0%	0%
Collaboration	1	2%	0%	3%	0%	0%	25%	0%	0%
Development of policy	1	2%	3%	0%	0%	2%	0%	0%	0%
Meeting staff/student expectations	1	2%	0%	3%	0%	0%	0%	10%	0%
Organisational transformation	1	2%	3%	0%	0%	2%	0%	0%	0%
Personal tutoring	1	2%	3%	0%	0%	2%	0%	0%	0%
Surface hubs	1	2%	0%	3%	0%	0%	25%	0%	0%
VR/AR	1	2%	3%	0%	0%	2%	0%	0%	0%
Wireless	1	2%	0%	0%	33%	2%	0%	0%	0%

Question 6.4: Do you see these developments posing any challenges over the next *two to three years* in terms of the support that will be required for staff and students?

Table A6.4: Whether institutions consider that the developments identified in Question 6.3 will pose support challenges over the next two to three years

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents)		*(65)*	*(32)*	*(30)*	*(3)*	*(50)*	*(4)*	*(10)*	*(1)*
Yes	51	78%	78%	83%	33%	74%	100%	90%	100%
No	14	22%	22%	17%	67%	26%	0%	10%	0%

Question 6.5a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

Table A6.5a: Challenges that these developments pose over the next two to three years in terms of support that will be required for staff and students

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see challenges over next 2–3 years)		(51)	(25)	(25)	(1)	(37)	(4)	(9)	(1)
Electronic management of assessment (e-submission, e-marking, e-feedback)	15	29%	36%	24%	0%	19%	75%	44%	100%
Learning analytics (inc. ethics, use of data, reporting)	10	20%	20%	20%	0%	22%	25%	0%	100%
New modes of delivery (e.g. online/distance courses, active learning, blended learning, flipped classroom)	10	20%	24%	16%	0%	19%	0%	22%	100%
Lack of support staff/specialist skills/resources	8	16%	12%	20%	0%	14%	25%	22%	0%
Lecture capture/recording	8	16%	24%	8%	0%	16%	0%	22%	0%
Digital literacy/capability	7	14%	4%	24%	0%	16%	25%	0%	0%
Technical infrastructure – addressing growth, new technologies	7	14%	12%	12%	100%	14%	25%	11%	0%
Increased/diverse support (inc. 24/7 support, support for remote students/staff)	5	10%	8%	12%	0%	8%	0%	11%	100%
Keeping up with emerging technologies/ technology changes	5	10%	12%	8%	0%	14%	0%	0%	0%
Mobile technologies/learning, BYOD (support, creating content and compatibility with systems)	5	10%	8%	12%	0%	8%	25%	11%	0%
Process change/improvement	5	10%	16%	4%	0%	11%	25%	0%	0%
Staff development	5	10%	8%	12%	0%	5%	0%	33%	0%
Managing/meeting expectations	4	8%	8%	8%	0%	8%	0%	11%	0%
Budgets/funding/financial constraints	3	6%	8%	0%	100%	5%	0%	11%	0%
Differences between schools/departments	3	6%	12%	0%	0%	5%	0%	11%	0%
Prioritisation of teaching in line other activities	3	6%	8%	4%	0%	5%	0%	11%	0%
VLE (change/extend/baseline)	3	6%	8%	4%	0%	3%	0%	22%	0%
Classroom interactivity (e.g. voting technologies)	2	4%	0%	8%	0%	3%	0%	11%	0%
Complexity	2	4%	4%	4%	0%	5%	0%	0%	0%
Culture	2	4%	4%	4%	0%	3%	0%	11%	0%
E-exams	2	4%	8%	0%	0%	5%	0%	0%	0%
Growing student numbers	2	4%	0%	8%	0%	5%	0%	0%	0%
Interoperability/integration	2	4%	0%	8%	0%	3%	0%	11%	0%
Learning spaces	2	4%	4%	4%	0%	0%	0%	22%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Legal/policy issues (inc. IPR, copyright, data security, system contingency)	2	4%	8%	0%	0%	3%	0%	11%	0%
Multimedia (production, management, delivery storage)	2	4%	0%	8%	0%	3%	0%	11%	0%
Personalisation	2	4%	0%	8%	0%	5%	0%	0%	0%
Staff incentives	2	4%	8%	0%	0%	5%	0%	0%	0%
Synchronous tools	2	4%	4%	4%	0%	0%	0%	11%	100%
Video assessment	2	4%	4%	4%	0%	5%	0%	0%	0%
Change fatigue	1	2%	4%	0%	0%	3%	0%	0%	0%
Changing teaching practice	1	2%	0%	4%	0%	3%	0%	0%	0%
Demonstrating value of TEL	1	2%	0%	4%	0%	3%	0%	0%	0%
Developing/supporting content creation and collections	1	2%	0%	4%	0%	3%	0%	0%	0%
Gap between innovators and mainstream	1	2%	0%	4%	0%	3%	0%	0%	0%
Internal collaboration	1	2%	0%	4%	0%	3%	0%	0%	0%
Keeping up with demand from staff/students	1	2%	4%	0%	0%	0%	25%	0%	0%
Lack of time	1	2%	4%	0%	0%	3%	0%	0%	0%
More diverse students	1	2%	0%	4%	0%	3%	0%	0%	0%
Pedagogic support	1	2%	0%	4%	0%	3%	0%	0%	0%
Student retention	1	2%	0%	4%	0%	3%	0%	0%	0%
Students as creators	1	2%	4%	0%	0%	0%	25%	0%	0%

Table 6.5b: How institutions see the challenges identified in Question 6.5a being overcome

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
(Base: all respondents that see challenges over next 2–3 years)		(51)	(25)	(25)	(1)	(37)	(4)	(9)	(1)
Staff development (e.g. training courses)	16	31%	40%	24%	0%	24%	75%	44%	0%
Investment (time, money, resources, support staff)	12	24%	32%	16%	0%	24%	0%	33%	0%
Communities of practice – sharing good practice, success stories, case studies, champions	11	22%	24%	20%	0%	16%	50%	33%	0%
Focus on pedagogy, curriculum design/ development, adapting teaching approach	11	22%	24%	20%	0%	16%	0%	44%	100%
Review and revise support provision (increase/ improve/devolve/extend)	11	22%	24%	20%	0%	16%	25%	33%	100%
Development of/integration with strategies/ policies	10	20%	24%	12%	100%	19%	0%	33%	0%
Improve technical infrastructure (inc. wireless)	7	14%	12%	16%	0%	14%	0%	22%	0%
Senior management leadership/commitment to TEL	7	14%	12%	16%	0%	14%	0%	22%	0%
Develop digital literacies/capabilities	6	12%	8%	16%	0%	14%	0%	11%	0%
Processes (streamline, more efficient)	6	12%	16%	8%	0%	14%	0%	11%	0%
Reorganisation/restructure	6	12%	12%	12%	0%	14%	0%	11%	0%
Internal collaboration/joined up approach	5	10%	8%	12%	0%	11%	0%	11%	0%
Provision of guidance to staff/students (e.g. online resources)	5	10%	8%	12%	0%	8%	25%	11%	0%
Communication/consultation	4	8%	4%	12%	0%	5%	0%	11%	100%
Data (cleansing, modelling, awareness)	4	8%	8%	8%	0%	11%	0%	0%	0%
Improve skills and knowledge of support staff	4	8%	4%	12%	0%	11%	0%	0%	0%

Response	Total		Type			Country			
	No	%	Pre-92	Post-92	Other	Eng	Wal	Scot	NI
Pilot/phased roll out	4	8%	4%	8%	100%	8%	0%	11%	0%
Collaboration with external partners	3	6%	12%	0%	0%	8%	0%	0%	0%
Improved access to mobile devices (e.g. loan devices)	3	6%	0%	12%	0%	3%	25%	11%	0%
Managing expectations	3	6%	4%	8%	0%	5%	0%	11%	0%
Minimum requirements	3	6%	4%	8%	0%	5%	0%	11%	0%
Provision of incentives/rewards/recognition	3	6%	8%	4%	0%	5%	0%	11%	0%
Awareness raising	2	4%	4%	4%	0%	5%	0%	0%	0%
Change management	2	4%	8%	0%	0%	0%	50%	0%	0%
Cloud solutions	2	4%	8%	0%	0%	3%	25%	0%	0%
Cultural changes/embedding	2	4%	4%	4%	0%	3%	25%	0%	0%
Governance	2	4%	4%	4%	0%	5%	0%	0%	0%
Improve/increase use of existing technologies	2	4%	8%	0%	0%	0%	25%	11%	0%
Keeping up to date with new technologies	2	4%	4%	4%	0%	5%	0%	0%	0%
Student partnerships	2	4%	4%	4%	0%	3%	0%	0%	100%
Student training	2	4%	0%	8%	0%	5%	0%	0%	0%
Alternative forms of e-assessment (e-submission, e-marking, e-feedback)	1	2%	0%	4%	0%	0%	25%	0%	0%
Connection to UKPSF and RDF	1	2%	4%	0%	0%	3%	0%	0%	0%
Define digital learning landscape	1	2%	0%	4%	0%	0%	0%	11%	0%
Institutional acceptance of risk	1	2%	0%	4%	0%	3%	0%	0%	0%
Interoperability/extending systems	1	2%	4%	0%	0%	3%	0%	0%	0%
Involvement with wider institution	1	2%	0%	4%	0%	3%	0%	0%	0%
Lobbying suppliers	1	2%	4%	0%	0%	3%	0%	0%	0%
Outsourcing	1	2%	0%	4%	0%	3%	0%	0%	0%
Personalisation/customisation of learning environment	1	2%	0%	4%	0%	3%	0%	0%	0%

Appendix B: Specification of the questions from the 2018, 2016, 2014, 2012, 2010, 2008, 2005, 2003 and 2001 Surveys for which longitudinal analysis was used in this Report

Table C1.1: How important, if at all, have each of the following driving factors been for developing TEL and the processes that promote it in *your institution* to date?

2018: Q1.1: Listed below are possible driving factors for developing TEL and the processes that promote it. How important, if at all, have each of these been in your institution to date?

2016: Q1.1: Listed below are possible driving factors for developing TEL and the processes that promote it. How important, if at all, have each of these been in your institution to date?

2014: Q1.1 How important, if at all, have each of the following driving factors been for developing TEL and the processes that promote it in your institution to date?

2012: Q1.1 How important, if at all, have each of the following driving factors been for developing TEL and the processes that promote it in your institution to date?

2010: Q1.1 How important, if at all, have each of the following drivers been in your institution to date?

2008: Q1.1 How important, if at all, have each of the following drivers been in your institution to date?

2005: Q1.3 Listed below are possible driving factors for MLE development and the environments and processes that support e-learning. Which of those have been important in your institution to date? Please indicate the importance of each of these.

2003: Q1.4 Listed below are possible drivers that can encourage MLE development. Which have driven development of your MLE to date? Please indicate the importance of each of these in your institution.

Table C1.3: How important, if at all are the following factors in *encouraging* the development of TEL and processes that promote it?

2018: Q1.3: Listed below are possible factors that encourage the development of TEL and processes that promote it. How important, if at all, have each of these been in your institution over the past two years?

2016: Q1.3: Listed below are possible factors that encourage the development of TEL and processes that promote it. How important, if at all, have each of these been in your institution over the past two years?

2014: Q1.3: How important, if at all are the following factors in encouraging the development of TEL and processes that promote it?

2012: Q1.3: How important, if at all are the following factors in encouraging the development of TEL and processes that promote it?

2010: Q1.3 How important, if at all, are the following factors in encouraging the development of TEL and processes that promote it?

2008: Q1.3 How important, if at all are the following factors in *encouraging* the development of TEL and processes that promote it?

2005: Q1.4 Listed below are possible supporting factors for MLE development and the environments and processes that support e-learning. Which of those have been important in your institution to date? Please indicate the importance of each of these in your institution.

2003: Q 1.4 Listed below are possible drivers that can encourage MLE development. Which have driven development of your MLE to date? Please indicate the importance of each of these in your institution.

Table C2.1: Institutional strategies that have informed TEL development

2018: Q2.1: Which, if any institutional strategies, inform the development of technology enhanced learning in your institution?

2016: Q2.1: Which, if any institutional strategies, inform the development of technology enhanced learning in your institution?

2014: Q2.1: Which, if any institutional strategies, inform the development of technology enhanced learning in your institution?

2012: Q2.1: Which, if any institutional strategies, inform the development of technology enhanced learning in your institution?

2010: Q2.1: Which, if any institutional strategies, inform the development of technology enhanced learning in your institution?

2008: Q2.1 Which, if any, institutional strategies inform the development of technology enhanced learning in your institution?

2005: Q3.3 Which institutional strategies inform the development of processes to support e-learning in your institution? Please tick all that apply.

2003: Q3.6 Which institutional strategy documents consider development of your MLE? Please tick all that apply.

Table C2.2: Management of TEL governance within institutions

2018: Q2.2: How is TEL governance managed within your institution? Do you have any of the following committees/ working groups with an institutional remit, looking at TEL activity across the institution?

2016: Q2.1d: How is TEL governance managed within your institution? Do you have any of the following committees/ working groups with an institutional remit, looking at TEL activity across the institution?

Table C2.3: External strategy documents or report that have informed the development of TEL

2018: Q2.3: Which *three* external strategy documents or reports have been *most useful* in planning TEL in your institution?

Note that in 2018 the above question replaced two questions that were asked previously (one about external strategy documents and the other about external reports). So, the two previous questions were combined into one and only the Top 3 most useful were asked for in 2018. The longitudinal analysis is therefore more difficult, but commentary has been added to the report where possible.

Old question 2.2:

2016: Q2.2: Which, if any, external strategy documents inform the development of technology enhanced learning in your institution?

2014: Q2.2: Which, if any external strategy documents inform the development of technology enhanced learning in your institution?

2012: Q2.2: Which, if any external strategy documents inform the development of technology enhanced learning in your institution?

2010: Q2.2: Which, if any external strategy documents inform the development of technology enhanced learning in your institution?

