UCISA REPORT

2014 Survey of Technology Enhanced Learning for higher education in the UK

ucisa

Universities and Colleges
Information Systems Association

2014 Survey of Technology Enhanced Learning for higher education in the UK

By Richard Walker, Julie Voce, Joe Nicholls, Elaine Swift,
Jebar Ahmed, Sarah Horrigan and Phil Vincent

SURVEY

Contents

Universities and Colleges
Information Systems Association

University of Oxford
13 Banbury Road
Oxford OX2 6NN

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

Executive summary

This report records the results from a national survey, undertaken by UCISA, into matters relating to the management and support of technology enhanced learning (TEL) in UK higher education (HE) institutions. It builds upon similar surveys which were conducted in 2001, 2003, 2005, 2008, 2010 and 2012, for which at each stage, a longitudinal analysis was undertaken.

The definition for TEL, which first appeared in the 2008 Survey, reads as follows: *Any online facility or system that directly supports learning and teaching. This may include a formal VLE, an institutional intranet that has a learning and teaching component, a system that has been developed in house or a particular suite of specific individual tools*.

This definition was retained for the 2014 Survey, which again focused on institutional engagement with technologies in support of learning and teaching activities. This report presents the results from the 2014 Survey and, where appropriate, it also offers a longitudinal view of results for questions which have been retained across previous Surveys.

Each Survey has taken place within a particular national context – the one conducted in 2012 was conducted in the tougher economic climate of the post-Browne review era[1], with institutions focusing on efficiency savings as a result of restricted budgets realised through voluntary redundancies, reorganisations and more selective staff development activities. The Survey also followed after the publication of the Online Learning Task Force's Report to HEFCE, *Collaborate To Compete* (Jan 2011)[2], which highlighted the greater emphasis on student choice in the deregulated market place, with student expectations driving enhanced levels of service provision by higher education institutions, particularly through the use of technologies to support application and course selection procedures.

The 2012 Survey invited institutions to reflect on these developments – specifically how funding issues may be impacting on central and local support, staffing provision, training and development opportunities, as well as encouraging leaner management approaches such as the outsourcing of TEL infrastructure and services. The Survey also sought to capture progress in establishing new areas of service provision for learning and teaching, particularly the growth in mobile services offering more flexible opportunities for learning, as well as new modes of institutional collaboration in the delivery of these services.

The agenda for the 2014 Survey sought to track the adjustments that institutions have been making to meet these challenges. In particular, the 2014 questions addressed the expansion of mobile learning provision and the impact that this is having on institutional policies, service provision and pedagogic practice. The Survey maintained a focus on virtual learning environment (VLE) reviews and the evaluation work that institutions have been undertaking after a decision has been made on their VLE platforms, whilst also tracking developments in the delivery of open learning opportunities to external audiences, which have attracted so much attention by the government and the press in recent years.

The report provides an overview of TEL developments since the 2012 Survey, reflecting the progress that UK higher education institutions have made in meeting these challenges. A summary of the key findings is as follows.

Enhancing the quality of learning and teaching is consolidated longitudinally as the primary driver for considering using TEL, as are the other leading drivers from the 2012, 2010 and 2008 Surveys, namely *Meeting student expectations and Improving access to learning for students off campus*. *Improving administrative processes* has risen to fourth place in the list of drivers.

Feedback from students – a new response option for the 2014 Survey – tops the list of factors encouraging the development of TEL, displacing *Availability of TEL support staff* which was the leading factor in the 2012 Survey. *Availability and access to tools* is the third most commonly cited factor, followed by *Central university* and *School/departmental senior management support* in the rankings.

Lack of time remains the leading barrier to TEL development, consolidating its position at the top of the list which it has held dating back to the 2005 Survey. *Lack of academic staff knowledge* has risen from fifth position in 2012 to second place, reversing a trend of recent years where this factor had declined in importance. *Lack of money* has moved down to third place, followed by *Institutional* and *Departmental/school* culture.

Institutional strategies continue to influence TEL development, with *Teaching, Learning and Assessment* consolidated longitudinally as the leading internal strategy cited by respondents. The *Corporate Strategy* retains second place and is cited by two-thirds of Post-92 higher education institutions as an influence on TEL development. The remaining strategies are each cited by less than half of the respondents to the 2014 Survey. The key change since 2012 is the declining influence of strategies relating to *Library and Learning Resources*, which have dropped to equal fourth place in the list below strategies related to ICT. External strategies such as the *HEFCE* and *JISC publications* continue to be viewed by respondents as influential in informing institutional thinking on TEL developments.

1 *Browne Report – Securing a sustainable future for higher education: www.delni.gov.uk/browne-report-student-fees*

2 *Collaborate to compete: Seizing the opportunity of online learning for UK higher education: www.hefce.ac.uk/pubs/year/2011/201101/name,63891,en.html*

Blackboard Learn is still the most used enterprise or institutional virtual learning environment (VLE), followed by *Moodle*, and both platforms have increased in usage as enterprise solutions since the 2012 Survey. Part of this growth may be attributed to the migration of former *WebCT* clients to these platforms over the past two years, as support for their solution has been phased out. Moodle remains the most commonly used VLE platform, when departmental/school implementations are also considered. Adoption of other commercial and open source platforms is negligible across the sector, although *Canvas Instructure* and *Pearson eCollege (Learning Studio)* are returned for the first time in the results. MOOC platforms have made little impression so far on institutional TEL activity, with the *FutureLearn* platform the most commonly cited system in use, but only by eight Pre-92 institutions.

Evaluation activity in reviewing VLE provision is now well established across the sector, with half of the institutions which responded to the Survey having conducted reviews over the last two years. This activity is evenly spread across the university mission groups, with the exception of GuildHE institutions which were more active in the period leading up to the 2012 Survey. Perceived limitations in functionality and performance for the institutional VLE tops the list of reasons given for initiating a review. However, only 13 institutions have confirmed that they have evaluated the decision that they reached during their review.

Looking beyond the VLE, *plagiarism detection* and *e-submission tools* remain the most common centrally supported software in use across the sector. *E-portfolio*, *blog* and *e-assessment tools* are also well established, along with *personal response systems* which featured for the first time as a response item in the 2014 Survey and were the seventh most commonly cited tool in use. *Podcasting tools* have declined in usage since the 2010 Survey and appear to have been replaced by *lecture recording* and *media streaming* solutions. *Social networking*, *document sharing* and *blog tools* are the most common non-centrally supported tools in use across the sector.

The overall picture of how TEL tools are being used to support module delivery across the sector is remarkably similar to the one presented in the 2012 Survey Report. Supplementary use of the web to support module delivery remains the most common use of TEL and at an identical level to the figure recorded in 2012. Of the web dependent approaches requiring student participation for an online component of a course, interaction with content remains the most common approach. Fully online courses continue to represent a niche area of activity accounting for a very small proportion of institutional TEL engagement, and there is no discernible evidence of a *MOOC effect* having yet taken place across the sector, beyond the engagement of Russell Group institutions in this form of course delivery.

Evaluation of the impact of TEL tools and systems on the student learning experience remains at a similar level to the activity recorded in the 2012 Survey, with over half of responding institutions having engaged in some form of evaluation activity, with the main driver for this activity unsurprisingly linked to the need to determine take up and usage of TEL tools across an institution. Just as in 2012, the evaluation of pedagogic practices is less common, with less than a third of responding institutions having conducted a review and this figure is slightly down on the number of institutions evaluating pedagogic practice in 2012.

There has been notable progress towards the optimisation of services for mobile devices by Pre-92 and Post-92 institutions, with twice the number of institutions engaged in this activity compared with the figures reported in the 2012 Survey. The leading services which have been optimised unsurprisingly focus on communication, with specific attention to *email* and *course announcements* for iOS, Android and Windows mobile devices, but there has also been considerable progress towards the optimisation of *access to course materials and learning resources*. *Access to communication tools*, *Library services* and *Lecture recordings and videos* are also popular mobile enabled services for Pre-92 and Post-92 institutions. The most popular method for promoting the use of mobile devices in support of learning, teaching and assessment activities is by loaning out devices to staff and students, which 22 Post-92 institutions confirm that they are supporting.

The mean average number of units providing support for TEL has increased since the last Survey, with Information Technology Support Units continuing to be the most common providers of TEL support. There has been an overall increase in the number of learning technologists both within and outside central units. In contrast, the number of dedicated IT and administrative support staff appears to have decreased from the figures recorded in 2012. Despite the challenging economic climate and budgetary pressures which have led just under half of responding institutions to restructure or change existing TEL support roles, 34 institutions reported that they had actually increased staffing levels for TEL since the last Survey and 38 institutions foresee staff increases in the future.