2008: Q2.2 Which, if any, external strategy documents inform the development of technology enhanced learning in your institution?

2005: Q3.4 Which external strategy documents inform the development of processes to support e-learning in your institution? Please tick all that apply.

Old question 2.3

2016: Q2.3: Which, if any, external reports or documents inform the development of technology enhanced learning in your institution?

2014: Q2.3: Which, if any external reports or documents inform the development of technology enhanced learning in your institution?

2012: Q2.3: Which, if any external reports or documents inform the development of technology enhanced learning in your institution?

2010: Q2.3: Which, if any external reports or documents inform the development of technology enhanced learning in your institution?

Table C2.4: Institutional policies which link strategy with implementation of TEL tools

2018: Q2.4: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools? For example, VLE usage guidelines, faculty or school-based teaching and learning policies on usage of technology and online provision.

2016: Q2.5: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools? For example, VLE usage guidelines, faculty or school-based teaching and learning policies on usage of technology and online provision.

2014: Q2.5: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools? For example, VLE usage guidelines, faculty or school-based teaching and learning policies on usage of technology and online provision.

2012: Q2.5: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools? For example, VLE usage guidelines, faculty or school-based teaching and learning policies on usage of technology and online provision.

2010: Q3.2: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools?

2008: Q3.2: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools?

Table C3.1: Institutional VLE currently in use

2018: Q3.1: Is there a VLE currently in use in your institution?

2016: Q3.1: Is there a VLE currently in use in your institution?

2014: Q3.1: Is there a VLE *currently* in use in your institution?

Table C3.2: VLEs currently used

2018: Q3.2: Which VLE(s), if any, is *currently* used in your institution? Please select all VLEs in use across your institution (including departmental VLEs)

2016: Q3.1a: Which VLE(s), if any, is *currently* used in your institution? Please select all VLEs in use across your institution (including departmental VLEs)

2014: Q3.1a: Which VLE(s), if any, is *currently* used in your institution? Please select all VLEs in use across your institution (including departmental VLEs)

2012: Q3.1a: What VLE, if any, is currently used in your institution?

2010: Q3.4: What VLE, if any, is currently used in your institution?

2008: Q3.4: What VLE, if any, is currently used in your institution?

2005: Q4.2: What VLE(s) are used in your institution? Please tick all that apply.

2003: Q4.2: What VLEs, commercial or in house, are used in your institution? Please tick all that apply.

2001: Q6: What virtual learning environments (VLEs) are used at your institution? Please tick all that apply and indicate how long they have been used.

Table C3.3: The *main* VLE in use

2014: Q3.3: Out of the above, which is the *main* VLE in use across your institution?

2014: Q3.1b: Out of the above, which is the *main* VLE in use across your institution?

2014: Q3.1b: Out of the above, which is the *main* VLE in use across your institution?

2012: Q3.1b: What is the main VLE currently *used* in your institution?

2010: Q3.4c: What is the *main* VLE currently in use?

2008: Q3.4b: What is the *main* VLE currently in use?

Table C3.4: Use of main VLE

2018: Q3.4: Is the *main* VLE used for each of the following or not?

2013: Q3.1c: Is the main VLE used for each of the following or not?

Table C3.5: Hosting results for the main institutional VLE

Table C3.5b: Hosting results per platform for *main* institutional VLE

2018: Q3.5: Thinking about the (main) VLE in use, which of the following best describes how your platform is technically managed?

2016: Q3.2: Thinking about the (main) VLE in use, which of the following best describes how your platform is technically managed?

2014: Q3.2: Thinking about the (main) VLE in use, is it locally managed or hosted by a third party?

2012: Q3.2: Thinking about the (main) VLE in use, is it locally managed or hosted by a third party?

Table C3.6: External provider that host (main) VLE

2018: Q3.6: Who is the external provider that hosts your (main) VLE?

2016: Q3.2a: Who is the external provider that hosts your (main) VLE?

Table C3.7: Whether currently outsource provision

2018: Q3.7: Does your institution currently outsource its *provision* of any of the following? Provision refers to an institutional service being hosted by another organisation.

2016: Q5.3a: Does your institution currently outsource its *provision* of any of the following? Provision refers to an institutional service being hosted by another organisation.

Table C3.8: How the institutional services identified in Question 3.7 are currently outsourced

2018: Q3.8: How is the provision of these services currently outsourced?

2016: Q5.3b: How is the provision of these services currently outsourced?

Table C3.9: Services that are currently outsourced are under consideration for bringing back in to be institutionally managed

2018: Q3.9: Which, if any, of the services that are currently outsourced are you considering bringing back in to be institutionally managed?

2016: Q5.3c: Which, if any, of the services that are currently outsourced are you considering bringing back in to be institutionally managed?

Table C3.10: Services being formally considered for outsourcing

2018: Q3.10: Is your institution formally considering the outsourcing of some or all of your provision for any of the following? Provision refers to an institutional service being hosted by another organisation?

2016: Q5.3d: Is your institution formally considering the outsourcing of some or all of your provision for any of the following? Provision refers to an institutional service being hosted by another organisation?

Table C3.11: Options being considered for outsourcing

2018: Q3.11: What option(s) are being considered for the outsourcing of this provision?

2016: Q5.3e: What option(s) are being considered for the outsourcing of this provision?

Table C3.12: Whether considered collaboration with other HE institutions

2018: Q3.12: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff?

2014: Q5.4: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff?

2012: Q5.4: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff?

Table C3.16: Review of TEL facility/VLE in the last two years

2018: Q3.16: Has your institution undertaken a review of a major institutional TEL facility or system in the *last two years*?

2016: Q3.3a: Have you undertaken a review of a major institutional TEL facility or system in the *last two years*?

2014: Q3.3: Have you undertaken a review of the (main) institutional VLE in the *last two years*?

2012: Q3.3: Have you undertaken a review of the (main) institutional VLE in the *last two years*?

Table C3.17: TEL facilities or systems/VLE that have been reviewed in the last two years

2018: Q3.17: Which major TEL facilities or systems have been reviewed in the *last two years*?

2016: Q3.3a: Which major TEL facilities or systems have you reviewed in the *last two years*?

Table C3.17a: Cross-tabulation of *main institutional VLE* with *TEL/VLE review conducted in the last two years*

Table C3.18: Outcomes of the VLE review

2018: Q3.18: Please write the outcome of the review on these TEL facilities or systems

2016: Q3.3b: Please write the outcome of the review on these TEL facilities or systems

2014: Q3.5: What was the outcome, or likely outcome, of the review?

2012: Q3.5: What was the outcome, or likely outcome, of the review?

Table C3.19: Institutional review of TEL facility or system in next two years

2018: Q3.19: Are you planning to undertake a review of a major institutional TEL facility or system within the next two years?

2016: Q3.19: Are you planning to undertake a review of a major institutional TEL facility or system within the next two years?

2014: Q3.6: Are you planning to undertake a review of the (main) institutional VLE in the *next two years*?

2012: Q3.6: Are you planning to undertake a review of the (main) institutional VLE in the *next two years*?

Table C3.20: TEL facilities or systems planning on reviewing in the next two years

2018: Q3.20: Which major TEL facilities or systems are you planning on reviewing in the next two years?

2014: Q3.6a: Which major TEL facilities or systems are you planning on reviewing in the next two years?

Table C3.21: Centrally-supported software tools used by students

2018: Q3.21: Which centrally-supported TEL tools are used by students in your institution?

2016: Q3.10: Which, if any, centrally-supported technology enhanced software tools are used by students in your institution?

2014: Q3.10: Which, if any, centrally-supported technology enhanced software tools are used by students in your institution?

2012: Q3.10: Which, if any, centrally-supported technology enhanced software tools are used by students in your institution?

2010: Q3.7: Which, if any, centrally-supported technology enhanced software tools are used by students in your institution?

2008: Q3.5: Which, if any, centrally-supported technology enhanced learning software tools are used by students in your institution?

Table C3.22: Software tools used by students who are *not* centrally-supported

2018: Q3.22: And which, if any, technology enhanced learning tools that are used by students are not centrally-supported?

2016: Q3.11: And which, if any, technology enhanced learning tools that are used by students are not centrally-supported?

2014: Q3.11: And which, if any, technology enhanced learning tools that are used by students are *not* centrally-supported?

2012: Q3.11: Which, if any, technology enhanced learning tools that are used by students are not centrally-supported?

2010: Q3.8: Which, if any, technology enhanced learning tools that are used by students are not centrally-supported?

2008: Q3.6: Which, if any, technology enhanced learning tools that are used by students are *not* centrally-supported?

Table C3.24: Methods used to promote mobile device usage

2018: Q3.24: How does your institution promote the use of student or staff owned mobiles devices in support of learning, teaching and assessment activities?

2016: Q3.18: How does your institution promote the use of student/staff owned mobiles devices in support of learning, teaching and assessment activities?

2014: Q3.18: How does your institution promote the use of student/staff owned mobiles devices in support of learning, teaching and assessment activities?

Table C4.1: Types of online courses offered

2018: Q4.1: Does your institution offer any of the following types of programmes or courses?

2016: Q3.12b: Does your institution offer any of the following types of courses?

2014: Q3.12b: Does your institution offer any of the following types of courses?

Table C4.3: Institutions with subjects that make *more extensive* use of TEL tools than the institutional norm

2018: Q4.3: Are there any particular subject areas that make *more extensive* use of TEL tools than your institutional norm?

2016: Q3.13: Are there any particular subject areas that make *more extensive* use of technology enhanced learning tools than your institutional norm?

2014: Q3.13: Are there any particular subject areas that make *more extensive* use of technology enhanced learning tools than your institutional norm?

2012: Q3.13: Are there any particular subject areas that make more extensive use of technology enhanced learning tools than your institutional norm?

2010: Q3.10: Are there any particular subject areas that make more extensive use of technology enhanced learning tools than your institutional norm?

2008: Q3.8: Are there any particular subject areas or departments that make more extensive use of technology enhanced learning tools than your institutional norm?

Table C4.4: Subjects that make more extensive use of TEL tools than the institutional norm

2018: Q4.4: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of TEL tools and why you think this is so.

2016: Q3.13a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2014: Q3.13a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2012: Q3.13a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2010: Q3.10a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2008: Q3.8a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

Table C4.6: Institutions with subjects that make *less extensive* use of technology enhanced learning tools than the institutional norm

2018: Q4.6: Are there any particular subject areas that make less extensive use of technology enhanced learning tools than your institutional norm?

2016: Q3.14: Are there any particular subject areas that make less extensive use of technology enhanced learning tools than your institutional norm?

2014: Q3.14: Are there any particular subject areas that make *less extensive* use of technology enhanced learning tools than your institutional norm?

2012: Q3.14: Are there any particular subject areas that make less extensive use of technology enhanced learning tools than your institutional norm?

2010: Q3.11: Are there any particular subject areas that make less extensive use of technology enhanced learning tools than your institutional norm?

2008: Q3.9: Are there any particular subject areas or departments that make less extensive use of technology enhanced learning tools than your institutional norm?

Table C4.7: Subjects that make more extensive use of TEL tools than the institutional norm

2018: Q4.7: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of TEL tools and why you think this is so.

2016: Q3.14a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2014: Q3.14a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2012: Q3.14a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2010: Q3.11a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

2008: Q3.9a: Please select up to three subject areas below and then in the next question you will be asked to explain in what way they make more use of technology enhanced learning tools and why you think that is so.

Table C4.9: Proportion of courses using TEL tools

2018: Q4.9: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

2016: Q3.15: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

2014: Q3.15: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

2012: Q3.16: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

2010: Q3.12: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

2008: Q3.10: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

Table C4.10: Evaluation of the impact of TEL on *student learning experience*

2018: Q4.10: Has the institution evaluated the impact of TEL on the student learning experience across the institution as a whole over the past two years?

2016: Q3.20: Have you evaluated the impact of technology enhanced learning on the student learning experience across the institution as a whole over the past two years?

2014: Q3.20: Have you evaluated the impact of technology enhanced learning tools and systems on the *student learning experience* across the institution as a whole?

2012: Q3.21: Have you evaluated the impact of technology enhanced learning tools and systems on the student learning experience?

Table C4.12: Aspects of TEL evaluated

2018: Q4.12: What aspects of the impact of TEL on the student learning experience have been evaluated over the past two years?

2016: Q3.20b: What aspects of the impact of technology enhanced learning on the student learning experience have you evaluated over the past two years?

Table C4.13a: How the impact on student learning experience has been evaluated

Table C4.13b: When the impact on student learning experience has been evaluated

Table C4.13c: Purpose of the impact on student learning experience that has been evaluated

2018: Q4.13: How the impact has been measured, when, by whom, and for what purpose?

2016: Q3.21: How the impact has been measured, when, by whom, and for what purpose?

2014: Q3.21: How the impact has been measured, *when*, *by whom*, and for *what purpose*?

Table C4.14: Broad conclusions from the evaluations undertaken into the impact of TEL on the *student learning experience*

2018: Q4.14: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

2016: Q3.21a: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

2014: Q3.21a: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

Table C4.15: Evaluation of the impact of TEL on *pedagogic practices*

2018: Q4.15: Has the institution evaluated the impact of TEL on staff pedagogic practices across the institution as a whole over the past two years?

2016: Q3.22: Have you evaluated the impact of technology enhanced learning on pedagogic practices across the institution as a whole over the past two years?

2014: Q3.22: Have you evaluated the impact of technology enhanced learning tools and systems on *pedagogic practices* across the institution as a whole?

2012: Q3.23: Have you evaluated the impact of technology enhanced learning tools and systems on pedagogic practices?

Table C4.17: Aspects of staff pedagogic practices that have been evaluated in the last two years

2018: Q4.17: What aspects of staff pedagogic practices have been evaluated over the past two years?

2016: Q3.22a: What aspects of staff pedagogic practices have you evaluated over the past two years?

Table C4.18a: How the impact on pedagogical practices has been evaluated

Table C4.18b: When the impact on pedagogical practices has been evaluated

Table C4.18c: Purpose of the evaluation on pedagogical practices

2018: Q4.18: How has the impact on pedagogic practices been measured, when, and for what purpose?

2016: Q3.23: How has the impact on pedagogic practices been measured, when, and for what purpose?

2014: Q3.23: *How has the impact has been measured, when, and for what purpose?*

Table C4.19: Broad conclusions from the evaluations undertaken into the impact of TEL on pedagogical practices

2018: Q4.19: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

2016: Q3.23a: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

2014: Q3.23a: And what have these evaluations revealed? Please describe the broad conclusions from the evaluations and, if any have been published, provide the appropriate references or links.

Table C5.1: Support units that provide support for technology enhanced learning

Table C5.1b: Number of units providing support for TEL per institution

2018: Q5.1: First of all, which, if any, support units are there in your institution that provide *support for TEL*? Please include both centrally provided and local units.

2016: Q4.1: Which, if any, support units are there in your institution that provide support for technology enhanced learning? Please include both centrally provided and local units.

2014: Q4.1: Which, if any, support units are there in your institution that provide support for *technology enhanced learning*? Please include both centrally provided and local units.

2012: Q4.1: Which, if any, support units are there in your institution that provide support for technology enhanced learning?

2010: Q4.1: Which, if any, support units are there in your institution that provide support for technology enhanced learning?

2008: Q4.1: Which, if any, support units are there in your institution that provide support for technology enhanced learning?

Table C5.2: Number of staff supporting TEL

2018: Q5.2: How many staff supporting TEL are in the unit?

2016: Q4.2: How many staff work in the unit?

Table C5.4: Whether changes in staffing provision have been made

Table C5.4a: Changes made in staffing provision

2018: Q5.4: What changes in staffing provision for supporting TEL, if any, have been made over the last two years?

2016: Q4.4: What changes in staffing provision for technology enhanced learning tools, if any, have been made over the *last two years*?

2014: Q4.4: What changes in staffing provision for technology enhanced learning tools, if any, have been made over the *last two years* due to budgetary pressures or other reasons?

2012: Q4.4: What changes in staffing provision, if any, have been made over the last two years due to budgetary pressures or other reasons?

Table C5.6: Whether changes in staffing provision are foreseen in the near future

Table C5.6a: Foreseen changes in staffing provision in the near future

2018: Q5.6: Do you foresee changes in the staffing provision for supporting TEL in the near future?

2016: Q4.5: Do you foresee changes in the staffing provision in supporting staff and students in their use of technology enhanced learning tools in the near future?

2014: Q4.5: Do you foresee changes in the staffing provision in supporting staff and students in their use of technology enhanced learning tools in the near future?

2012: Q4.5: Do you foresee changes in the staffing provision in supporting staff and students in their use of technology enhanced learning tools in the near future?

Table C6.1: Ranked potential barriers to any (further) development of processes to promote and support TEL tools

2018: Q6.1: Listed below are potential barriers to any (further) development of processes to promote and support TEL tools. What, in your opinion, might be the barriers in your institution over the coming years?

2016: Q5.1: Listed below are potential barriers to any (further) development of processes to promote and support TEL tools. What, in your opinion, might be the barriers in your institution over the coming years?

2014: Q5.1: Listed below are potential *barriers* to any (further) development of processes to promote and support technology enhanced learning tools. What, in your opinion, are the barriers in your institution to any (further) development to promote TEL tools over the coming years?

2012: Q5.1: What, in your opinion, are the barriers in your institution to any (further) development to promote TEL tools over the coming years?

2010: Q5.1: What, in your opinion, are the barriers in your institution to any (further) development to promote TEL tools over the coming years?

2008: Q5.1: What, in your opinion, are the barriers in your institution to any (further) development to promote TEL tools over the coming years?

2005: Q3.5 What, in your opinion, are the barriers to any (further) development of processes to support e-learning in your institution over the coming years?

2003: Q3.7 What, in your opinion, are the barriers to any (further) development of your (or any potential) MLE over the coming years?

Table C6.2: Whether there are any recent and prospective developments in technology that have started to make new demands upon institutions in terms of the support required by users.

2018: Q6.2: Have any recent and prospective developments in technology started to make new demands upon your institution in terms of the support required by users?

2016: Q5.5: Have any recent and prospective developments in technology started to make new demands upon you in terms of the support required by users?

2014: Q5.5: Have any recent and prospective developments in technology started to make new demands upon you in terms of the support required by users?

Table C6.3: Recent and prospective developments in technology that are starting to make new demands terms of the support required by users

2018: Q6.3: Please write in details of up to three developments that are starting to make new demands in terms of the support required by users – those you think are most important.

2016: Q5.5a: Please write in details of up to three developments that are starting to make new demands upon you in terms of the support required by users – those you think are most important.

2014: Q5.5a: Please write in details of up to three developments that are starting to make new demands upon you in terms of the support required by users – those you think are most important.

2012: Q5.5: What if any, recent and prospective developments in technology are starting to make new demands upon you in terms of the support required by users?

2010: Question 5.3: What if any, recent and prospective developments in technology are starting to make new demands upon you in terms of the support required by users?

Table C6.4: Whether institutions consider that the developments identified in question 6.3 will pose support challenges over the next two to three years

2018: Q6.4: Do you see these developments posing any challenges over the next two to three years in terms of the support that will be required for staff and students?

2016: Q5.6: Do you see these developments posing any challenges over the next two to three years in terms of the support that will be required for staff and students?

2014: Q5.6: Do you see these developments posing any challenges over the next two to three years in terms of the support that will be required for staff and students?

Table C6.5: Challenges that these developments pose over the next two to three years in terms of support that will be required for staff and students

2018: Q5.6a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

2016: Q5.6a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

2014: Q5.6a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

2012: Q5.6: What challenges do you see these developments posing over the next two to three years in terms of support that will be required for staff and students?

2010: Q5.4: What challenges do you see these developments posing over the next two to three years in terms of support that will be required for staff and students?

Table C6.5b: How institutions see the challenges identified in question 5.6a being overcome

2018: Q6.5b: Also, please write in how you see these challenges being overcome.

2016: Q5.6a: Also, please write in how you see these challenges being overcome.

2014: Q5.6a: Also, please write in how you see these challenges being overcome.

2012: Q5.7: In general, how do you see these challenges being overcome?

2010: Q5.5: In general, how do you see these challenges being overcome?

Appendix C: Longitudinal analysis between 2018, 2016, 2014, 2012, 2010, 2008, 2005, 2003 and 2001 surveys

Where new response options have been added to established questions used in previous Surveys, they have been denoted with an asterisk at the end of the response option in the table.

Question 1.1: How important, if at all, have each of the following driving factors been for developing TEL and the processes that promote it in *your institution* to date?

Table C1.1: Driving factors for TEL development (rankings)

Driving factor	ALL							
	2018	2016	2014	2012	2010	2008	2005	2003
Enhancing the quality of learning and teaching in general	1	1	1	1	1	1	1	1
Improving student satisfaction, e.g. NSS scores	2	3	-	-	-	-	-	-
Meeting student expectations in the use of technology	3	2	2	2	2	2	3	5
Improving access to online/blended learning for campus-based students	4	5	-	-	-	-	-	-
Widening participation/inclusiveness	5	10	9	8	5	4	7	4
Supporting the development of digital literacy skills or digital capability for students and staff	6	7	-	-	-	-	-	-
Helping to create a common user experience	7	4	5	5=	7	8	-	-
Supporting flexible/blended curriculum development	8	8	-	-	-	-	-	-
Improving institutional reputation*	9	-	-	-	-	-	-	-
Assisting and improving the retention of students	10	12	-	-	-	-	-	-
Meeting the requirements of the Equality Act (2010)	11	18	16	16	8	10=	13	15
Responding to the Teaching Excellence Framework (TEF)*	12	-	-	-	-	-	-	-
Keeping abreast of educational developments	13	9	10	14	9	7	11	13
Supporting students affected by the withdrawal of DSA provision (Disabled Students' Allowances)	14	15	-	-	-	-	-	-
Improving administrative processes	15	6	4	10=	13	10=	4	7
Attracting international (outside EU) students	16	14	6	12	15	12	12	-
Attracting home students	17	11	7	10=	16	9	10	10
Creating or improving competitive advantage	18	13	8	7	11	6	6	6
Attracting new markets	19	16	13	13	14	13=	9	9
Attracting EU students	20	17	11	15	18	15	15	11=
Improving access to learning for international students	21	19	12	9	10	13	14	11=

Driving factor	ALL							
	2018	2016	2014	2012	2010	2008	2005	2003
Addressing work-based learning – the employer/workforce development agenda and student employability skills	22	21	15	17	12	-	-	-
Achieving cost/efficiency savings	23	22	19	18	20	20	16=	14
Improving access to learning for distance learners	24	20	14	4	6	-	-	-
Developing a wider regional, national or international role for your institution	25	24	18	19	17	16	16=	17
Improving access to learning for part time students	26	23	17	5=	4	5	5	3
The formation of other partnerships with external institutions/organisations	27	25	20	20	19	19	18	16
Helping to support joint/collaborative course developments with other institutions	28	26	22	22	21	17=	-	-
Improving access to learning through the provision of open education courses (e.g. MOOCs)	29	28	24	-	-	-	-	-
Improving access to learning through the provision of open education resources	30	27	23	-	-	-	-	-
Improving access to learning for students off-campus	-	-	3	3	3	3	2	2
Assisting institutional view regarding learning styles	-	-	21	21	22	17=	-	-
Help to standardise across institution	-	-	-	-	-	-	8	8
Help to standardise institution with others	-	-	-	-	-	-	19	18

Question 1.3: How important, if at all are the following factors in *encouraging* the development of TEL and processes that promote it?

Table C1.3: Factors encouraging development of TEL

Factor	Rank 2018	Mean 2018	Rank 2016	Mean 2016	Rank 2014	Mean 2014	Rank 2012	Mean 2012	Rank 2010	Mean 2010	Rank 2008	Mean 2008	Rank 2005	Mean 2005
Availability of technology enhanced learning support staff	1	3.67	1	3.70	2	3.69	1	3.77	1	3.56	-	-	-	-
Feedback from students	2	3.64	2	3.52	1	3.70	-	-	-	-	-	-	-	-
Central university senior management support	3	3.51	5	3.31	4	3.49	2	3.49	3	3.46	-	-	-	-
School/departmental senior management support	4	3.42	4	3.44	5	3.45	3	3.44	4	3.33	-	-	-	-
Feedback from staff*	5	3.40	-	-	-	-	-	-	-	-	-	-	-	-
Availability and access to tools across the institution	6	3.37	3	3.44	3	3.50	4	3.39	2	3.52	-	-	-	-
Availability of committed local champions	7	3.15	6	3.22	6	3.42	5	3.36	5	3.3	1	3.54	2	3.85
Technological changes/ developments	8	3.15	7	3.13	7	3.2	6	3.21	6	3.10	3	3.11	3	3.21
Availability of university committees and steering groups to guide development and policy	9	3.12	9	2.92	8	3.14	-	-	-	-	-	-	-	-
Availability of internal project funding	10	3.02	8	3.03	9	3.12	7	3.06	7	2.93	2	3.41	1	3.95
Threshold/minimum/baseline standards*	11	2.91	-	-	-	-	-	-	-	-	-	-	-	-
Availability and access to relevant user groups/online communities	12	2.84	10	2.72	10	2.85	-	-	-	-	-	-	-	-
Partnership with students on TEL projects (students as co-creators)	13	2.56	11	2.57	-	-	-	-	-	-	-	-	-	-
Availability of relevant technical standards	14	2.54	12	2.5	12	2.41	9	2.29	9	1.92	5	2.12	5	2.1
Availability of external project funding (e.g. Jisc, HEA, HEFCE, HEFCW, SFC, DfE)	15	2.27	13	2.32	11	2.51	8	2.64	8	2.79	4	3.07	4	3.13

Question 2.1: Which, if any, *institutional strategies*, inform the development of technology enhanced learning in your institution?

Table C2.1: Institutional strategies that have informed TEL development

	Total 2018	Rank 2018	Total 2016	Rank 2016	Total 2014	Rank 2014	Total 2012	Rank 2012	Total 2010	Rank 2010	Total 2008	Rank 2008	Total 2005	Rank 2005	Total 2003	Rank 2003
Teaching, learning and assessment strategy	88%	1	91%	1	92%	1	93%	1	99%	1	100%	1	95%	1	64%	1
Student learning experience strategy	39%	4	58%	2	47%	5	44%	5	-	-	-	-	-	-	-	-
Corporate strategy	53%	2	56%	3	52%	2	67%	2	59%	3	70%	4	53%	5	-	-
Library/learning resources strategy	42%	3	53%	4	47%	4	64%	3	75%	2	76%	2=	74%	2	48%	2
Technology enhanced learning or e-learning strategy	34%	6	48%	5	47%	6	43%	6	48%	6	76%	2=	55%	4	37%	5
Information and Communication Technology (ICT) strategy	35%	5	48%	6	48%	3	56%	4	51%	5	46%	8	56%	3	45%	4
Employability strategy	32%	=8	38%	7	33%	7	-	-	-	-	-	-	-	-	-	-
Quality enhancement strategy	12%	14	32%	8	25%	9	35%	7	53%	4	58%	5=	41%	8	-	-
Access/widening participation strategy	28%	10	30%	10	25%	8	28%	8	40%	7	54%	7	50%	7	-	-
Information and Learning Technology (ILT) strategy	13%	=18	30%	11	24%	11	25%	10	24%	10	41%	10	38%	9	32%	6
Estates strategy	33%	7	28%	12	22%	12	28%	9	26%	9	58%	5=	24%	10	-	-
Digital literacy/digital capability strategy	24%	13	26%	13	15%	15	-	-	-	-	-	-	-	-	-	-
International strategy	17%	15	25%	14	25%	10	-	-	-	-	-	-	-	-	-	-
Distance learning	15%	16	23%	15	10%	18	12%	15	-	-	-	-	-	-	-	-
Digital strategy/e-strategy	26%	=11	20%	16	10%	17	1%	19	11%	15	11%	14	8%	13	-	-
Mobile learning strategy	7%	=25	18%	17	17%	13	19%	127	-	-	-	-	-	-	-	-
Information strategy	8%	=23	15%	18	14%	16	18%	13	37%	8	45%	9	52%	6	46%	3
Other institutional strategy	14%	17	13%	19	17%	14	22%	11	13%	14	10%	15	6%	14	16%	7
Digital media strategy	11%	21	12%	20	8%	20	9%	16	-	-	-	-	-	-	-	-
Marketing strategy	13%	=18	10%	21	9%	19	13%	14	14%	12	27%	12	23%	11	-	-
Open learning strategy	9%	22	10%	22	-	-	-	-	-	-	-	-	-	-	-	-
Human resources strategy	13%	=18	10%	23	5%	22	9%	17	14%	13	28%	11	3%	15	-	-
Communications strategy	8%	=23	7%	24	7%	21	8%	18	15%	11	15%	13	8%	12	14%	8
Competition and Markets Authority (CMA) strategy	7%	=25	4%	25	-	-	-	-	-	-	-	-	-	-	-	-

	Total 2018	Rank 2018	Total 2016	Rank 2016	Total 2014	Rank 2014	Total 2012	Rank 2012	Total 2010	Rank 2010	Total 2008	Rank 2008	Total 2005	Rank 2005	Total 2003	Rank 2003
Student engagement strategy*	32%	=8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not considered in any institutional strategy documents*			1%	26	-	-	-	-	-	-	-	-	-	-	-	-
Staff development strategy	26%	=11														

Question 2.2: How is TEL governance managed within your institution? Do you have any of the following committees/working groups with an *institutional remit*, looking at TEL activity across the institution?