The establishment of *outsourced support* for TEL services remains quite limited though across the sector and has only really been implemented for student and staff email services and to a lesser degree for VLE hosting. *Hosting of provision* for TEL services is far more developed however, with 35 institutions outsourcing their email provision and 31 opting for a hosted VLE provider, rather than managing these services in-house.

The majority of institutions responding to this year's Survey have not considered collaborating with other HE institutions in the delivery of TEL services or resources to staff, or have considered this possibility and then decided not to do so.

There has been little change in the nature of training and development activities promoted to TEL support staff, although ten institutions noted that they had made reductions in travel and attendance at external events due to budgetary pressures. *National conferences/seminars* and *internal staff* development remain the most promoted

development activities, and the increase in the promotion of accreditation, in particular, *HEA* and *CMALT accreditation*, is sustained in the 2014 results. Looking to the future, institutions anticipate an increase in development and support activities for staff with a direct responsibility for enabling TEL services, as well as a greater focus on developing staff IT skills and digital literacies.

Mobile technologies remains at the top of the list of the items making the most demand on TEL support teams, consolidating its position from the 2012 Survey results. *Lecture capture* and *e-assessment* (e-submission, e-marking and e-feedback) follow in the list of top five demands, along with *VLEs* where the focus is now on how institutions change to a new system or embed use of their current VLE within their institution. MOOCs are identified by 12 institutions – mostly Pre-92 universities – as another area making new demands in terms of support requirements.

The top five challenges facing institutions are largely unchanged from 2012, although the order of priorities appears to have shifted. *Lack of support staff/specialist skills/resources* has moved into first place from fifth place. *Mobile technologies/learning* and *staff development* remain key challenges and despite both dropping a place in the rankings, their overall percentages have increased. *Lecture capture/recording* is new to the top five, whilst *MOOCs* do not feature at all as a challenge for the next two to three years.

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.

Heads of e-Learning Forum (HeLF) members, especially Jonathon Alltree, Haydn Blackey, Stephen Bruce, Jane Carne, Sue Folley, Rob Howe, Brian Irwin, Matt Lingard, Maria-Christiana Papaefthimiou, Debbie Prescott, Fiona Strawbridge, James Turner, Chris Turnock, David Walker and Neil Witt.

Helen Beetham and Maren Deepwell (Association for Learning Technology) for their input into the Survey design.

UCISA – Executive and UCISA Operational Support team.

UCISA – Academic Support Group members.

The Research Partnership, especially Nick Smith.

Thanks are also due to the HeLF steering group, particularly the Chair of HeLF – Neil Ringan, for agreeing to publicise the Survey and encourage the HeLF membership to complete it.

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 and 2012). For the 2014 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.

Background

The 2014 Survey is a continuation of those conducted between 2001 and 2012 but it also endeavours to capture contemporary issues that have emerged in the intervening period since the 2012 Survey. 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 still 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 target, or 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 Training and Educational Development Units, in specialist e-learning units, in academic departments or indeed in any combination of them all!

The reports for the 2001, 2003, 2005, 2008, 2010 and 2012 Surveys are available on the UCISA website[3]. A peer reviewed analysis for the 2012 Survey is also available[4], and short papers and conference presentations have also been delivered on the key messages from the 2012 Survey to national and international audiences at the *2012 Association for Learning Technology Conference*[5], *EUNIS 2012*[6] and *The Future of Learning Conference* in Australia *(2014)*[7].

On each occasion that a report has been published, the UCISA community has valued the opportunity to receive an oversight of trends within UK HE and to position their own institution in relation to them. However, we continue to caution against anyone attempting to use the statistics as performance indicators. There are different perspectives on where an institution may wish to be located in the spectrum of options and there is no path of uniform development in provision and support for learning technologies.

As highlighted in the 2012 Survey, the focus of attention is firmly on the institutional agenda. 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 2012 Survey, bringing new educational opportunities and additional support headaches! It is these new challenges which the 2014 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 of particular importance and relevance to the support community, i.e. 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 Association for Learning Technology and Heads of e-Learning Forum. Crucially, we also received financial backing from UCISA to go ahead with another project, tackling the challenge of designing a suitable survey instrument for completion by the UK HE community in 2014.

Factors influencing the design of the 2014 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 naturally strongly influenced by sector developments in the policy and management of TEL. Looking to the recent past, the publication of HEFCE's revised strategy for e-learning in 2009[8] represented an important landmark for the sector in terms of strategic thinking on TEL development, and indeed remains an important reference point for institutions as evidenced in the 2014 Survey data. The revised strategy reflected a change in language, eschewing e-learning and its close association with distance learning for the more inclusive *"use of technology to enhance learning and teaching"*. The strategy also reflected a change in emphasis, moving from pump-priming investment in technology across the sector to the outline of a strategic framework, which was intended to assist institutions in maximising the strategic benefits of technology. Reflecting on the investment achieved across the sector in the provision of tools, the framework emphasised the need to embed the use of technology in teaching and learning and develop pedagogic skills to make best use of these tools to support student learning – a key challenge facing all institutions in their current and future management of TEL tools.

Since the publication of the strategy, there have been further reports (e.g. the Online Learning Task Force's Report to HEFCE, *Collaborate To Compete*), conferences and events which have focused on how the sector can maximise the value of its strategic investment in learning technologies. Post e-learning benchmarking – an exercise supported by the Higher Education Academy in 2006 which involved many HE institutions – we have observed the emergence of special interest groups such as LERSIG and ELESIG[9], which have initiated discussions on learning platforms and their contribution to student learning, as well as sharing practice on strategies for evaluating students' experiences of the uses of technology in their learning. Whilst LERSIG as a coordinating group has now been wound up, the focus on the evaluation of VLE platforms has not gone away and is firmly embedded across the sector, and evaluation of the impact of TEL on student and pedagogic practices is of enduring interest to HE institutions. Indeed, taken as whole, although these publications, events and special interest groups may appear a little dated now, they still represent important

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

4 *Walker, R., Voce, J. and Jenkins, M. (2013). Charting the development of technology-enhanced learning developments across the UK higher education sector: a longitudinal perspective (2001–2012),* Interactive Learning Environments, *Routledge: London. First published on: 11 December 2013. www.tandfonline.com/doi/full/10.1080/10494820.2013.867888*

5 *Walker, R., Ahmed, J., and Voce, J. (2012). Capturing current realities and future challenges: findings from the 2012 UCISA TEL survey. ALT-C 2012 –* a confrontation with reality. *11–13 September 2012. University of Manchester.*

6 *Walker, R. and Voce, J. (2012). A study of technology enhanced learning developments across the UK HE sector: 2001–2012.* EUNIS '12. A 360° perspective on IT/IS in Higher Education. *20th – 22nd June 2012. University of Trás-os-Montes e Alto Douro, Vila Real, Portugal.*

7 *Walker, R. and Voce, J. (2014). Technology developments across the UK HE sector: reflections on recent UCISA research.* The Future of Learning Conference: Strategic leadership in post-secondary learning environments, technologies and approaches. *24–25 February 2014: Parkroyal Darling Harbour, Sydney, Australia www.informa.com.au/conferences/education-conference/the-future-of-learning-conference (Future of Learning Paper 720k PDF) (Future of Learning Presentation 840k PPTX)*

8 *Enhancing learning and teaching through the use of technology: A revised approach to HEFCE's strategy for e-learning: www.hefce.ac.uk/pubs/year/2009/200912*

9 *LERSIG: Association for Learning Technology's Learning Environment Review Special Interest Group: repository.alt.ac.uk/673/*
ELESIG: Evaluation of Learners' Experiences of e-learning Special Interest Group: elesig.ning.com

influences on the UK sector and collectively formed an important backdrop to the 2014 Survey and the questions that we were proposing to raise on the embedding of TEL tools across the sector.

We have also kept a watchful eye on TEL developments since the last Survey in 2012. The embedding of learning technologies and their alignment with pedagogic practice continue to constitute key challenges for HE providers, as recognised through HEFCE's *Changing the Learning Landscape programme*[10], which has been directed towards supporting transformative change across institutions in embedding learning technologies. The programme has drawn on a number of key partners including the National Union of Students and aims to support senior managers, helping them to see the opportunities to align technology enhanced learning developments with strategic priorities. A key part of this process has been about placing students at the heart of curriculum design processes, a theme which the JISC have actively promoted through their own project funding initiatives[11]. Another key development has been the launch of the *FutureLearn* massive open online courses (MOOCs) in September 2013. MOOC developments have commanded a lot of attention in the press and have been viewed as a way of driving changes in technology development and usage, opening up access to higher education and expanding UK HE teaching provision internationally[12]. Keeping with the open education theme, we have also observed the influence of European and national government led initiatives that are encouraging HE and Further Education (FE) institutions to make their educational content open and freely available. For example, Welsh institutions have been strongly encouraged to sign a declaration of intent to put open education practices at the heart of their strategies[13], and the European Commission has launched the *Open Education Europa – the gateway to European innovative learning*[14]. We have sought to address these themes too in the design of the 2014 question-set.