Table C2.2: Management of TEL governance within institutions

	Total 2018	Total 2016
TEL/e-learning/blended learning	52%	48%
Distance learning (fully online delivery)	26%	19%
Mobile learning	2%	3%
Open learning/MOOC development	20%	17%
Teaching and learning	70%	-
Learning spaces*	37%	-
Electronic Management of Assignments (EMA)*	28%	-
e-assessment (eg. quizzes)	14%	-
Lecture capture	31%	-
Learning analytics	34%	-
Don't have committees/working groups with an institutional remit looking at TEL	11%	20%

Question 2.3: Which three external strategy documents or reports have been most useful in planning TEL in your institution?

Note that in 2018 the above question replaced two questions that were asked previously (one about external strategy documents and the other about external reports). So, the two previous questions were combined into one and only the top three most useful were asked for in 2018. The longitudinal analysis is, therefore, more difficult, but commentary has been added to the report where possible. Data for 2018 is in Appendix A (Table A2.3).

Question 2.2: Which, if any, *external strategy documents* inform the development of technology enhanced learning in your institution?

Table C2.2: External strategy documents/reports that have informed the development of TEL

	Total 2016	Total 2014	Total 2012	Total 2010	Total 2008	Total 2005
JISC strategies	71%	56%	67%	80%	77%	24%
HEFCE e-learning strategy (2005 and 2009)	51%	58%	69%	80%	80%	50%
Strategies from professional bodies or agencies	29%	21%	32%	37%	34%	73%
Other HEFCE strategy documents	17%	21%	30%	34%	28%	68%
Enhancing Learning & Teaching through Technology: refreshing the HEFCW strategy 2011	16%	15%	24%	10%	-	-
No external strategy documents inform development	11%	15%	7%	-	1%	0%
Joint Scottish Funding Councils eLearning Report	10%	3%	11%	15%	11%	27%
Other external strategy	9%	5%	4%	8%	18%	6%
Department for Employment and Learning Northern Ireland (DELNI)	3%	1%	1%	1%	-	-

Question 2.3: Which, if any, *external reports or documents* inform the development of technology enhanced learning in your institution?

Table C2.3: External reports or documents that have informed the development of TEL

External reports or documents	Total 2016	Total 2014	Total 2012	Total 2010
JISC: Developing Digital Literacies (2012)	73%	67%	-	-
UCISA Survey of Technology Enhanced Learning for higher education (2014/2012)	61%	71%	-	-
Changing the Learning Landscape Report (2012–14)*	58%	-	-	-
Jisc: Enhancing the student digital experience: a strategic approach (2014)*	57%	-	-	-
JISC: Enhancing curriculum design with technology (2013)	56%	46%	-	-
HeLF: Electronic Management of Assessment Survey Report (2013)	47%	44%	-	-
NMC Horizon Report Higher Education Edition (2015)*	45%	-	-	-
HeLF Learning Analytics report (2015)*	36%	-	-	-
Jisc: Code of practice for learning analytics (2015)*	36%	-	-	-
Jisc/NUS Benchmarking tool – the student digital experience (2015)*	36%	-	-	-
NUS Charter on Technology in HE (2011)	33%	42%	-	-
MOOCs and Open Education: Implications for Higher Education (2013)	30%	49%	-	-
HEFCE Review of the National Student Survey (2014)*	30%	-	-	-
The Open University: Innovation Pedagogy Report (2014)*	29%	-	-	-
BIS: Students at the Heart of the System (2011)*	26%	-	-	-
Jisc: Developing successful student-staff partnerships (2015)*	26%	-	-	-
HEFCE's Strategic Statement: Opportunity, choice and excellence in higher education (2011)	21%	23%	31%	-
HeLF Tablet Survey Report (2014)*	21%	-	-	-
Gibbs (2012) Implications of Dimensions of quality in a market environment	19%	27%	-	-
NUS report: Radical interventions in teaching and learning (2014)*	18%	-	-	-
Department for Business Innovation & Skills report on MOOCs (2013): The Maturing of the MOOC	15%	29%	-	-
NUS connect: A Manifesto for Partnership (2015)*	13%	-	-	-
HEFCE's Collaborate to Compete paper (2011)	11%	22%	31%	-
Department for Business and Skills FELTAG report (2014)*	11%	-	-	-
HEPI-HEA Student Academic Experience Survey (2015)*	10%	-	-	-
Other external reports or documents	10%	11%	21%	33%
E-Learning in European Higher Education Institutions: EUA report (2014)*	8%	-	-	-
No external reports or documents inform development	4%	4%	12%	8%
JISC: Learning in a digital age: Extending higher education opportunities for lifelong learning (2012)*	-	59%	-	-
NUS's Student Perspectives on Technology report (2010)	-	59%	53%	-
JISCinfoNET: Emerging Practice in a Digital Age (2011)	-	49%	60%	-
NMC Horizon Report Higher Education Edition (2013)	-	43%	-	-
Online Learning Task Force's Study of UK online learning (2010)	-	34%	44%	-
Effective Practice in a Digital Age (JISC, 2009)	-	-	65%	75%
HE in a Web 2.0 World (JISC, 2009)	-	-	51%	-
JISCinfoNET: Exploring Tangible Benefits of e-learning in HE (2008)	-	-	40%	67%
Leitch Review of Skills (2006)	-	-	26%	52%
Sir Ron Cooke's submission to DIUS: On-line Innovation in HE (2008)	-	-	24%	41%
Not answered	-	-	2%	2%

Question 2.4: What institutional policies, if any link strategy and implementation of technology enhanced learning tools?

Table C2.4: Institutional policies which link strategy with implementation of TEL tools

	2018		2016		2014		2012		2010		2008	
	No	Total	No.	Total	No.	Total	No.	Total	No.	Total	No.	Total
Learning, teaching and assessment policies	59	59%	71	70%	62	68%	18	18%	33	36%	16	22%
VLE usage policy (minimum requirements)	58	58%	69	68%	53	58%	21	21%	-	-	-	-
Faculty or departmental/ school plans	44	44%	63	62%	55	60%	20	20%	-	-	-	-
VLE guidelines/description of VLE service	41	41%	61	60%	43	47%	11	11%	-	-	-	-
e-assessment/e-submission policy #	-	-	50	50%	37	41%	15	15%	-	-	-	-
EMA policy*	36	36%	-	-	-	-	-	-	-	-	-	-
e-assessment policy*	24	24%	-	-	-	-	-	-	-	-	-	
TEL or e-learning strategy/ action plan	37	37%	44	44%	41	45%	18	18%	18	20%	17	23%
Mobile policy*	12	12%	-	-	-	-	-	-	-	-	-	-
Lecture capture guidelines/ policy	59	59%	44	44%	-	-	-	-	-	-	-	-
Other institutional policy	8	8%	8	8%	16	18%	-	-	-	-	-	-
There are no institutional policies that link strategy and implementation	6	6%	3	3%	4	4%	-	-	-	-	-	-

note that this policy was split out into two separate policies for the 2018 survey

Question 3.1: Is there a VLE *currently* in use in your institution?

Table C3.1: Institutional VLE currently in use

	HE Total 2018	HE Total 2016	HE Total 2014
Yes	99%	100%	100%
No	1%	0%	0%

Question 3.2: Which VLE(s), if any, is/are *currently* used in your institution?

Table C3.2: VLEs currently used

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008	HE Total 2005	HE Total 2003	HE Total 2001
Moodle	55%	53%	62%	58%	55%	55%	8%	-	-
Blackboard Learn	43%	46%	49%	38%	9%	-	-	-	-
FutureLearn	30%	24%	5%	-	-	-	-	-	-
Canvas (by Instructure)	16%	7%	2%	-	-	-	-	-	-
Open Education (by Blackboard)	9%	9%	-	-	-	-	-	-	-
Coursera	8%	6%	1%	-	-	-	-	-	-
Other VLE developed in house	6%	12%	12%	11%	15%	23%	38%	23%	11%
SharePoint	6%	5%	12%	6%	13%	-	-	-	-
edX	4%	2%	0%	-	-	-	-	-	-
Other *commercial* VLE	4%	2%	2%	6%	3%	4%	0%	-	-
Other MOOC platform	4%	6%	-	-	-	-	-	-	-
Blackboard Ultra*	3%	-	-	-	-	-	-	-	-
Brightspace (by Desire2Learn)	3%	2%	2%	2%	2%	5%	-	-	-
Other intranet based – developed *in house*	3%	1%	3%	7%	2%	12%	17%	26%	-
Other *open source* VLE	3%	2%	1%	2%	2%	4%	-	-	-
Sakai	2%	2%	2%	3%	3%	5%	-	-	-
Joule (by Moodlerooms)	1%	3%	-	-	-	-	-	-	-

Question 3.3: Out of the above which is the *main* VLE in use across your institution?

Table C3.3: The *main* VLE in use

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008
Moodle	46%	43%	39%	31%	23%	11%
Blackboard Learn	42%	45%	49%	39%	9%	-
Canvas (by Instructure)	8%	2%	1%	-	-	-
Brightspace (by Desire2Learn)	2%	2%	2%	1%	1%	1%
Joule (by Moodlerooms)	1%	1%	-	-	-	-
Other VLE developed *in house*	1%	0%	0%	0%	0%	1%
Sakai	1%	1%	2%	2%	1%	1%
Blackboard Angel	-	0%	0%	0%	1%	-
Blackboard Classic	-	1%	0%	9%	25%	-
Blackboard Ultra*	0%	-	-	-	-	-
Blackboard WebCT	-	0%	0%	9%	-	-
Other *commercial* VLE	0%	0%	0%	1%	0%	1%
Other *open source* VLE	0%	1%	0%	-	-	-
Pearson eCollege	-	1%	1%	-	-	-
SharePoint	0%	2%	1%	1%	3%	-
WebCT	-	-	-	-	20%	23%

Question 3.4: Is the *main* VLE used for each of the following or not?

Table C3.4 (i): The *main* VLE and blended learning (campus-based courses)

	HE Total 2018	HE Total 2016
Yes	96%	99%
No. Another VLE is used	0%	0%
No. Mode of delivery not supported *using a VLE*	0%	0%
No. Mode of delivery not supported	4%	1%

Table C3.4 (ii): The *main* VLE and distance learning

	HE Total 2018	HE Total 2016
Yes	77%	86%
No. Another VLE is used	10%	4%
No. Mode of delivery not supported *using a VLE*	1%	1%
No. Mode of delivery not supported	12%	8%

Table C3.4 (iii): The *main* VLE and open online learning

	HE Total 2018	HE Total 2016
Yes	7%	17%
No. Another VLE is used	38%	26%
No. Mode of delivery not supported using a VLE	7%	12%
No. Mode of delivery not supported	48%	44%

Question 3.5: Thinking about the (main) VLE in use, which of the following best describes how your platform is technically managed?

Table C3.5: Hosting results for main institutional VLE

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Institutionally hosted and managed	48%	57%	67%	80%
Institutionally managed but hosted by third party	38%	37%	33%	20%
Cloud-based software as a service/multi-tenant service	14%	7%	-	-

Table C3.5(i): Hosting results per platform for *main* institutional VLE

		Institutionally hosted and managed		Institutionally managed but hosted by third party		Cloud-based software as a service/multi-tenant service*		Total
	Year	No.	%	No.	%	No.	%	No.
Moodle	2018	27	57%	17	36%	3	6%	47
	2016	28	60%	18	38%	1	2%	47
	2014	22	60%	15	40%	-	-	37
Blackboard Learn	2018	20	47%	21	49%	2	5%	43
	2016	26	54%	20	42%	2	4%	48
	2014	32	70%	14	30%	-	-	46
Canvas (by Instructure)	2018	0	0%	0	0%	8	100%	8
	2016	0	0%	0	0%	2	100%	2
	2014	0	0%	1	100%	-	-	1
Brightspace (by Desire2Learn)	2018	1	50%	0	0%	1	50%	2
	2016	2	100%	0	0%	0	0%	2
	2014	2	100%	0	0%	-	-	2
Joule (by Moodlerooms)	2018	0	0%	1	100%	0	0%	1
	2016	0	0%	0	0%	1	100%	1
	2014	-	-	-	-	-	-	-
Other VLE – developed *in house*	2018	1	100%	0	0%	0	0%	1
	2016	0	0%	0	0%	0	0%	0
	2014	4	100%	0	0%	-	-	4
Sakai	2018	1	100%	0	0%	0	0%	1
	2016	1	100%	0	0%	0	0%	1
	2014	2	100%	0	0%	-	-	2

Note: Cloud-based Software as a Service (SaaS) was not available as a response option in the 2014 Survey. Canvas respondents, therefore, opted for the *hosted by a third party* option.

Question 3.6: Who is the external provider that hosts your (main) VLE?

Table C3.6: External provider that host (main) VLE

	HE Total 2018	HE Total 2016
Blackboard Managed Hosting	43%	53%
CoSector (previously ULCC)	30%	37%
Other external provider	13%	-
Instructure	9%	5%
Moodlerooms*	2%	-
Webanywhere*	2%	-
Synergy Learning	0%	5%

Note that the format of this question changed from an open response question in 2016 to a pre-coded list of options in 2018

Question 3.7: Does your institution currently outsource its *provision* of any of the following? Provision refers to an institutional service being hosted by another organisation.

Table C3.7: Whether currently outsource provision

	HE Total 2018	HE Total 2016
Lecture capture platform	46%	23%
Digital repositories (e.g. Google Drive, Google Docs)	34%	10%
e-portfolio	34%	35%
Media streaming*	33%	-
VLE platform – supporting the delivery of blended learning courses	32%	33%
VLE platform – supporting the delivery of open online courses	27%	21%
VLE platform – supporting the delivery of fully online courses	25%	26%
No outsourced provision	20%	19%
Learning analytics*	9%	-
Don't know	2%	3%
Student email#	-	59%
Staff email#	-	30%
Content creation#	-	2%
Other#	-	12%

*new response options in 2018, not shown in 2016
#response options in 2016, not used in 2018

Question 3.8: How is the provision of these services currently outsourced?

Table C3.8: How the institutional services identified in Question 3.7 are currently outsourced

		Institutionally managed but hosted by third party		Cloud-based software as a service/multi-tenant service		Don't know		Total
	Year	No.	%	No.	%	No.	%	No.
Lecture capture platform	2018	12	25%	35	73%	1	2%	48
	2016	13	57%	10	43%	0	0%	23
Digital repositories (e.g. Google Drive, Google Docs)	2018	10	29%	25	71%	0	0%	35
	2016	8	80%	1	10%	1	10%	10
e-portfolio	2018	19	54%	16	46%	0	0%	35
	2016	25	71%	10	29%	0	0%	35
Media streaming*	2018	12	35%	21	62%	1	3%	34
	2016	-	-	-	-	-	-	-
VLE platform – supporting the delivery of blended learning courses	2018	20	61%	13	39%	0	0%	33
	2016	24	73%	9	27%	0	0%	33
VLE platform – supporting the delivery of open online courses	2018	11	39%	17	61%	0	0%	28
	2016	10	48%	11	52%	0	0%	21
VLE platform – supporting the delivery of fully online courses	2018	13	50%	12	46%	1	4%	26
	2016	18	69%	7	27%	1	4%	26
Learning analytics*	2018	4	44%	4	44%	1	12%	9
	2016	-	-	-	-	-	-	-
Student email#	2018	-	-	-	-	-	-	-
	2016	14	24%	44	75%	1	2%	59
Staff email#	2018	-	-	-	-	-	-	-
	2016	9	30%	21	70%	0	0%	30
Content creation#	2018	-	-	-	-	-	-	-
	2016	2	100%	0	0%	0	0%	2
Other#	2018	-	-	-	-	-	-	-
	2016	4	33%	7	58%	1	8%	12

Question 3.9: Which, if any, of the services that are currently outsourced are you considering bringing back in to be institutionally managed?

Table C3.9: Services that are currently outsourced are under consideration for bringing back in to be institutionally managed

	HE Total 2018	HE Total 2016
None being considered for bringing back in house	100%	92%
VLE platform – supporting the delivery of blended learning courses	0%	4%
VLE platform – supporting the delivery of fully online courses	0%	3%
VLE platform – supporting the delivery of open online courses	0%	1%
Lecture capture platform	0%	3%
Digital repositories (e.g. Google Drive, Google Docs)	0%	-
e-portfolio	0%	4%
Learning analytics*	0%	-
Media streaming*	0%	-
Student email#	-	1%
Staff email#	-	0%
Content creation#	-	0%
Other#	-	0%
Don't know	0%	4%

*new response options in 2018, not shown in 2016
#response options in 2016, not used in 2018

Question 3.10: Is your institution formally considering the outsourcing of some or all of your *provision* for any of the following? Provision refers to an institutional service being hosted by another organisation?

Table C3.10: Services being formally considered for outsourcing

	HE Total 2018	HE Total 2016
None being considered for outsourcing	45%	40%
VLE platform – supporting the delivery of blended learning courses	20%	39%
VLE platform – supporting the delivery of fully online courses	16%	39%
Learning analytics*	15%	-
Lecture capture platform	14%	31%
Media streaming*	10%	-
e-portfolio	9%	20%
Don't know	9%	11%
VLE platform – supporting the delivery of open online courses	5%	29%
Digital repositories (e.g. Google Drive, Google Docs)	4%	14%
Student email#	-	16%
Staff email#	-	47%
Content creation#	-	24%

*new response options in 2018, not shown in 2016
#response options in 2016, not used in 2018

Question 3.11: What option(s) are being considered for the outsourcing of this provision?

Table C3.11: Options being considered for outsourcing

		Institutionally managed but hosted by third party		Cloud-based software as a service/multi-tenant service		Don't know/ options still being considered		Total
	Year	No.	%	No.	%	No.	%	No.
VLE platform – supporting the delivery of blended learning courses	2018	2	10%	10	48%	9	43%	21
	2016	10	43%	8	35%	5	22%	23
VLE platform – supporting the delivery of fully online courses	2018	0	0%	10	59%	7	41%	17
	2016	7	29%	9	38%	8	33%	24
Learning analytics*	2018	1	6%	4	25%	11	69%	16
	2016	-	-	-	-	-	-	-
Lecture capture platform	2018	1	6%	10	67%	4	27%	15
	2016	5	28%	6	33%	7	39%	18
Media streaming*	2018	2	20%	4	40%	4	40%	10
	2016	-	-	-	-	-	-	-
e-portfolio	2018	1	11%	5	56%	3	33%	9
	2016	5	42%	5	42%	2	17%	12
VLE platform – supporting the delivery of open online courses	2018	0	0%	3	60%	2	40%	5
	2016	4	24%	7	41%	6	35%	17
Digital repositories (e.g. Google Drive, Google Docs)	2018	0	0%	3	75%	1	25%	4
	2016	3	27%	3	27%	5	45%	11
Student email#	2018	-	-	-	-	-	-	-
	2016	0	0%	6	75%	2	25%	8
Content creation#	2018	-	-	-	-	-	-	-
	2016	0	0%	0	0%	12	100%	12

Question 3.12: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff?

Table C3.12: Considered collaboration with other HE institutions

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Yes, and do collaborate as a result	7%	15%	20%	37%
Yes, currently under consideration so no decision reached	6%	10%	-	-
Yes, did consider but decided *not* to collaborate	5%	4%	11%	-
No, have not considered	69%	61%	69%	63%
Don't know	13%	10%	-	-

Question 3.16: Has your institution undertaken a review of a major institutional TEL facility or system/VLE in the *last two years*?

Table C3.16: Review of TEL facility/VLE in the last two years

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Yes	47%	44%	51%	62%
No	53%	56%	49%	38%

Question 3.17: Which major TEL facilities or systems have been reviewed in the *last two years*?

Table C3.17: TEL facilities or systems that have been reviewed in the last two years

	HE Total 2018	HE Total 2016
VLE	82%	83%
Lecture capture	47%	47%
e-portfolio	27%	30%
Learning analytics	27%	26%
Electronic Management of Assignments (EMA)*	18%	-
Media streaming*	18%	-
Other	14%	14%
MOOC platform	12%	16%
e-assessment	12%	35%
Mobile learning	4%	12%

Table C3.17(i): Cross-tabulation of *main institutional VLE* with *TEL/VLE review conducted in the last two years*

Main institutional VLE		Conducted review in last two years		
	Year	No.	*Main VLE total (3.3)*	%
Blackboard Learn	2018	16	*43*	37%
	2016	14	*48*	29%
	2014	27	*46*	59%
Moodle	2018	15	*47*	32%
	2016	26	*47*	55%
	2014	13	*37*	35%
Canvas (by Instructure)	2018	5	*8*	63%
	2016	2	*2*	100%
	2014	1	*1*	100%
BrightSpace (by D2L)	2018	2	*2*	100%
		-	-	-
		-	-	-
Joule (by Moodlerooms)*	2018	1	*1*	100%
	2016	1	*1*	100%
		-	-	-
Sakai	2018	1	*1*	100%
	2016	1	*1*	100%
	2014	1	*2*	50%
Blackboard Classic	2018	0	*0*	0%
	2016	1	*1*	100%
	2014	0	*0*	0%
SharePoint	2018	0	*0*	0%
	2016	1	*2*	50%
	2014	1	*1*	100%
Other *open* source VLE	2018	-	-	-
	2016	1	*1*	100%
	2014	0	*0*	0%

Question 3.18: Please write the outcome of the review on these TEL facilities or systems

Table C18: Outcomes of the VLE review

Outcomes	Frequency			
	2018	2016	2014	2012
Switch to a different VLE platform	**10**	**4**	**15**	**29**
• From Moodle to Canvas (by Instructure)	(2)	(2)	-	-
• From Sakai to Canvas (by Instructure)	(1)	(1)	-	-
• From Blackboard to Moodle	(0)	(1)	(4)	(2)
• From Blackboard WebCT to Moodle	-	-	(3)	(12)
• From Blackboard WebCT to Blackboard Learn	-	-	(3)	(10)
• From Blackboard WebCT to Desire2Learn	-	-	(1)	(1)
• From Blackboard WebCT to Canvas (by Instructure)	-	-	(1)	-
• From Blackboard WebCT to Pearson eCollege	-	-	(1)	-
• From Moodle to Blackboard	-	-	(1)	-
• From SharePoint to Moodle	(0)	(0)	(1)	-
• From VLE developed in house to Moodle	(0)	(0)	(1)	(3)
• From Blackboard to Canvas (by Instructure)	(0)	(0)	(0)	(1)
• From Moodle to Brightspace (by Desire2Learn)	(2)	-	-	-
• From Blackboard to Brightspace (by Desire2Learn)	(2)	-	-	-
• From Pearson Learning Studio to Canvas (by Instructure)	(1)	-	-	-
• From not specified to Canvas (by Instructure)	(1)	-	-	-
	(1)	-	-	-
Continue with the same VLE platform	**8**	**13**	**15**	**8**
• Blackboard Learn	(4)	(6)	(12)	
• Moodle	(3)	(5)	(1)	
• Canvas (by Instructure)	(0)	(1)	(0)	
• WordPress	(0)	(1)	-	
• Other VLE developed *in house*	(0)	-	(2)	
• Brightspace (by Desire2Learn)	(1)			
Continue with the same platform and upgrade to latest version	**7**	**9**	**9**	**17**
• Moodle	(5)	(9)	(3)	(5)
• Blackboard Learn	(2)	(0)	(5)	(12)
• Sakai	(0)	(0)	(1)	-
Review process not yet complete	**4**	**9**	**2**	**5**
• Blackboard Learn	(4)	(4)	(2)	
• Moodle	(0)	(4)	(0)	
• SharePoint	(0)	(1)	(0)	
Switch to external hosting for same VLE platform	**4**	**6**	**4**	**5**
• Move to Blackboard Managed Hosting (for Blackboard Learn)	(3)	(3)	(3)	(2)
• Move to external hosting provider (for Moodle)	(1)	(2)	(1)	(3)
• Move to Moodlerooms (for Joule)	(0)	(1)	-	-
Continue with the same VLE platform and hosting provider	**0**	**3**	**0**	**-**
• Stay with CoSector (for Moodle)		(2)	(0)	
• Stay with unnamed provider (for Moodle)		(1)	(0)	
Move from two VLE platforms to one platform	**0**	**1**	**0**	**0**
• From Blackboard and Moodle to Blackboard		(1)	-	-
Establish closer integration between VLE and other TEL systems	**0**	**0**	**0**	**3**
Re-organisation of TEL support provision and governance	**0**	**0**	**0**	**1**

Question 3.19: Are you planning to undertake a review of a major institutional TEL facility or system within the *next two years*?

Table C3.19: Institutional review of TEL facility or system in next two years

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Planning a review in the next year	37%	-	-	-
Planning a review in the next two years	29%	45%	32%	34%
Not planning a review in the next two years	35%	55%	68%	66%

Question 3.20: Which major TEL facilities or systems are you planning on reviewing in the next two years?

Table C3.20: TEL facilities or systems planning on reviewing in the next two years

	HE Total 2018	HE Total 2016
VLE	65%	70%
Lecture capture	46%	43%
e-assessment	40%	52%
Learning analytics	37%	43%
Electronic Management of Assignments (EMA)*	34%	-
e-portfolio	29%	40%
Media streaming*	28%	-
Mobile learning	15%	21%
Other	9%	12%
MOOC platform	7%	12%

Table C3.20(i): Cross-tabulation of *main institutional VLE* with *TEL/VLE review to be conducted in the next two years*

Main institutional VLE		Review to be conducted in next two years		
	Year	No.	Main VLE total (3.3)	%
Blackboard Learn	2018	25	43	58%
	2016	24	48	50%
	2014	20	46	43%
Moodle	2018	17	47	36%
	2016	16	47	34%
	2014	6	37	16%
Canvas (by Instructure)	2018	1	8	13%
	2016	0	2	0%
	2014	0	1	0%
Other VLE developed *in house*	2018	1	1	100%
	2016	-	-	-
	2014	1	4	25%
Sakai	2018	1	1	100%
	2016	0	1	0%
	2014	2	2	100%
Brightspace (by Desire2Learn)	2018	0	2	0%
	2016	2	2	100%
	2014	1	2	50%

Main institutional VLE		Review to be conducted in next two years		
	Year	No.	Main VLE total (3.3)	%
Blackboard Classic	2018	-	-	-
	2016	1	1	100%
	2014	-	-	-
Other *open* source VLE	2018	-	-	-
	2016	1	1	100%
	2014	-	-	-
Pearson eCollege	2018	-	-	-
	2016	1	1	100%
	2014	1	1	100%
SharePoint	2018	-	-	-
	2016	2	2	100%
	2014	0	1	0%

Question 3.21: Which, if any, *centrally-supported* technology enhanced learning software tools are used by *students* in your institution?