As with all continuing surveys, 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 also keeping pace with new developments. The approach that we have 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 practices. For instance, the list of driving factors for developing TEL was extended to include options on improving access to learning through the provision of open education courses (e.g. MOOCs). Additional questions were introduced on the VLE review process, focusing on how institutions are evaluating their VLE review decisions and on support for mobile services, exploring how institutions are promoting the use of mobile devices in support of learning, teaching and assessment activities.

New questions were also introduced to identify discontinued TEL services that have not stood the test of time, and those services reported to be attracting increasing investment – such as the delivery of open learning provision to external audiences. Additional component questions were also added to the evaluation section, inviting respondents to comment on the purpose of the evaluation activities they were undertaking into TEL practices and their impact on TEL provision and support within their institution.

Circulation and completion of the 2014 Survey

Following on from the success of the online approach which was introduced in 2012, institutional Heads of e-Learning were invited to complete the Survey via UCISA's online survey instrument in mid-January 2014 and an email message was also posted on the Heads of eLearning 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 in the first week of March 2014.

The workers

The Survey was conducted by UCISA, through the work of Richard Walker (University of York), Julie Voce (Imperial College London), Joe Nicholls (University of Cardiff), Elaine Swift, (Nottingham Trent University), Jebar Ahmed (University of Huddersfield), Sarah Horrigan (University of Derby) and Phil Vincent (York St John University) and with support from UCISA's Academic Support Group and with help from Martin Jenkins (Coventry University), an author of previous Survey Reports who served as a critical friend to the project team. The project team worked in collaboration with The Research Partnership (an independent survey organisation).

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

10 *Changing the Learning Landscape is a professional development programme aimed at helping UK HE institutions to explore practical, innovative use of digital technologies in learning and teaching. Further details are available at: www.heacademy.ac.uk/cll*

11 *The JISC has funded a series of curriculum development projects which have engaged students as change agents. Further details are available at: Jiscdesignstudio.pbworks.com/w/page/31087422/Students%20as%20Change%20Agents*

12 *For example, keynote speakers at the* Guardian Higher Education Summit *27 February 2013, highlighted the opportunities that MOOCs will provide to open up education to new types of learners: www.ucl.ac.uk/teaching-learning/news/david-willetts-guardian-summit-future-of-higher-education*

13 *Welsh universities sign declaration of intent embedding Open Education at the heart of their strategies – 11 Dec 2013: www.hew.ac.uk/welsh-universities-sign-declaration-of-intent-embedding-open-education-at-the-heart-of-their-strategies*

14 *Open Education Europe – The Opening up Education initiative: www.openeducationeuropa.eu/en/initiative*

Institutions surveyed

All 134 members of the Universities UK list[15] were approached to complete the Survey, along with 24 other higher education institutions, forming a total population of 158 institutions. This is slightly down on the 165 institutions targeted in 2012, with the total number reduced over the past two years due to mergers and changes in university status.

Presentation of data

The presentation of the data is in four main parts. The report commentary will focus on results from the 2014 Survey and, where appropriate, highlights from that data will be presented in tabular or graphical form. In most cases, only the leading responses for each question will be given in the tables within the main report (e.g. the top five responses). The full tabular data for each question for 2014 is presented in Appendix A of the report. Repeating the approach taken in the 2012 Survey, a breakdown of the data is also available by university mission groups, and this is presented in Appendix B. Where longitudinal analysis can be performed, any presentation of that data is in Appendix C. In most instances, it will only be shown from 2003 because the removal and modification of questions since 2001 rarely warrants detailed comparison with that first survey. As part of the general narrative, any longitudinal analysis will be in the main text. We have not produced tables for a longitudinal analysis of mission group data comparing 2014 results with 2012, due to the big changes in membership over the past two years (e.g. movement of some institutions from the now defunct 1994 Group to the Russell Group), but key developments in mission group are identified in the main commentary where they are worthy of discussion.

The classification of higher education institutions follows the same approach as in previous Surveys, based on type (Pre-92, Post-92 and HE Colleges) and country (England, Wales, Scotland, Northern Ireland), along with the additional layer of data by mission group. Note that the membership of mission groups is based on the make up of these groups in February/March 2014 when the Survey was being completed and, therefore, does not reflect any subsequent changes in group membership.

Although 96 institutions submitted responses to the Survey, not all questions were attempted by all respondents. Completion totals are consequently presented at the bottom of each table to indicate the number of responses received per question. It is worth noting that some country and group populations are relatively small in size (e.g. Wales, n =5; Northern Ireland, n=1; GuildHE institutions, n=11; HE Colleges, n=9) and so susceptible to dramatic swings in percentage scores when the number of respondents in these groups is 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.

It is also worth noting that the shift in distribution methods for the 2012 and 2014 Surveys may have resulted in changes to the profile of respondents completing institutional returns, given that previously the Survey had been sent out to VCs and Principals who determined who should complete the institutional return, whereas for 2012 and 2014 it was targeted directly at Heads of e-Learning. This may lead to subtle changes in the data based on the profile of respondents completing submissions for certain questions; for example, perceptions on the influence of institutional strategies on TEL developments (Question 2.4) may be affected by the position of the respondent within the institutional hierarchy.

Whilst the switch to an online method for completion of the Survey has helped with the accuracy of submissions for some questions (e.g. Question 3.12 where the proportion of modules had to total 100%), we cannot rule out errors in returns for other questions. For example, in Section 3 Question 3.10 on centrally managed TEL tools, a 95% figure is returned here for the percentage of institutions supporting VLE systems, but this figure does not match the 100% return for *main institutional VLE* recorded by 94 respondents for Question 3.1b at the beginning of this section; the inconsistency may possibly be attributed to incomplete submissions/user error for this question. A commentary on the data is provided either as a footnote or as part of the discussion for a particular question, where errors like this arise.

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 denoted with an asterisk at the end of the response option. New questions for the 2014 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 2012 Survey.

Please note that for the mission group data in Appendix B, we have omitted a data column for unclassified institutions which do not belong to a mission group, as this unaffiliated set of institutions is now too large to be meaningful and the data for these institutions is, therefore, not captured. The totals that are presented for each table in Appendix B relate to the total number of respondents to the question and not to the mission groups that are represented in the table, which are a subset of that total.

15 For the full list of Universities UK members, please see: www.universitiesuk.ac.uk/aboutus/members/Pages/default.aspx

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. However, in response to feedback received for the 2008 report on the need for clearer lines of interpretation for certain areas of the data, 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. These case studies will be presented in a companion report which will be published by UCISA later on in the year.

Response rate

Survey returns were received from 96 of the 158 HE institutions targeted – an impressive response rate of 61% (compared with 59% in 2012), maintaining the upward trend in the level of responses recorded since 2008 (44%), albeit from a slightly reduced total population of HE institutions than the 165 institutions targeted in 2012. The profile of those taking part is again representative of sector institutions in terms of type of institution, geographic spread and mission group – as shown by Tables A, B and C.

Table A: Type of institution

Type	Total possible[16]	No. responding	% responding	Universe	Sample
Pre-92	-	47	-	-	49%
Post-92	-	40	-	-	42%
HE College	-	9	-	-	9%
Total	158	96	61%		100%

Table B: UK Country

Country	Total possible[17]	No. responding	% responding	Universe	Sample
England	130	81	62%	82%	84%
Wales	9	5	56%	6%	5%
Scotland	15	9	60%	9%	9%
Northern Ireland	4	1	25%	3%	1%
Total	158	96	61%	100%	100%

Table C: Mission Group

Country	Total possible[18]	No. responding	% responding	Universe	Sample
Russell Group	24	19	79%	15%	20%
University Alliance	22	16	73%	14%	17%
Million+	17	10	59%	11%	10%
GuildHE	28	11	39%	18%	11%
Unclassified	67	40	60%	42%	42%
Total	158	96	61%	100%	100%

16 HESA no longer provides definitive figures for total populations by institutional type, based on the Pre-92/Post-92/HE college classifications. Therefore, in this table the number of responding institutions and sample percentages are presented only.

17 The figures are drawn from national funding council lists as published in 2014: e.g. HEFCE www.hefce.ac.uk/whatwedo/invest/unicoll/heis

18 The numbers are based on membership of the university mission groups in February/March 2014 when the Survey was being completed by institutions.

Table D provides a summary of variability of responding institutions for 2003, 2005, 2008, 2010, 2012 and 2014.

Table D: Institutional responses for the last six Surveys

	Surveys	No.
2014 and:	2012 + 2010 + 2008 + 2005 + 2003	12
2014	2012 + 2010 + 2008 + 2005	1
2014	2010 + 2008	4
2014	2012 + 2010	3
2014	2010	6
2014 only	-	4
2014 and:	2008	3
2014	2005	2
2014	2003	5
2014	2010 + 2008 + 2005 + 2003	2
2014	2012 + 2005 + 2003	5
2014	2012 + 2003	5
2014	2012 + 2010 + 2008 + 2003	8
2014	2012 + 2010 + 2003	3
2014	2012 + 2008	3
2014	2012 + 2010 + 2005	5
2014	2012 + 2005	3
2014	2005 + 2003	3
2014	2012 + 2008 + 2005 + 2003	3
2014	2012 + 2010 + 2005 + 2003	2
2014	2008 + 2005 + 2003	2
2014	2010 + 2008 + 2005	2
2014	2010 + 2008 + 2003	2
2014	Plus random mix, no greater than one for any pattern	8
Total		96

Some institutions have not responded to any of the Surveys! Only 12 of the 96 that responded to the 2014 Survey also responded to the 2012, 2010, 2008, 2005 and 2003 Surveys[19]. 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 universities.

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 D.

19 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 12 institutions.

Summary of conclusions

1. *Enhancing the quality of learning and teaching* is consolidated longitudinally as the primary driver for considering using TEL, as are the other leading drivers from the 2012, 2010 and 2008 Surveys, namely *Meeting student expectations* and *Improving access to learning for students off campus*. *Improving administrative processes* has risen to fourth place in the list of drivers.

2. *Feedback from students* – a new response option for the 2014 Survey – tops the list of factors encouraging the development of TEL, displacing *Availability of TEL support staff* which was the leading factor in the 2012 Survey. *Availability and access to tools* is the third most commonly cited factor, followed by *Central University* and *School/ Departmental senior management support* in the rankings.

3. *Lack of time* remains the leading barrier to TEL development, consolidating its position at the top of the list which it has held dating back to the 2005 Survey. *Lack of academic staff knowledge* has risen from fifth position in 2012 to second place, reversing a trend of recent years where this factor had declined in importance. *Lack of money* has moved down to third place, followed by *Institutional* and *Departmental/School* culture.

4. Institutional strategies continue to influence TEL development, with *Teaching, Learning and Assessment* consolidated longitudinally as the leading internal strategy cited by respondents. The Corporate Strategy retains second place and is cited by two thirds of Post-92 institutions as an influence on TEL development. The remaining strategies are each cited by less than half of the respondents to the 2014 Survey. The key change since 2012 is the declining influence of strategies relating to *Library and Learning Resources*, which have dropped to equal fourth place in the list below strategies related to *ICT*. External strategies such as the HEFCE and JISC publications continue to be identified as influential in informing institutional thinking on TEL developments.

5. *Blackboard Learn* is still the most used enterprise or institutional virtual learning environment (VLE), followed by *Moodle*, and both platforms have increased in usage as enterprise solutions since the 2012 Survey. Moodle remains the most commonly used VLE platform, when departmental /school implementations are also considered. Adoption of other commercial and open source platforms is negligible across the sector, although *Canvas Instructure* and *Pearson eCollege (Learning Studio)* are returned for the first time in the results. MOOC platforms have made little impression so far on TEL activity, with the *FutureLearn* platform the most commonly cited one in use, but only by eight institutions.

6. Evaluation activity in reviewing VLE provision is now well established across the sector, with half of the institutions which responded to the Survey having conducted reviews over the last two years. This activity is evenly spread across the university mission groups, with the exception of GuildHE institutions which were more active in the period up to 2012. Perceived limitations in functionality and performance for the institutional VLE top the list of reasons given for initiating a review. However, only 13 institutions have confirmed that they have evaluated the decision that they reached during their review.

7. Looking beyond the VLE, plagiarism detection and e-submission tools remain the most common centrally supported software in use across the sector. E-portfolio, blog and e-assessment tools are also well established, along with personal response systems which featured for the first time as a response option in the Survey and were the seventh most commonly cited tool in use. Podcasting tools have continued to decline in usage since the 2010 Survey and appear to have been replaced by lecture recording and media streaming solutions.

8. Social networking, document sharing and blog tools remain the most common non-centrally supported software used by staff and students. Comparing centrally provided and non-centrally provided provision, social networking tools appear to be firmly adopted at a local level, but are not a feature of central provision.

9. Supplementary use of the web to support module delivery remains the most common use of TEL and at an identical level to the figure recorded in 2012. Of the web dependent approaches requiring student participation for an online component of a course, interaction with content remains the most common approach. Fully online courses continue to represent a niche area of activity, accounting for a very small proportion of institutional TEL engagement, and there is no discernible evidence of a *MOOC effect* having yet taken place across the sector, beyond the activity of some Russell Group institutions.

10. There has been notable progress towards the optimisation of services for mobile devices by Pre-92 and Post-92 institutions, with twice the number of institutions engaged in this activity compared with the figures reported in the 2012 Survey. The leading services which have been optimised unsurprisingly focus on communication with specific attention to *email* and *course announcements* for iOS, Android and Windows mobile devices, but there has also been considerable progress towards the optimisation of *Access to course materials and learning resources*. *Access to communication tools*, *Library services* and *Lecture recordings and videos* are also popular mobile enabled

services for Pre-92 and Post-92 institutions. Institutional efforts towards the promotion of mobile learning appear to be focused on making the technology available through the loaning devices to staff and students and through dedicated funding for mobile learning projects, rather than through pedagogic initiatives and staff development activities.

11. Evaluation of the impact of TEL tools and systems on the student learning experience remains at a similar level to the activity recorded in the 2012 Survey, with over half of responding institutions having engaged in some form of evaluation activity, with the main driver for this activity unsurprisingly linked to the need to determine take up and usage of TEL tools across an institution. Just as in 2012, the evaluation of pedagogic practices is less common, with less than a third of responding institutions having done so and this figure is slightly down on the number of institutions evaluating pedagogic practice in 2012.

12. The mean average number of units providing support for TEL has increased since the last Survey, with Information Technology Support Units continuing to be the most common providers of TEL support. There has been an overall increase in the number of learning technologists both within and outside central units. In contrast, the number of dedicated IT and administrative support staff has decreased from the figures recorded in 2012. Despite the challenging economic climate and budgetary pressures, which have led just under half the number of responding institutions to restructure or change existing TEL support roles, 34 institutions reported that they had actually increased staffing levels for TEL since the last Survey and 38 institutions foresee staff increases in the future.

13. The establishment of *outsourced support* for TEL services remains quite limited across the sector and has only really been implemented for student and staff email services and to a lesser degree for support for the VLE. *Hosting of provision* for TEL services is far more developed however, with 35 institutions outsourcing their email provision and 31 opting for a hosted VLE provider, rather than managing these services in house.

14. Despite the 2011 HEFCE report calling for universities to *Collaborate to Compete*, the majority of institutions responding to this year's Survey have not considered collaborating with other HE institutions in the delivery of technology enhanced learning services or resources to staff, or have considered this possibility and then decided not to do so.

15. There has been little change in the nature of training and development activities promoted to TEL support staff, although ten institutions noted that they had made reductions in travel and attendance at external events due to budgetary pressures. *National conferences/seminars* and *internal staff* development remain the most promoted development activities, and the increase in the promotion of accreditation, in particular HEA and CMALT accreditation, is sustained in the 2014 results. Looking to the future, institutions anticipate an increase in development and support activities for staff with a direct responsibility for enabling TEL services, as well as a greater focus on developing staff IT skills and digital literacies.

16. *Mobile technologies* remains at the top of the list of the items making the most demand on TEL support teams, consolidating its position from the 2012 Survey results. *Lecture capture* and *e-assessment* (e-submission, e-marking and e-feedback) follow in the list of top five demands, along with *VLEs* where the focus is now on how institutions change to a new system or embed use of their current VLE within their institution. MOOCs are identified by 12 institutions – mostly Pre-92 universities from England and the Russell Group – as another area making new demands in terms of support requirements.