Table C3.21: Centrally-supported software tools used by students

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008
VLE	94%	99%	95%	-	-	-
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	89%	90%	95%	92%	92%	-
Asynchronous communication tools (e.g. discussion forums)	84%	85%	-	-	-	-
Formative e-assessment tool (e.g. quizzes)	81%	87%	71%	79%	80%	-
Document sharing tool (e.g. Google Docs, Office 365)	81%	76%	45%	51%	-	-
Lecture capture tools	75%	71%	63%	51%	-	-
e-portfolio	73%	74%	78%	76%	72%	68%
Summative e-assessment tool (e.g. quizzes)	71%	81%	-	-	-	-
Blog	68%	76%	73%	72%	74%	72%
Personal response systems (including handsets or web-based apps)	67%	67%	70%	-	-	-
Electronic Management of Assignments (EMA)*	67%	-	-	-	-	-
Reading list management software	64%	66%	55%	-	-	-
Media streaming system	63%	73%	65%	-	-	-
Webinar	53%	60%	-	-	-	-
Mobile apps	51%	62%	-	-	-	-
Synchronous collaborative tools (e.g. virtual classroom)	49%	55%	-	-	-	-
Wiki	48%	63%	66%	74%	75%	64%
Screen casting	43%	49%	31%	-	-	-
Learning analytics tool	31%	19%	-	-	-	-
Content management systems	27%	32%	32%	40%	-	-
Digital/learning repository	26%	34%	34%	-	-	-
Other software tool	19%	19%	30%	42%	44%	12%

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008
Social networking	18%	25%	15%	33%	33%	-
Podcasting	17%	35%	46%	62%	69%	69%
Electronic essay exams	16%	14%	-	-	-	-
Social bookmarking/content curation tools	10%	6%	5%	9%	19%	28%
e-submission tools (assignment)	-	93%	85%	87%	89%	-

Table C3.22: Software tools used by students who are *not* centrally-supported

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008
Social networking	42%	59%	64%	73%	81%	-
Document sharing tool	40%	44%	62%	52%	-	-
Blog	36%	39%	59%	60%	59%	46%
Personal response systems	26%	26%	26%	-	-	-
Mobile apps	24%	30%	-	-	-	-
Asynchronous communication tools (e.g. discussion forums)	18%	18%	-	-	-	-
None used	18%	17%	6%	6%	-	-
Other software tool	15%	14%	26%	36%	33%	32%
e-portfolio	14%	17%	19%	23%	25%	11%
Media streaming system	12%	21%	26%	-	-	-
Synchronous collaborative tools (e.g. virtual classroom)	12%	19%	-	-	-	-
Formative e-assessment tool (e.g. quizzes)	11%	10%	14%	23%	27%	26%
Podcasting	11%	11%	21%	22%	41%	31%
Social bookmarking/content curation tools	11%	20%	31%	40%	48%	30%
Summative e-assessment tools (e.g. quizzes)	11%	4%	-	-	-	-
Virtual Learning Environment (VLE)	11%	11%	20%	21%	23%	26%
Webinar	11%	11%	-	-	-	-
Screen casting	10%	22%	26%	-	-	-
Content management systems	7%	6%	7%	-	-	-
Lecture capture tools	7%	9%	19%	20%	-	-
Wiki	6%	11%	17%	36%	51%	34%

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012	HE Total 2010	HE Total 2008
Digital/learning repository	5%	10%	8%	-	-	-
Reading list management software	4%	3%	4%	-	-	-
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	4%	1%	-	-	-	-
Electronic Management of Assignments (EMA)*	3%	-	-	-	-	-
Learning analytics tool	3%	1%	-	-	-	-
Electronic essay exams	1%	1%	-	-	-	-
e-submission tool (assignments)	-	5%	9%	8%	15%	-

Question 3.24: How does your institution promote the use of student/staff owned mobile devices in support of learning, teaching and assessment activities?

Table C3.24: Methods used to promote mobile device usage

	HE Total 2018	HE Total 2016	HE Total 2014
Institutional Bring Your Own Device (BYOD) policy and supporting mobile device usage on campus	46%	43%	-
Loaning of devices to students or staff	42%	40%	42%
Institution does not promote the use of mobile devices	21%	15%	24%
Other method of promoting use of mobile devices	17%	22%	30%
Free provision of devices to staff/students	15%	8%	18%
Funding for mobile learning projects	10%	23%	35%
Institutional switch-on policy to encourage use of devices by staff and students for learning, teaching and assessment	6%	15%	17%

Question 4.1: Does your institution offer any of the following types of programmes or courses?

Table C4.1a: Blended learning: lecture notes and supplementary resources for courses studied in class are available

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	73%	79%
Yes, across some schools/departments	19%	13%
Yes, by some individual teachers	7%	7%
Not yet, but we are planning to	0%	0%
Not offered and no plans to do so	1%	0%
Don't know/not applicable	0%	1%

Table C4.1b: Blended learning: parts of the course are studied in class and other parts require students to engage in active learning online (e.g. engaging in collaborative or assessed tasks)

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	18%	19%
Yes, across some schools/departments	43%	46%
Yes, by some individual teachers	35%	31%
Not yet, but we are planning to	3%	1%
Not offered and no plans to do so	1%	2%
Don't know/not applicable	0%	1%

Table C4.1c: Fully online courses

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	5%	8%
Yes, across some schools/departments	50%	46%
Yes, by some individual teachers	24%	26%
Not yet, but we are planning to	9%	13%
Not offered and no plans to do so	10%	7%
Don't know/not applicable	1%	0%

Table C4.1d: Open online learning courses for all students at your institution (internal access only)

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	4%	7%
Yes, across some schools/departments	19%	16%
Yes, by some individual teachers	18%	18%
Not yet, but we are planning to	19%	20%
Not offered and no plans to do so	30%	28%
Don't know/not applicable	9%	11%
Not answered	1%	0%

Table C4.1e: Open online boundary courses: free external access to the course materials for the public, but assessment restricted to students registered at your institution only

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	0%	2%
Yes, across some schools/departments	12%	4%
Yes, by some individual teachers	8%	13%
Not yet, but we are planning to	10%	15%
Not offered and no plans to do so	56%	54%
Don't know/not applicable	12%	11%
Not answered	2%	2%

Table C4.1f: Open online learning courses for public (free external access)

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	3%	4%
Yes, across some schools/departments	24%	15%
Yes, by some individual teachers	16%	19%
Not yet, but we are planning to	9%	14%
Not offered and no plans to do so	42%	40%
Don't know/not applicable	6%	6%
Not answered	0%	1%

Table C4.1g: Other programme or course

	HE Total 2018	HE Total 2016
Yes, extensively across the institution	0%	0%
Yes, across some schools/departments	2%	5%
Yes, by some individual teachers	1%	2%
Not yet, but we are planning to	0%	1%
Not offered and no plans to do so	5%	4%
Don't know/not applicable	13%	18%
Not answered	79%	70%

Question 4.3: Are there any particular subject areas that make *more extensive* use of TEL tools than your institutional norm?

Table C4.3: Institutions with subjects that make *more extensive* use of technology enhanced learning tools than the institutional norm

	HE Total 2018	HE Total 2016	HE Total 2014
Yes	50%	57%	71%
No	50%	43%	29%

Question 4.4: Please select *up to three* subject areas and explain in what way they make more use of technology enhanced learning tools and why you think that this is so.

Table C4.4 Subjects that make more extensive use of TEL tools than the institutional norm

2008 – 2014 subject classifications	2016 subject classifications[19]	Total 2018	Total 2016	Total 2014	Total 2012	Total 2010	Total 2008
Medicine, Nursing, Health	Medical sciences	56%	54%	62%	81%	45%	35%
Management, Accountancy, Finance, Business etc.	Business and management	31%	32%	40%	38%	29%	14%
Education	Education, teacher training	25%	25%	25%	25%	19%	4%
Computing	Computing	13%	19%	10%	13%	20%	16%
Engineering	Engineering, technology	8%	15%	10%	18%	6%	0%
Humanities	Humanities (Geography, History)	2%	12%	5%	-	-	-
Social Sciences, Psychology, Law, Teaching etc.	Social sciences	6%	10%	28%	24%	21%	14%
Science, specified, e.g. Chemistry	Natural sciences	21%	8%	12%	9%	11%	-
Languages	Languages	10%	8%	8%	9%	9%	4%
Art, Music, Drama	Art and design	-	3%	27%	18%	-	7%
Science(s), not specified	-	-	-	28%	9%	5%	3%

19 2016 subject classifications were pre-defined and presented as response options. Previous Surveys (2008 – 2014) invited free-text responses to this question, with responses then grouped together and classified through a cluster analysis.

Question 4.6: Are there any particular subject areas that make *less extensive* use of technology enhanced learning tools than your institutional norm?

Table C4.6: Institutions with subjects that make less extensive use of technology enhanced learning tools than the institutional norm

	HE Total 2018	HE Total 2016	HE Total 2014
Yes	35%	46%	52%
No	65%	54%	48%

Question 4.7: Please select *up to three* subject areas and explain in what way they make less use of technology enhanced learning tools and why you think that this is so.

Table C4.7 Subjects that make *less extensive* use of TEL than the institutional norm

2008 – 2014 subject classifications	2016 subject classifications[20]	Total 2018	Total 2016	Total 2014	Total 2012	Total 2010	Total 2008
Art, Music, Drama	Art and design	32%	45%	100%	70%	46%	31%
Humanities	Humanities (Geography, History)	18%	34%	24%	17%	12%	-
Maths	Mathematics	21%	15%	7%	9%	9%	1%
Social Sciences	Social Sciences	12%	11%	17%	21%	16%	11%
Education	Education, teacher training	9%	9%	7%	4%	-	-
-	Law	9%	9%	-	-	-	-
-	Architecture	3%	6%	-	-	-	-
Engineering	Engineering, technology	12%	6%	12%	11%	7%	1%
Computing	Computing	9%	6%	7%	6%	5%	1%
Science, specified, e.g. Chemistry	Natural sciences	6%	4%	5%	4%	-	-
Languages	Languages	3%	4%	2%	6%	4%	-
Management, Accountancy, Finance, Business etc.	Business and management	6%	0%	19%	11%	-	-
Theology/Religious Studies	-	-	-	7%	4%	4%	1%
English	-	-	-	2%	6%	7%	11%

20 2016 subject classifications were pre-defined and presented as response options. Previous surveys (2008–2014) invited free-text responses to this question, with responses then grouped together and classified through a cluster analysis.

Question 4.9: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

In 2018, an additional response option was added, splitting 1–24% into 1–4% and 5%–24%. These options are given in Appendix A. For these longitudinal tables these two options have been combined.

Table C4.9: Proportion of courses using TEL tools

Tool	Year	100%	75% – 99%	50% – 74%	25% – 49%	1% – 24%	0%
e-submission tools (assignments)	2018	-	-	-	-	-	-
	2016	20%	38%	20%	8%	3%	2%
	2014	6%	34%	22%	9%	9%	4%
	2012	3%	16%	31%	18%	11%	2%
	2010	4%	12%	22%	25%	26%	4%
	2008	3%	8%	15%	30%	27%	4%
Formative e-assessment (e.g. quizzes as part of course delivery)	2018	1%	7%	16%	28%	33%	0%
	2016	3%	4%	17%	33%	33%	1%
	2014	5%	1%	16%	16%	51%	0%
	2012	1%	2%	11%	21%	46%	0%
	2010	0%	4%	13%	18%	53%	2%
	2008	0%	4%	7%	24%	42%	8%
Text-matching tools (e.g. SafeAssign, Turnitin, Urkund)	2018	13%	52%	17%	6%	4%	1%
	2016	16%	42%	19%	8%	5%	3%
	2014	5%	31%	34%	11%	14%	0%
	2012	2%	19%	25%	18%	17%	1%
	2010	1%	18%	22%	24%	21%	7%
	2008	-	-	-	-	-	-
Summative e-assessment (e.g. defined response tests as part of course delivery)	2018	0%	4%	10%	19%	46%	4%
	2016	-	3%	7%	25%	50%	4%
	2014	2%	5%	4%	13%	64%	4%
	2012	0%	1%	4%	10%	62%	5%
	2010	0%	0%	1%	14%	60%	12%
	2008	0%	0%	1%	4%	64%	16%
Lecture capture tools	2018	5%	18%	11%	17%	33%	9%
	2016	4%	9%	4%	7%	53%	11%
	2014	2%	1%	5%	7%	71%	4%
	2012	1%	0%	3%	11%	63%	4%
	2010	0%	2%	2%	12%	68%	7%
	2008	-	-	-	-	-	-
Document sharing tools (e.g. Google documents, Office 365)	2018	2%	9%	14%	11%	36%	0%
	2016	3%	6%	12%	10%	37%	2%
	2014	1%	2%	6%	7%	51%	2%
	2012	0%	1%	0%	9%	44%	8%
	2010	-	-	-	-	-	-
	2008	-	-	-	-	-	-

Tool	Year	100%	75% – 99%	50% – 74%	25% – 49%	1% – 24%	0%
e-portfolio	2018	1%	3%	4%	7%	65%	9%
	2016	3%	-	3%	16%	63%	6%
	2014	0%	1%	2%	13%	65%	5%
	2012	0%	0%	4%	10%	61%	6%
	2010	2%	3%	2%	15%	57%	8%
	2008	0%	7%	5%	16%	47%	7%
Electronic Management of Assignments (EMA)*	2018	18%	44%	7%	9%	5%	5%
Electronic essay exams	2018	1%	3%	4%	10%	32%	31%
	2016	1%	6%	4%	2%	32%	32%
	2014	0%	1%	4%	6%	25%	40%
	2012	-	-	-	-	-	-
	2010	-	-	-	-	-	-
	2008	-	-	-	-	-	-
Synchronous Collaborative tools (e.g. virtual classroom)	2018	1%	0%	1%	11%	60%	5%
	2016	-	2%	5%	4%	61%	13%
	2014	0%	0%	1%	1%	79%	10%
	2012	0%	0%	0%	8%	57%	13%
	2010	0%	0%	1%	1%	66%	18%
	2008	-	-	-	-	-	-
Asynchronous collaborative working tools (e.g. discussion forums, blogs, wikis)	2018	2%	5%	16%	26%	37%	0%
	2016	4%	10%	15%	25%	32%	3%
	2014	0%	7%	19%	29%	35%	0%
	2012	0%	7%	13%	36%	26%	0%
	2010	1%	10%	18%	29%	37%	0%
	2008	-	-	-	-	-	-
Personal response systems	2018	0%	3%	1%	25%	51%	4%
	2016	1%	-	3%	14%	53%	10%
	2014	0%	1%	5%	7%	65%	11%
	2012	-	-	-	-	-	-
	2010	-	-	-	-	-	-
	2008	-	-	-	-	-	-
Podcasting	2018	0%	1%	5%	6%	50%	5%
	2016	1%	3%	3%	5%	57%	12%
	2014	0%	0%	1%	7%	68%	6%
	2012	1%	0%	2%	4%	63%	6%
	2010	0%	0%	2%	10%	71%	7%
	2008	-	-	-	-	-	-
Screen casting	2018	1%	0%	4%	12%	55%	2%
	2016	1%	1%	4%	10%	57%	8%
	2014	0%	0%	1%	6%	65%	5%

Question 4.10: Has the institution evaluated the impact of TEL on the *student learning experience* across the institution as a whole over the *past two years*?