17. The top five challenges facing institutions are largely unchanged from 2012, although the order of priorities appears to have shifted. *Lack of support staff/specialist skills/resources* has moved into first place from fifth. *Mobile technologies/learning* and *staff development* remain key challenges and despite both dropping a place in the ranking, their overall percentages have increased. *Lecture capture/recording* is new to the top five, whilst *MOOCs* do not feature as a challenge for the next two to three years.

Section 1: Factors encouraging development of Technology Enhanced Learning

Section 1 of the Survey looked at the factors promoting the development of TEL within institutions and retained the same questions used in the 2014 Survey. Respondents were asked to consider the factors encouraging strategic development for TEL within their institution.

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 1.1a: Mean values and Ranks for ALL and Type

Rank2014	Driving factors	ALL	Pre-92		Post-92		Coll	
Top 5			Mean	Rank	Mean	Rank	Mean	Rank
1	Enhancing quality of learning and teaching in general	3.83	3.80	1	3.87	2	3.78	1
2	Meeting student expectations	3.73	3.67	2	3.90	1	3.25	3
3	Improving access to learning for students off campus	3.27	3.22	3	3.51	3	2.44	7=
4	Improving administrative processes	3.15	3.02	7	3.23	12	3.44	2
5	To help create a common user experience	3.13	3.04	6	3.31	7	2.78	4

Note: n=94 for Table 1.1a

Table 1.1b: Mean values and Ranks for ALL and Country

Rank2014	Driving factors	ALL	England		Wales		Scotland		N. Ireland	
Top 5			Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Enhancing quality of learning and teaching in general	3.83	3.84	1	3.60	2	3.89	1=	4.00	1=
2	Meeting student expectations	3.73	3.74	2	4.00	1	3.67	3=	2.00	17=
3	Improving access to learning for students off campus	3.27	3.23	3	2.80	13=	3.89	1=	3.00	9=
4	Improving administrative processes	3.15	3.23	4	3.00	8=	2.56	18=	3.00	9=
5	To help create a common user experience	3.13	3.13	6	3.40	4	3.11	16	2.00	17=

Note: n=94 for Table 1.1b

Table 1.1a and Table 1.1b summarise the returns for Question 1.1 showing the top five rankings for all the data, ordering them according to their mean values. The mean values were calculated from the number of responses given for each option within the response scale. The individual rankings by type of university are given in Table 1.1a and by country in Table 1.1b. A breakdown of results by mission group is available in Table B1.1 in the Appendix to this report.

The top three drivers for TEL development remain unchanged from the 2012 Survey, with *Enhancing the quality of learning and teaching* again leading the list. However, for this year's Survey, *Improving administrative processes* has risen to 4th place in the rankings from 10th place in 2012, with English institutions marking a shift in their estimation of this factor's importance; the 2012 mean average for English institutions was 3.04, but it is now rated with a mean average of 3.23, and HE colleges also highlight its importance, with the mean average rising from 3.00 to 3.44.

In contrast, *Improving access to learning for distance learners* has dropped from 4th in 2012 to 14th place in this year's Survey, with the largest fall in mean score recorded for HE colleges (mean = 3.57 in 2012 to mean = 1.67 in 2014). For the mission groups, the declining importance of this driver was most noticeable for GuildHE institutions – with the mean average dropping from 3.50 in 2012 to 2.27 in 2014. *Improving access to learning for part time students* has also seen a significant fall in the 2014 Survey – from 5th to 17th place – with the declining importance for this driver again particularly noticeable for the GuildHE mission group (mean = 3.38 in 2012, mean = 2.36 in 2014).

The two new driving factors for developing TEL, *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)* were ranked

as the least important of all the driving factors for developing TEL, with Russell Group universities offering the highest mean scores (2.12 and 2.72 respectively) of the mission groups for these new factors.

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

Table 1.2: Other driving factors for TEL development

Leading factors identified	Frequency
Student learning experience/attainment	4
Institutional strategy/policy	4
Improving NSS scores and relevant rankings/sector position comparisons	3
Meeting user expectations	2
Employability	2

This was an open question inviting respondents to identify additional driving factors encouraging the development of TEL. Table 1.2 captures the leading list of additional driving factors that were identified by respondents. The full set of results is captured in Table A1.2 in the Appendix. 22 institutions suggested alternative drivers, although some of the responses reflected pre-coded options in Question 1.1. The additional factors highlighted the importance of the quality of the student learning experience/student attainment, as well as priorities arising from institutional strategy/policy, which are all closely related to the second leading driver in Table 1.1 *(Meeting student expectations)*.

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

Table 1.3a: Factors encouraging development of TEL for ALL and Type

Rank2014	Question	ALL	Pre-92		Post-92		Coll	
Top 5			Mean	Rank	Mean	Rank	Mean	Rank
1	Feedback from students*	3.70	3.64	2	3.85	1	3.33	2
2	Availability of technology enhanced learning support staff	3.69	3.73	1	3.67	3	3.63	1
3	Availability and access to tools across the institutions	3.50	3.38	5	3.71	2	3.22	4
4	Central university senior management support	3.49	3.47	3	3.66	4	2.89	6
5	School/departmental senior management support	3.45	3.44	4	3.58	5	2.88	7

Note: n=93 for Table 1.3a

Table 1.3b: Factors encouraging development of TEL for ALL and Country

Rank2014	Question	ALL	England		Wales		Scotland		N. Ireland	
Top 5			Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Feedback from students*	3.70	3.65	2	4.00	1	3.88	2=	4.00	1=
2	Availability of technology enhanced learning support staff	3.69	3.66	1	3.60	4	4.00	1	4.00	1=
3	Availability and access to tools across the institutions	3.50	3.46	4	3.80	2	3.88	2=	2.00	9=
4	Central university senior management support	3.49	3.44	5	3.75	3	3.88	2=	3.00	4
5	School/departmental senior management support	3.45	3.49	3	3.00	9	3.50	5=	2.00	9=

Note: n=93 for Table 1.3b

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

For this year's Survey, *Feedback from students* was introduced as a new response option (as denoted by the asterisk in both tables) and it tops the list as the main factor encouraging the development of TEL, pushing *Availability of*

TEL support staff down to second place after it had led the rankings in the 2010 and 2012 Surveys. Of the other new response items which were introduced for this question, *Availability of university committees and steering groups to guide development* is ranked 8th and *Availability and access to relevant user groups/online communities* appears further down the list in 10th place. The full list of factors is captured in Table A1.3 in the Appendix.

Table C1.3 presents the longitudinal picture of responses to this question and shows that *Availability of relevant standards* remains the lowest ranked factor, followed by *Availability of external project funding*.

Table B1.3 presents the scores for university mission groups. It is interesting to observe that the top four encouraging factors for the sector are not reflected in the list of rankings across all mission groups. Russell Group institutions highlight *Availability of TEL support staff* as being their leading factor, whilst GuildHE institutions have *Availability of committed champions* and Million+ institutions *Availability and access to tools across the institution* as their most important factors in encouraging development of TEL. Only the University Alliance institutions identify *Feedback from students* as their leading factor encouraging the development of TEL.

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 1.4: Other factors that *encourage* TEL development

Other factors encouraging TEL	Frequency
Availbility of internal communities of practice • Networking/networks of champions • Conferences and symposia • Staff development	7
Support from senior management • through awareness/encouragement	3
Student – staff partnerships	2
Sector position/cross institutional comparisons	2
Research groups	2
Reform of curriculum development processes	2
Staff feedback and engagement	2
Indirectly through exposure to other mandatory online training	1
Corporate strategy specifically encouraging TEL development	1
Financial incentives	1

Table 1.4 captures the list of additional 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 – a focus for Question 2.6. Responses which articulated factors enabling use of TEL were discounted for this question.

Availability of internal communities of practice providing pressure for TEL development represented the most common encouraging factor, differing from previous Survey results (2012 to 2008) where student petitions and feedback dominated. It should be noted, however, that *Feedback from students* was added as a factor encouraging development of TEL in Question 1.3 and this may account for its absence in the above table. Respondents also highlighted the *Support from senior management* in the form of awareness, endorsement and encouragement at an executive level to foster TEL development across an institution.

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 was revised from the 2012 Survey to incorporate an additional question (Q2.7), which invited respondents to consider the approaches that institutions use to raise awareness amongst staff of the benefits of using technology enhanced learning tools. In addition, Question 2.5 was converted from a free-text question to a multiple choice format, with pre-coded options based upon the responses received in 2012.