Table C4.10: Evaluation of the impact of TEL on *student learning experience*

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Yes	43%	40%	52%	61%
No institutional evaluation, but individual departments/schools have evaluated*	12%	-	-	-
No	45%	60%	48%	39%

Question 4.12: What aspects of the impact of TEL on the *student learning experience* have been evaluated over the *past two years*?

Table C4.12: Aspects of the impact of TEL on the student learning experience evaluated over the past two years

	HE Total 2018	HE Total 2016
General review of TEL services*	70%	-
Take-up/usage/adoption by students of lecture capture	60%	30%
Effectiveness of flipped learning	5%	20%
Electronic Management of Assignments (EMA)*	35%	-
e-assessment*	28%	43%
Mobile learning	15%	28%
Use of learning analytics in supporting students	15%	8%
Student digital fluency/capability*	53%	-
Other aspect evaluated*	20%	68%

Question 4.13: *How* has the impact has been measured, *when*, and for *what purpose*?

Table C4.13a: How the impact on student learning experience has been evaluated

	HE Total 2018	HE Total 2016	HE Total 2014
Survey	80%	35%	81%
As part of a module or course evaluation	43%	24%	60%
Interview/focus group	60%	26%	55%
Benchmarking, e.g. Jisc Digital Experience Tracker*	48%	9%	19%
Crowd-sourcing feedback from users via social media	3%	0%	0%
Usage figures, e.g. system logs/reports*	55%	-	-
Learning analytics*	18%	-	-
Other method	10%	6%	0%

Table C4.13b: When the impact on student learning experience has been evaluated

	HE Total 2018	HE Total 2016	HE Total 2014
Annually	60%	38%	60%
Each term/semester	23%	28%	32%
Summer	-	0%	6%
Continuously measuring*	33%	-	-
Other timing	20%	34%	0%

Table C4.13c: Purpose of the impact on student learning experience that has been evaluated

	HE Total 2018	HE Total 2016	HE Total 2014
Assess value of TEL in relation to student performance (learning analytics)	25%	8%	32%
Determine take-up and usage of TEL tool(s) across institution (adoption)	73%	31%	83%
Assess value for money of TEL tool(s) (e.g. review of licensing costs)	25%	-	-
Assess student satisfaction with TEL approach	75%	38%	-
Other purpose	18%	13%	51%

Question 4.14: And what have these evaluations revealed?

Table C4.14: Broad conclusions from the evaluations undertaken into the impact of TEL on the *student learning experience*

The small number of written responses to this question in 2018 means that themes were not quantified.

	HE Total 2016	HE Total 2014
TEL appreciated by students	42%	34%
Students value consistency	39%	29%
Demand for mobile support	21%	10%
Mixed use of TEL	18%	29%
Other	18%	-
Interest in more e-assessment	12%	10%
Demand for lecture capture	12%	7%
Concern about digital literacy of staff	9%	10%
Increase in TEL adoption	6%	24%

Question 4.15 Has the institution evaluated the impact of TEL on *staff pedagogic practices* across the institution as a whole over the *past two years*?

Table C4.15: Evaluation of the impact of TEL on *pedagogic practices*

	HE Total 2018	HE Total 2016	HE Total 2014	HE Total 2012
Yes	23%	36%	30%	38%
No institutional evaluation, but individual departments/schools have evaluated*	13%	-	-	-
No	64%	64%	70%	62%

Question 4.17: What aspects of staff pedagogic practices have you evaluated over the past two years?

Table C4.17: Aspects of staff pedagogic practices that have been evaluated in the last two years

	HE Total 2018	HE Total 2016
General review of TEL services*	62%	-
Take-up/usage/adoption by students of lecture capture	33%	17%
Effectiveness of flipped learning	14%	12%
Electronic Management of Assignments (EMA)*	24%	-
e-assessment	33%	21%
Mobile learning	10%	6%
Use of learning analytics in supporting students	10%	1%
Staff digital fluency/capability*	48%	16%
Other aspect evaluated*	19%	9%
e-marking	-	18%

Question 4.18: How has the impact has been measured, when, and for what purpose?

Table C4.18a: How the impact on student learning experience has been evaluated

	HE Total 2018	HE Total 2016	HE Total 2014
Survey	76%	69%	55%
As part of a module or course evaluation	33%	28%	33%
Interview/focus group	71%	39%	60%
Benchmarking, e.g. Jisc Digital Experience Tracker*	29%	11%	44%
Crowd-sourcing feedback from users via social media	-	0%	0%
Usage figures, e.g. system logs/reports*	48%	-	-
Learning analytics*	29%	-	-
Other method	14%	6%	0%

Table C4.18b: When the impact on pedagogical practices has been evaluated

	HE Total 2018	HE Total 2016	HE Total 2014
Annually	38%	44%	44%
Each term/semester	14%	19%	30%
Summer	-	0%	7%
Continuously measuring*	7%	-	-
Other timing	9%	50%	0%

Table C4.18c: Purpose of the evaluation on pedagogical practices

	HE Total 2018	HE Total 2016	HE Total 2014
Assess value of TEL in relation to student performance (learning analytics)	29%	17%	44%
Determine take-up and usage of TEL tool(s) across institution (adoption)	86%	69%	63%
Assess value for money	10%	26%	-
Assess staff satisfaction	71%	63%	-
Other purpose	29%	40%	44%

Question 4.19: And what have these evaluations revealed?

Table C4.19: Broad conclusions from the evaluations undertaken into the impact of TEL on *pedagogical practices*

The small number of written responses to this question in 2018 means that themes were not quantified.

	HE Total 2016	HE Total 2014
Identification of gaps in provision/support	15%	-
Efficiency with e-assessment	12%	-
Mixed practice	12%	13%
More staff support	12%	9%
TEL valued as positive	8%	9%
No data	8%	-
Published works from TEL	8%	17%
Positive impact on staff teaching practice	-	30%
Rethinking pedagogic systems, workflows	-	22%

Question 5.1: First of all, which, if any, support units are there in your institution that provide *support for TEL*? Please include both centrally provided and local units.

Table C5.1: Support units that provide support for technology enhanced learning

	2018	2016	2014	2012	2010	2008
Information technology support	74%	59%	73%	64%	81%	80%
TEL unit or equivalent*	67%	68%	66%	49%	63%	67%
Educational development unit	54%	51%	51%	54%	65%	56%
Library	45%	48%	60%	-	-	-
Local support (devolved to faculty, school, department)	52%	55%	60%	48%	66%	-
Distance/online learning unit*	23%	-	-	-	-	-
Other	8%	15%	13%	19%	23%	47%
Outsourced support	4%	2%	9%	4%	7%	4%
No support units	0%	0%	-	10%	-	-

Note: *TEL unit or equivalent* was renamed in 2018 from *Learning Technology Support Unit*

Table C5.1b: Number of units providing support for TEL per institution

Number of support units per institution	2018	2016	2014	2012	2010	2008
0	0%	0%	0%	-	3%	7%
1	13%	8%	13%	-	12%	11%
2	21%	32%	16%	-	15%	32%
3	24%	29%	23%	-	27%	39%
4	17%	17%	23%	-	32%	8%
5	17%	11%	15%	-	7%	3%
6	6%	2%	6%	-	1%	-
7	1%	-	-	-	-	-
Mean number of support units	3.26	2.97	3.32	2.65	3.0	2.4

Question 5.2: How many staff supporting TEL are in the unit?

Table C5.2a1: Mean number of staff working in each unit

	IT Support		TEL unit*		EDU		Library	
	2018	2016	2018	2016	2018	2016	2018	2016
Mean number of learning technologists	0.86	1.00	5.77	4.58	2.08	1.43	0.73	0.38
Mean number of IT support staff	5.54	9.60	0.53	0.55	0.15	0.02	0.94	0.77
Mean number of administrative staff	0.23	0.38	0.56	0.30	0.49	0.52	0.33	0.94
Mean number of academic staff	0.23	0.00	0.15	0.22	1.38	2.07	0.09	0.04
Mean number of other staff	0.86	0.93	0.48	1.50	2.08	1.32	0.73	3.48

Note: *TEL unit or equivalent* was renamed in 2018 from *Learning Technology Support Unit*

Table C5.2a2: Mean number of staff working in each unit

	Local		Distance/online learning unit		Other		Outsourced/ specialist	
	2018	2016	2018	2016	2018	2016	2018	2016
Mean number of learning technologists	6.58	5.14	2.57	-	0.95	4.93	0.50	0.50
Mean number of IT support staff	1.78	1.63	0.04	-	0.88	5.13	0.50	0.50
Mean number of administrative staff	0.88	0.74	1.17	-	0.00	0.33	0.00	0.00
Mean number of academic staff	0.71	1.98	0.04	-	0.25	1.33	0.00	0.00
Mean number of other staff	6.58	0.46	2.57	-	0.50	0.87	0.00	0.00

Table C5.2b: Mean FTE of staff working in each unit

FTE staff in each unit	2018 Mean	2016 Mean
Information technology support	2.74	3.20
TEL unit or equivalent*	4.60	4.73
Educational Development Unit (EDU)	2.93	2.72
Library	2.63	1.61
Local support	6.33	6.49
Distance/online learning unit*	3.27	-
Other support unit	2.20	10.63
Outsourced supplier or specialist	1.25	0.20

Note: *TEL unit or equivalent* was renamed in 2018 from *Learning Technology Support Unit*

Question 5.4: What changes in staffing provision for supporting TEL, if any, have been made over the *last two years*?

Table C5.4: Whether changes in staffing provision have been made

	2018		2016		2014		2012	
	No.	%	No.	%	No.	%	No.	%
Changes made	80%	81%	81	83%	76	84%	46	55%
No changes made	19	19%	17	17%	14	16%	37	45%

Table C5.4a: Changes made in staffing provision

	2018		2016		2014		2012	
	No.	%	No.	%	No.	%	No.	%
Increase in number of staff	40	40%	50	51%	34	38%	5	11%
Restructure of department(s)/TEL provision	38	38%	41	42%	42	47%	10	22%
Change of existing roles/ incorporated other duties	30	30%	30	31%	40	44%	6	13%
Reduction in number of staff	22	22%	16	16%	17	19%	20	44%
Recruitment delay/freeze	14	14%	14	14%	21	23%	3	7%
Other change in staffing provision	6	6%	7	7%	-	-	-	-

Note: The 2012 Survey invited open responses to this question, and responses were classified using a cluster analysis approach, whereas for 2014 and 2016 the question design changed and response items were pre-coded – leading to much higher levels of responses to this question

Question 5.6: Do you foresee changes in the staffing provision for supporting TEL in the near future?

Table C5.6: Whether changes in staffing provision are foreseen in the near future

	2018		2016		2014		2012	
	No.	%	No.	%	No.	%	No.	%
Changes foreseen	76	77%	77	79%	77	86%	52	61%
No changes foreseen	23	23%	21	21%	13	14%	33	39%

Table C5.6a: Foreseen changes in staffing provision in the near future

	2018		2016		2014		2012	
	No.	%	No.	%	No.	%	No.	%
Increase in number of staff	34	34%	29	30%	38	42%	24	46%
Anticipate change but unsure as to what this might be	25	25%	32	33%	29	32%	11	21%
Restructure of department(s)/TEL provision	24	24%	25	26%	27	30%	6	12%
Change of existing roles/incorporation of other duties	23	23%	24	24%	30	33%	2	4%
Currently reviewing staffing provision	13	13%	10	10%	15	17%	4	8%
Recruitment delay/freeze	6	6%	6	6%	8	5%	-	-
Other change	2	2%	4	4%	4	2%	-	-
Reduction in the number of staff	5	5%	5	5%	2	1%	3	6%

Note: The 2012 Survey invited open responses to this question, and responses were classified using a cluster analysis approach, whereas for 2014 and 2016 the question design changed and response items were pre-coded – leading to much higher levels of responses to this question

Question 6.1: Listed below are potential *barriers* to any (further) development of processes to promote and support TEL tools. What, in your opinion, might be the barriers in your institution over the coming years?