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	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Teaching, Learning and Assessment strategy	85	92%	93%	95%	78%	91%	100%	100%	100%
Corporate strategy	48	52%	46%	67%	22%	51%	80%	38%	100%
Information and Communication Technology (ICT) strategy	44	48%	46%	51%	44%	45%	40%	88%	0%
Library/Learning Resources strategy	43	47%	48%	46%	44%	47%	40%	50%	0%
Student Learning Experience strategy	43	47%	43%	54%	33%	46%	60%	50%	0%
Technology Enhanced Learning or e-Learning strategy	43	47%	61%	41%	0%	49%	20%	38%	100%

Note: n=92 for Table 2.1

This question was retained from previous Surveys, enabling a comparison of rankings for institutional strategies informing TEL development across the years. (See Table C2.1 for the complete list of rankings and totals for previous years.).

Table 2.1 shows that the *Teaching, Learning and Assessment Strategy* tops the list and remains the most commonly cited strategy (92%) informing TEL development across institutional type, country and mission group categories.

The *Corporate Strategy* retains second place in the list and is cited by two-thirds of Post-92 institutions as an influence on TEL development. The remaining strategies are each cited by less than half of the respondents to the 2014 Survey. The key change since 2012 is the declining influence of strategies relating to *Library and Learning Resources*, which have dropped to equal fourth place in the list below strategies related to *ICT*, with a marked decrease in percentage score from 64% in 2012 to 47% in this year's Survey.

Interestingly, none of the HE college respondents has developed a dedicated *Technology Enhanced Learning* or *e-Learning strategy* to inform TEL development, and this approach is most commonly seen in Pre-92 institutions, with 61% indicating that a dedicated strategy is in use.

Of the *Other* strategies that were mentioned by respondents, most were a variation on the existing response items for Question 2.1, with the exception of *Staff Development* and *Open Access/Learning*.

Question 2.2: Which, if any, *external strategy* documents inform the development of technology enhanced learning in your institution?

Table 2.2: External strategy documents that have informed the development of TEL

Top 6	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
HEFCE e-learning strategy (2005 and 2009)	52	58%	58%	63%	38%	67%	20%	13%	0%
JISC strategies	50	56%	51%	66%	38%	60%	40%	38%	0%
Strategies from professional bodies or agencies	19	21%	23%	21%	13%	19%	40%	38%	0%
Other HEFCE strategy documents	19	21%	23%	21%	13%	25%	0%	0%	0%
Enhancing Learning and Teaching through Technology: refreshing the HEFCW strategy 2011	13	15%	12%	21%	0%	11%	100%	0%	0%
No external strategy documents inform development	13	15%	16%	11%	25%	16%	0%	13%	0%

Note: n=89 for Table 2.2

Table 2.2 provides a summary of the leading external strategy documents which inform TEL development. *HEFCE strategies* remains the leading category and is most commonly cited by institutional and mission groups, once again closely followed by *JISC strategies*. Similar to the picture recorded in 2012, there are strong national variations in the reception of external strategy documents, with the revised *HEFCW strategy* quoted by all Welsh institutions responding to the Survey and 63% of Scottish institutions citing their own national e-learning report as an influential TEL document.

Other documents that were mentioned by respondents included *Greening ICT initiatives*, the Department of Business, Innovation and Skills' *Students at the heart of the system* report (2011), as well as references to general strategies relating to the school and health and social care sectors.

A longitudinal picture of responses for external strategy documents is available in Table C2.2. The results recorded for 2014 reflect the declining percentage scores for external strategies since the high point of the 2010 Survey, and this trend is underscored by an increase in responses for the answer *No external strategy documents inform development*, which was selected by 13 institutions.

Question 2.3: Which, if any, *external reports or documents* inform the development of technology enhanced learning in your institution?

Table 2.3: External reports or documents that have informed the development of TEL

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
UCISA 2012 Survey of Technology Enhanced Learning for higher education*	64	71%	71%	76%	50%	69%	60%	100%	100%
JISC: Developing Digital Literacies (2012)*	60	67%	64%	74%	50%	65%	60%	86%	100%
JISC: Learning in a digital age: Extending higher education opportunities for lifelong learning (2012)*	53	59%	57%	66%	38%	56%	80%	71%	100%
NUS's Student Perspectives on Technology report (2010)	52	58%	68%	55%	13%	61%	40%	29%	100%
Jisc infoNet: Emerging Practice in a Digital Age (2011)	44	49%	43%	58%	38%	46%	60%	71%	100%
MOOCs and Open Education: Implications for Higher Education (2013)*	44	49%	61%	40%	25%	47%	60%	57%	100%

Note n=90 for Table 2.3

This question was retained from the 2012 Survey, with the intention of tracking the influence of other reports (not strategies) informing the development of TEL. The response items were updated from the 2012 Survey to remove reports published prior to 2010, and to add reports and documents published since the last Survey.

Table 2.3 shows the top five reports or documents informing the development of TEL, with the majority having been published in the last two years. The list is dominated by the new response items. The *UCISA 2012 TEL Survey for higher education* is ranked in first place both overall (71%) and across all institution types and for the majority of mission groups and institutions. The exceptions to this response pattern are GuildHE institutions, which most commonly reference *Jisc: Developing Digital Literacies (2012)* and Welsh institutions, which reference *Jisc: Learning in a digital age: Extending higher education opportunities for lifelong learning (2012)*.

Of the 2012 Survey response items, the *NUS Student Perspectives on Technology* report *(2010)* continues to be influential, increasing in its percentage score from 53% to 58%; however, the *Jisc infoNet: Emerging Practice in a Digital Age (2011)* has declined in currency from 60% to 49%, in favour of more recent Jisc publications.

There is a clear difference between the mission groups when it comes to the *MOOCs and Open Education: Implications for Higher Education (2013)* report, which is cited by 65% of Russell Group institutions compared to 30% of GuildHE and Million+ institutions. In addition, the *NMC Horizon Report 2013 Higher Education Edition* is much less influential for Million+ institutions, with only 20% citing this report.

The longitudinal trend is for the more recent reports to have greater influence. However, the results may well have been skewed somewhat by removing previously high ranking response items such as *Effective Practice in a Digital Age* (Jisc, 2009) – which had topped the list in both the 2010 and 2012 Surveys – from the set of response items for this question.

Question 2.4: To what extent, if at all, do any internal or external strategies on the development of technology enhanced learning influence the implementation of the various tools in practice?

Table 2.4: The extent to which internal or external strategies on the development of TEL have influenced the implementation of the various tools in practice

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Strategies have a great influence on implementation	16	17%	18%	18%	13%	17%	40%	13%	0%
Strategies influence implementation	49	53%	58%	56%	13%	54%	40%	50%	100%
Strategies have limited influence on implementation	26	28%	24%	26%	63%	28%	20%	38%	0%
Strategies have no influence on implementation	1	1%	0%	0%	13%	1%	0%	0%	0%

Note: n=92 for Table 2.4

The figures in Table 2.4 confirm that strategies are still felt to have an influence on TEL implementation across the sector, with the exception of one respondent who indicated that strategies have no influence. In total, 70% of respondents agreed that strategies have an influence or a great influence on implementation, which is similar to the figure from 2012 (72%). The only difference is a small increase in the number reporting that strategies have a great influence, up from 13% to 17%.

As in 2012, variations between the national groups are evident in the response data, with 40% of Welsh respondents agreeing that strategies have great influence in comparison with only 17% of English respondents and 13% of Scottish respondents. Table B2.4 also reveals some notable variations in the results by university mission groups; for example, 60% of GuildHE respondents confirm that strategies have limited influence on their implementation of TEL tools.

Question 2.5: What institutional policies, if any, link strategy and implementation of technology enhanced learning tools?

Table 2.5: Institutional policies which link strategy with implementation of TEL tools

Top 6	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Learning, Teaching and Assessment strategy	62	68%	61%	80%	50%	65%	100%	75%	100%
Faculty or departmental/school plans	55	60%	55%	72%	38%	61%	20%	88%	0%
VLE usage policy (minimum requirements)	53	58%	43%	74%	63%	61%	40%	38%	100%
VLE guidelines/description of VLE service	43	47%	39%	56%	25%	52%	40%	13%	0%
TEL or e-learning strategy/action plan	41	45%	41%	56%	13%	48%	0%	50%	0%
e-Assessment/e-submission policy	37	41%	30%	56%	25%	43%	60%	13%	0%

Note: n=91 for Table 2.5

Question 2.5 was converted from a free text question to a multiple choice format, with pre-coded options based on the responses recorded from the 2012 Survey. Respondents were invited to identify any policies that link institutional strategies with the implementation of TEL tools. Of the policies that were mentioned, *Learning, Teaching and Assessment strategies* were the most frequently cited (68%). However, 90% of respondents from Million+ institutions and 71% of Russell Group institutions cited *Faculty or departmental/school plans* as the main policy linking strategy to implementation of TEL tools. *Faculty or departmental/school plans* was also the leading response recorded by Scottish institutions (88%). The full list of policies mentioned by respondents is set out in Tables A2.5a and A2.5b.