Table C6.1: Ranked potential barriers to any (further) development of processes to promote and support TEL tools

Extent to which....	Rank 2018	Rank 2016	Rank 2014	Rank 2012	Rank 2010	Rank 2008	Rank 2005	Rank 2003
Lack of time	1	1	1	1	1	1	1	2
Departmental/school culture	2	2	5	3	-	-	-	-
Lack of academic staff knowledge	3	6	2	5	3	2	7	4
Lack of academic staff commitment	4=	4	7	6	5	-	-	-
Institutional culture	4=	5	4	8	7	4	8	-
Lack of internal sources of funding to support development	6	3	-	-	-	-	-	-
Lack of money	-	-	3	2	2	3	2	1
Lack of recognition for career development	7	7	8	4	4	6	4	-
Lack of support staff	8	8	10	9	8	5	3	5
Competing strategic initiatives	9	9	9	-	-	-	-	-
Lack of academic staff development opportunities	10	12=	14	14	9	7	6	3
Organisational structure	11	15	13	10	12	10	11	7
Changing administrative processes	12	11	12	11	11	11	9	-
Lack of incentives	13	10	6	7	6	8	5	8=
Lack of strategy and leadership	14	16	11	13	13	12	10	-
Lack of external sources of funding (e.g. HEA, HEFCE, Jisc) to support project development	15	12=	-	-	-	-	-	-
Technical and infrastructure limitations (e.g. wireless)	16=	14	-	-	-	-	-	-
Technical problems	-	-	15	12	10	9	12	8=
Other technical problems	16=	17	-	-	-	-	-	-
Lack of student engagement	18	18	18	-	-	-	-	-
Too few standards and guidelines	19	20	16	17	16	16	16	-
Lack of institutional support for open learning	20	19	-	-	-	-	-	-
Inappropriate policies and procedures	21	21	17	15	14	13	13	-
Too many/diffuse/diverse standards and guidelines	22	22	19	-	-	-	-	-

Note: The categories of *Lack of money* and *Technical problems* used in previous Surveys have been included in this table to enable longitudinal comparison with the revised categories noted in the main report

This has been done by combining data from the new options for 2016 (e.g. combining data on lack of internal and external sources of funding from the 2016 Survey) to determine the ranking of the lack of money item).

Question 6.2: Have any recent and prospective developments in technology started to make new demands upon your institution in terms of the support required by users?

Table C6.2: Whether there are any recent and prospective developments in technology that have started to make new demands upon institutions in terms of the support required by users

	2018		2016		2014	
	No.	%	No.	%	No.	%
Yes	65	65%	62	62%	72	81%
No	35	35%	38	38%	17	19%

Question 6.3: Please write in details of up to three developments that are starting to make new demands upon your institution in terms of the support required by users – those you think are most important.

Table C6.3: Recent and prospective developments in technology that are starting to make new demands terms of the support required by users

	2018		2016		2014		2012		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Electronic management of assessment (e-submission, e-marking, e-feedback)	28	43%	24	39%	24	34%	26	31%	18	23%
Lecture capture	28	43%	21	34%	26	37%	18	22%	13	16%
VLE – new/change, embed, extend, customise, standards	16	25%	6	10%	10	14%	11	13%	12	16%
Learning analytics	13	20%	8	13%	6	8%	3	4%	-	-
Distance learning/fully online courses	9	14%	8	13%	2	3%	-	-	-	-
Multimedia (use, provision, management, support)	8	12%	9	15%	8	11%	10	12%	18	23%
Increased demand for support	7	11%	2	3%	1	1%	2	2%	-	-
Mobile technologies/bring your own device (support, access to systems/content)	7	11%	19	31%	32	45%	49	59%	18	23%
Degree apprenticeships	5	8%	-	-	-	-	-	-	-	-
Digital literacy/capability	5	8%	3	5%	4	6%	2	2%	-	-
Office 365	5	8%	2	3%	-	-	-	-	-	-
Blended learning	4	6%	1	2%	-	-	-	-	-	-
Classroom interactivity (e.g. voting technologies)	4	6%	2	3%	4	6%	3	4%	-	-
e-portfolio	4	6%	5	8%	4	6%	9	11%	12	15%
Interoperability/integration of systems	4	6%	1	2%	1	1%	4	5%	10	13%
Learning spaces	4	6%	3	5%	-	-	-	-	-	-
Real-time communication (e.g. video conferencing/webinar software)	4	6%	4	6%	2	3%	8	10%	-	-
Accessibility (in particular captioning and response to the change in Disabled Students' Allowance)	3	5%	4	6%	-	-	-	-	-	-
Digital exams	3	5%	-	-	-	-	-	-	-	-
Staff development	3	5%	2	3%	2	3%	2	2%	6	8%
Video assessment	3	5%	-	-	-	-	-	-	-	-
Curriculum development/design	2	3%	2	3%	1	1%	2	2%	-	-
New pedagogies/modes of delivery (e.g. flipped classroom)	2	3%	4	6%	4	6%	-	-	-	-
Attendance monitoring	1	2%	-	-	-	-	-	-	-	-
Collaboration	1	2%	3	5%	1	1%	3	4%	1	1%
Development of policy	1	2%	3	5%	-	-	-	-	-	-
Meeting staff/student expectations	1	2%	3	5%	2	3%	1	1%	-	-
Organisational transformation	1	2%	-	-	-	-	-	-	-	-
Personal tutoring	1	2%	-	-	-	-	-	-	-	-
Surface hubs	1	2%	-	-	-	-	-	-	-	-
VR/AR	1	2%	-	-	-	-	-	-	-	-
Wireless	1	2%	1	2%	2	3%	4	5%	1	1%
MOOCs	-	-	6	10%	12	17%	-	-	-	-
Cloud services	-	-	4	6%	2	3%	8	10%	6	8%
Social media/networking	-	-	4	6%	2	3%	8	10%	10	13%

Question 6.4: Do you see these developments posing any challenges over the next two to three years in terms of the support that will be required for staff and students?

Table C6.4: Whether institutions consider that the developments identified in question 6.3 will pose support challenges over the next two to three years

	2018		2016		2014	
	No.	%	No.	%	No.	%
Yes	51	78%	44	72%	59	82%
No	14	22%	17	28%	13	18%

Question 6.5a: Please write in the challenges you see these developments posing over the next two to three years in terms of the support that will be required for staff and students? Please write in details of up to three challenges – those you think are most important.

Table C6.5a: Challenges that these developments pose over the next two to three years in terms of support that will be required for staff and students

	2018		2016		2014		2012		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Electronic management of assessment (e-submission, e-marking, e-feedback)	15	29%	10	23%	11	19%	12	15%	12	16%
Learning analytics (inc. ethics, use of data, reporting)	10	20%	4	9%	4	7%	8	10%	-	-
New modes of delivery (e.g. online/ distance courses, active learning, blended learning, flipped classroom)	10	20%	5	12%	7	12%	-	-	-	-
Lack of support staff/specialist skills/ resources	8	16%	7	16%	19	32%	10	13%	-	-
Lecture capture/recording	8	16%	9	21%	10	17%	6	8%	-	-
Digital literacy/capability	7	14%	2	5%	7	12%	2	3%	-	-
Technical infrastructure – addressing growth, new technologies	7	14%	9	21%	7	12%	7	9%	14	18%
Increased/diverse support (inc. 24/7 support, support for remote students/ staff)	5	10%	4	9%	1	2%	-	-	-	-
Keeping up with emerging technologies/technology changes	5	10%	3	7%	-	-	-	-	-	-
Mobile technologies/learning, BYOD (support, creating content and compatibility with systems)	5	10%	7	16%	16	27%	23	29%	7	9%
Process change/improvement	5	10%	-	-	-	-	-	-	-	-
Staff development	5	10%	15	35%	12	20%	19	24%	28	36%
Managing/meeting expectations	4	8%	4	9%	1	2%	9	11%	4	5%
Budgets/funding/financial constraints	3	6%	6	14%	6	10%	8	10%		
Differences between schools/ departments	3	6%	-	-	-	-	-	-	-	-
Prioritisation of teaching in line other activities	3	6%	2	5%	-	-	-	-	-	-
VLE (change/extend/baseline)	3	6%	1	2%	2	3%	5	6%	-	-
Classroom interactivity (e.g. voting technologies)	2	4%	-	-	-	-	-	-	-	-
Complexity	2	4%	-	-	-	-	-	-	-	-
Culture change	2	4%	3	7%	3	5%	3	4%	5	6%
e-exams	2	4%	-	-	-	-	-	-	-	-
Growing student numbers	2	4%	-	-	-	-	-	-	-	-
Interoperability/integration	2	4%	2	5%	1	2%	2	3%	11	14%

	2018		2016		2014		2012		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Learning spaces	2	4%	1	2%	1	2%	-	-	-	-
Legal/policy issues (inc. IPR, copyright, data security, system contingency)	2	4%	5	12%	3	5%	14	18%	13	17%
Multimedia (production, management, delivery storage)	2	4%	2	5%	2	3%	9	11%	3	4%
Personalisation	2	4%	-	-	-	-	-	-	-	-
Staff incentives	2	4%	3	7%	-	-	-	-	-	-
Synchronous tools	2	4%	-	-	-	-	-	-	-	-
Video assessment	2	4%	-	-	-	-	-	-	-	-
Change fatigue	1	2%	-	-	-	-	-	-	-	-
Changing teaching practice	1	2%	-	-	-	-	-	-	-	-
Demonstrating value of TEL	1	2%	-	-	2	3%	6	8%	-	-
Developing/supporting content creation and collections	1	2%	1	2%	2	3%	-	-	-	-
Gap between innovators and mainstream	1	2%	-	-	-	-	-	-	-	-
Internal collaboration	1	2%	2	5%	-	-	-	-	-	-
Keeping up with demand from staff/ students	1	2%	-	-	-	-	-	-	-	-
Lack of time	1	2%	2	5%	5	8%	2	3%	-	-
More diverse students	1	2%	-	-	-	-	-	-	-	-
Pedagogic support	1	2%	1	2%	-	-	-	-	-	-
Student retention	1	2%	-	-	-	-	-	-	-	-
Students as creators	1	2%	-	-	-	-	-	-	-	-

Question 6.5b: How do you see these challenges being overcome?

Table C6.5b: How institutions see the challenges identified in question 5.6a being overcome

	2018		2016		2014		2012		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Staff development (e.g. training courses)	16	31%	15	35%	15	25%	24	32%	31	40%
Investment (time, money, resources, support staff)	12	24%	15	35%	16	27%	19	25%	28	34%
Communities of practice – sharing good practice, success stories, case studies, champions	11	22%	4	9%	3	5%	9	12%	13	17%
Focus on pedagogy, curriculum design/ development, adapting teaching approach	11	22%	-	-	-	-	-	-	-	-
Review and revise support provision (increased/ improved/devolved/extended hours)	11	22%	8	19%	15	25%	6	8%	-	-
Development of/integration with strategies/ policies	10	20%	11	26%	11	19%	14	18%	24	31%
Improve technical infrastructure (inc. wireless)	7	14%	13	30%	6	10%	-	-	4	5%
Senior management leadership/commitment to TEL	7	14%	4	9%	2	3%	4	5%	9	12%
Develop digital literacies/capabilities	6	12%	1	2%	2	3%	-	-	-	-
Processes (streamline, more efficient)	6	12%	-	-	-	-	-	-	-	-
Reorganisation/restructure	6	12%	2	5%	-	-	-	-	-	-
Internal collaboration/joined up approach	5	10%	4	9%	4	7%	3	4%		
Provision of guidance to staff/students (e.g. online resources)	5	10%	5	12%	3	5%	3	4%	-	-
Communication/consultation	4	8%	-	-	-	-	-	-	-	-
Data (cleansing, modelling, awareness)	4	8%	-	-	-	-	-	-	-	-

	2018		2016		2014		2012		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Improve skills and knowledge of support staff	4	8%	1	2%	-	-	-	-	-	-
Pilot/phased roll out	4	8%	-	-	-	-	-	-	-	-
Collaboration with external partners	3	6%	1	2%	-	-	-	-	-	-
Improved access to mobile devices (e.g. loan devices)	3	6%	-	-	-	-	-	-	-	-
Managing expectations	3	6%	1	2%	-	-	-	-	-	-
Minimum requirements	3	6%	-	-	-	-	-	-	-	-
Provision of incentives/rewards/recognition	3	6%	1	2%	-	-	-	-	-	-
Awareness raising	2	4%	1	2%	1	2%	5	7%	-	-
Change management	2	4%	-	-	-	-	-	-	-	-
Cloud solutions	2	4%	1	2%	1	2%	3	4%	1	1%
Cultural changes/embedding	2	4%	1	2%	1	2%	6	8%	4	5%
Governance	2	4%	1	2%	-	-	-	-	-	-
Improve/increase use of existing technologies	2	4%	3	7%	-	-	-	-	-	-
Keeping up to date with new technologies	2	4%	1	2%	1	2%	3	4%	-	-
Student partnerships	2	4%	-	-	-	-	-	-	-	-
Student training	2	4%	1	2%	-	-	-	-	-	-
Alternative forms of e-assessment (e-submission, e-marking, e-feedback)	1	2%	-	-	-	-	-	-	-	-
Connection to UKPSF and RDF	1	2%	-	-	-	-	-	-	-	-
Define digital learning landscape	1	2%	-	-	-	-	-	-	-	-
Institutional acceptance of risk	1	2%	-	-	-	-	-	-	-	-
Interoperability/extending systems	1	2%	3	7%	2	3%	4	5%	5	6%
Involvement with wider institution	1	2%	-	-	-	-	-	-	-	-
Lobbying suppliers	1	2%	-	-	-	-	-	-	-	-
Outsourcing	1	2%	-	-	-	-	-	-	-	-
Personalisation/customisation of learning environment	1	2%	-	-	-	-	-	-	-	-
Student demand/experience	0	0%	1	2%	1	2%	7	9%	5	6%