Due to the change in question format, scope for longitudinal analysis is limited, but does show the continuing importance of institutional policies in linking strategy with the implementation of TEL tools.

Question 2.6: How is the adoption and use of technology enhanced learning tools *enabled* within your institution?

Table 2.6: Enabling approaches for the adoption and use of TEL tools within an institution

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Providing support and training to academic staff	89	97%	98%	97%	88%	97%	100%	88%	100%
Providing platforms for sharing good practice (e.g. networks; show and tell meetings)*	80	87%	87%	90%	75%	87%	100%	75%	100%
Delivery of PGCert programme for academic staff	67	73%	71%	82%	38%	72%	80%	75%	100%
Allowing academic staff development time	39	42%	38%	51%	25%	47%	0%%	25%	0%
Provision of student internships/ partnerships*	38	41%	47%	44%	0%	42%	60%	25%	0%
Allowing support staff development time	36	39%	36%	51%	0%	45%	0%	13%	0%
Delivery of other forms of accredited training for academic staff	28	30%	29%	36%	13%	30%	20%	50%	0%
Contractual obligation/part of job specification for academic staff	13	14%	9%	21%	13%	14%	20%	13%	0%
Other enabling approach	11	12%	13%	8%	25%	12%	0%	25%	0%
Adoption and use of TEL is not enabled	2	2%	2%	3%	0%	1%	0%	13%	0%

Note: n=92 for Table 2.6

Question 2.6 has been included in various guises in all previous Surveys dating back to 2001, although the response options have evolved over time. For the 2014 Survey, two new response items were introduced to the list of pre-coded options for this question, namely *Providing platforms for sharing good practice* (87%) and *Provision of student internships/partnerships* (41%), with both items returned in the list of top five responses.

Table 2.6 reveals that *Providing support and training to academic staff* (97%) remains the primary way of enabling the adoption of TEL tools, as it was in the 2012 Survey across all institutional types and mission groups. *Providing platforms for sharing good practice* also features very highly across all institution types and mission groups. Using the *Delivery of PG Cert. programmes* as a way of promoting TEL tools is another common practice, picked out particularly by Million+ institutions (90%). The recent call by the National Union of Students for students to be regarded as partners in curriculum design processes is also reflected in the results, with *Provision of student internships/ partnerships* featuring quite highly across all mission groups and institution types, with the notable exception of HE colleges (0%).

Of the long standing response items, *Allowing academic staff development time* and *Allowing support staff development time* were both cited by just under half of respondents, a consistent trend across the years.

Of the *Other* enabling approaches that were mentioned, there is some overlap here with the encouraging factors which were considered in Question 1.3, with references made to TEL *champions*, delivery of non-accredited training and dedicated project funding for TEL developments among others. A summary of the *Other* approaches is presented in Table 2.6a.

Table 2.6a: Other approaches enabling the adoption and use of technology enhanced tools

Other enabling approaches Top five	**No.**	**Total**
TEL *champions*	2	2%
Delivery of non-accredited training	2	2%
Internally funded development projects	1	1%
Staff secondments	1	1%
Self-help training materials	1	1%

Question 2.7: In what ways, if any, have you sought to raise awareness amongst staff of the benefits of using technology enhanced learning tools, engaging them in greater use of technology in their teaching and assessment?

Table 2.7a: Approaches to raise awareness amongst staff of the benefits of using technology enhanced learning tools

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Staff development programme	83	93%	93%	95%	86%	93%	100%	86%	100%
Dissemination channels for TEL practices	80	90%	88%	97%	57%	90%	80%	100%	100%
TEL website and online training resources	71	80%	77%	87%	57%	79%	100%	71%	100%
TEL strategy groups and networks	66	74%	72%	80%	57%	75%	60%	71%	100%
Joined up central and departmental support provision	58	65%	70%	64%	43%	70%	20%	43%	100%
Other approach to raising awareness	18	20%	%23%	18%	14%	24%	0%	0%	0%

Note: n=89 for Table 2.7a

Question 2.7 was introduced for the first time in the 2014 Survey, inviting respondents to consider the approaches that institutions employ to raise awareness amongst their staff of the benefits of using TEL tools.

Staff development programme (93%) was the top response given by the majority of institution types, mission groups and countries, with the marginal exception of Post-92, Russell Group and Scottish institutions, which both cited *Dissemination channels for TEL practices* as their favoured approach.

Variations of *TEL strategy groups and networks*, which was ranked fourth overall, also featured heavily in the *Other* awareness raising approaches, including *TEL champions* and *Communities of practice*. *Teaching prizes and awards* also featured among the *Other* responses, as did raising awareness amongst staff of the benefits of using TEL tools via *Research and publications*.

Section 3: Technology Enhanced Learning *currently* in use

Section 3 of the Survey focused on details of the TEL tools that are being used by institutions to support learning, teaching and assessment activities.

This section was expanded from the 2012 Survey to include additional questions on the VLE review process and on support for mobile services, exploring the degree to which these technologies are supporting more flexible opportunities for learning. New questions were also introduced to identify discontinued TEL services that have not stood the test of time, and those services reported to be attracting increasing investment – such as the delivery of open learning provision to external audiences, which has attracted so much attention by the government and the press over the past two years. Additional component questions were also added to the evaluation section, inviting respondents to comment on the purpose of the evaluation activities they were undertaking into TEL practices and their impact on TEL provision and support within their institution.

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

Table 3.1: Institutional VLE currently in use

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	94	100%	100%	100%	100%	100%	100%	100%	100%
No	0	0%	0%	0%	0%	0%	0%	0%	0%

Note: n=94 for Table 3.1

In a new question for the 2014 Survey, respondents were asked to confirm whether a VLE platform was currently in use in their institution. Comprehensive VLE usage across the sector has been inferred from Questions 3.1a and 3.1b in previous Surveys and the responses for 2014 confirm that all responding institutions are indeed using such a platform.

Table 3.1a: VLEs currently used

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Moodle	58	62%	72%	51%	56%	62%	80%	57%	0%
Blackboard Learn	46	49%	50%	49%	44%	44%	80%	71%	100%
SharePoint	11	12%	9%	13%	22%	12%	0%	14%	0%
Other VLE developed *in house*	11	12%	15%	10%	0%	11%	0%	29%	0%
FutureLearn*	8	5%	17%	0%	0%	9%	0%	14%	0%
Other intranet based developed *in house*	5	3%	7%	5%	0%	6%	0%	0%	0%
Blackboard WebCT	4	3%	4%	5%	0%	4%	0%	0%	0%
Desire2Learn	3	2%	4%	3%	0%	3%	20%	0%	0%
Instructure Canvas*	3	2%	4%	3%	0%	4%	0%	0%	0%
Sakai	3	2%	7%	0%	0%	4%	0%	0%	0%
Other *commercial* VLE	3	2%	2%	5%	0%	4%	0%	0%	0%
Coursera*	2	1%	2%	0%	11%	1%	0%	14%	0%
Pearson eCollege*	2	1%	2%	3%	0%	3%	0%	0%	0%
Other *open source* VLE	2	1%	2%	3%	0%	3%	0%	0%	0%

Note: n=94 for Table 3.1a

This question was retained from previous Surveys, enabling a longitudinal analysis of institutional VLE usage from 2001 onwards (see Table C3.1a). Results from the 2012 Survey identified *Moodle* as the leading platform in terms of institutional usage, with 58% of respondents confirming its deployment within their institution. The 2014 results again reveal Moodle's leading position with a slight increase in usage to 62% from its 2012 figure (58%). *Blackboard Learn* has also increased from 38% in 2012 to 49%, and these changes reflect a growing consolidation of VLE usage across the HE sector in a smaller range of systems, with once widely used solutions such as WebCT nearing *end of life*. Table 3.5 (below) on VLE review outcomes indeed suggests that the transition of WebCT users to different solutions is nearing completion, and the increasing percentage usage for Moodle and Blackboard (captured in Table C3.1a) may partly be attributed to the migration of WebCT institutions to these systems.

Taken as a whole, the results reflect a further maturing of the VLE market, with a plethora of commercial platforms such as Top Class, FirstClass, Colloquia, Lotus Domino and Learning Space having all disappeared from view. Of the remaining commercial systems, *SharePoint* has increased in usage from 6% in 2012 to 12% in 2014, and *Canvas Instructure* and *Pearson eCollege* are returned for the first time in the results, as denoted by the asterisks in Table 3.1a which highlight new response options for the 2014 Survey. Of the *Other* commercial systems which were cited, *Blackboard Coursesites*, *Pearson MyLabs* and *Edmodo* were all mentioned. Open source systems also follow a similar pattern, with a much reduced range of solutions beyond Moodle, with *Sakai* the main alternative which was highlighted by three institutions.

It will be interesting to track whether these alternative systems to Moodle and Blackboard are more widely adopted across the sector or follow a similar pattern of usage to Desire2Learn and remain restricted to one or two institutions. Completing the picture for VLE systems in use, we see the emergence of MOOC platforms for the first time, with *FutureLearn* (n=8) and *Coursera* (n=2), which were mentioned exclusively by Russell Group institutions (see Table B3.1a).

Table 3.1b: The *main* VLE in use

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard Learn	46	49%	50%	49%	44%	44%	80%	71%	100%
Moodle	37	39%	39%	36%	56%	42%	20%	29%	0%
Other VLE developed *in house*	4	4%	2%	8%	0%	5%	0%	0%	0%
Desire2Learn	2	2%	2%	3%	0%	3%	0%	0%	0%
Sakai	2	2%	4%	0%	0%	3%	0%	0%	0%
Instructure Canvas*	1	1%	2%	0%	0%	4%	0%	0%	0%
Pearson eCollege*	1	1%	0%	3%	0%	1%	0%	0%	0%
SharePoint	1	1%	0%	3%	0%	1%	0%	0%	0%

Note: n=94 for Table 3.1b

Table 3.1b shows that 88% of responding institutions use either *Blackboard Learn* or *Moodle* as their main institutional platform. This represents a notable increase from the 70% of institutions who were using these systems in 2012. Blackboard Learn is most commonly being used by Russell Group (n=11) and University Alliance (n=9) institutions, whereas GuildHE institutions have the highest frequency of Moodle usage (n=8) for the main institutional VLE. Table C3.1b in the Appendix reveals that Blackboard Learn usage has increased by 10% and Moodle usage by 8% from the 2012 Survey. In contrast, Blackboard Classic and WebCT as main institutional platforms have disappeared from view, after both systems accounted for 9% of main institutional system usage across the sector in 2012.

Further changes may be anticipated to the breakdown of figures for main institutional VLE platform in the future, given that a third of institutions responding to the 2014 Survey are committed to reviewing their VLE provision over the next two years (see Table 3.6).

Question 3.2: Thinking about the (main) VLE in use, is it locally managed or hosted by a third party?

Table 3.2: Hosting results for main institutional VLE

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Locally managed	63	67%	72%	67%	44%	68%	80%	43%	100%
Hosted	31	33%	28%	33%	56%	32%	20	57%	0%

Note: n=94 for Table 3.2

This question was first introduced in the 2012 Survey and aimed to determine the extent to which VLE provision is being outsourced by HE institutions. The 2014 results confirm that the percentage of institutions opting for hosting has increased from the 20% recorded in 2012 to 33% in 2014. Table B3.2a reveals that hosting activity is evenly spread across the university mission groups, but Table 3.2 indicates that this activity is proportionally highest for HE colleges (56%) and Scottish institutions (57%); however, in both cases the number of responding institutions is small (n=4 and n=5 respectively) and we therefore need to take care in drawing distinctions on institutional hosting preferences based on this data.

Table 3.2a below provides a breakdown of results per platform, performed through a cross-tabulation of data for *main institutional VLE* (Table 3.1b) and *whether hosting is taking place* (Table 3.2). The results show that the institutions using Instructure Canvas and Pearson eCollege are based on fully hosted services. Institutions using Moodle as their main platform have the highest frequency of usage of hosted services (n=15), overtaking Blackboard Learn institutions which topped the list in 2012. This confirms the development in open source provision that we reported in 2012,

with a growing number of institutions opting for external commercial services to manage Moodle as their main institutional platform, blurring the division between open source and commercial system usage.

Table 3.2a: Hosting results per *platform* for main institutional VLE

	Locally managed		Hosted		Total
	No.	%	No.	%	No.
Blackboard Learn	32	70%	14	30%	46
Moodle	22	60%	15	40%	37
Other VLE developed *in house*	4	100%	0	0%	4
Desire2Learn	2	100%	0	0%	2
Sakai	2	100%	0	0%	2
Instructure Canvas*	0	0%	1	100%	1
Pearson eCollege*	0	0%	1	100%	1
SharePoint	1	100%	0	0%	1
Total	63		31		94

Note: n=94 for Table 3.2a

Question 3.3: Have you undertaken a review of the (main) institutional VLE in the *last two* years?

The next set of questions (Questions 3.3 – 3.7) was introduced for the first time in 2012 to capture trends in the review of institutional VLE provision across the sector. For the 2014 Survey an additional question (Q3.5) was introduced to this set, focusing on the evaluation of review decisions that had been reached over the past two years.

Table 3.3: Review of the (main) institutional VLE in the last two years

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	48	51%	48%	62%	22%	47%	80%	86%	0%
No	48	49%	52%	38%	78%	53%	20%	14%	100%

Note: n=94 for Table 3.3

Table 3.3 confirms that evaluation activity in reviewing VLE provision is still continuing across the sector, with half of the institutions which responded to the Survey having conducted a review in the last two years. Table B3.3 reveals that this activity is evenly spread across the mission groups, with the exception of GuildHE institutions (36%), which were more active in the period up to 2012 (63%), as reported in the last Survey. Table C3.3 in the Appendix compares global results for the sector between 2012 and 2014 and shows that review activity has reduced from the 62% reported in 2012 to 51% in 2014. Circumspection is needed in interpreting this result, which may simply reflect the cycle of institutional engagement in conducting a review – with a number of institutions already having conducted a review, rather than a drop-off in interest in the activity *per se*.

Table 3.3a: Review results per *platform* for main institutional VLE

	Have conducted review in last two years		Have not conducted review		Total
	No.	Total	No.	Total	No.
Blackboard Learn	27	59%	19	41%	46
Moodle	13	35%	24	65%	37
Other VLE developed *in house*	3	75%	1	25%	4
Desire2Learn	1	50%	1	50%	2
Sakai	1	50%	1	50%	2
Instructure Canvas*	1	100%	0	0%	1
Pearson eCollege*	1	100%	0	0%	1
SharePoint	1	100%	0	0%	1
Total	63		31		94

Note: n=94 for Table 3.3a

Table 3.3a 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 has taken place in the last two years* (Table 3.3). Whilst we cannot be absolutely sure that the reviews have taken place for the platforms mentioned in Table 3.1b (note that evaluations may have focused on predecessor systems and the current systems may reflect the VLE platforms that

institutions have subsequently moved to) the results suggest that institutions using Blackboard Learn as their main VLE have recorded the highest level of evaluation activity (59%) for their platform, in comparison with other VLE groups reflected in the survey data. The factors prompting this review activity are set out in Table 3.4.

Question 3.4: What prompted the review?

Table 3.4: Factors prompting review for the main institutional VLE

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Limitations in functionality and performance for current VLE	24	50%	55%	42%	100%	55%	0%	50%	0%
Staff dissatisfaction with current VLE	23	48%	50%	42%	100%	50%	25%	50%	0%
Timely opportunity to review VLE landscape	22	46%	46%	50%	0%	47%	50%	33%	0%
Phasing out of support for current VLE	18	36%	41%	38%	0%	40%	0%	50%	0%
Student dissatisfaction with current VLE	15	31%	27%	33%	50%	32%	25%	33%	0%

Note: n=48 for Table 3.4

Question 3.4 was first introduced in the 2012 Survey as an open question, but for 2014 response options were coded in. The results reveal an evolution in the drivers for conducting a review. Whereas in 2012 *Changes in supplier provision/phasing out of support* topped the list – no doubt heavily influenced by the Blackboard acquisition of WebCT and reduced support levels for the latter system – this driver has dropped down the list for 2014. This may reflect the progress made by WebCT clients in completing their reviews. In contrast, for 2014 perceived *Limitations in functionality* and *Staff dissatisfaction* top the list, along with a *Timely review of provision*, which suggest that this activity is becoming less a response to exceptional events and more a feature of routine practice. Interestingly, licensing *costs* no longer feature in the top list of factors, as they did in the 2012 Survey. Of the *Other* factors mentioned, the review process is reported by two institutions as an ongoing evaluation activity, which will inform upgrades and future VLE developments.

Table 3.4a: Other factors prompting review for main institutional VLE

Other factors	Frequency
Normal business – ongoing evaluation of VLE system to inform upgrades/future developments	2
Decision had been made to externally host VLE platform	1
Commitment to delivery of solution for the electronic submission of assignments	1
Technical problems with current platform – performance issues and data loss	1
Merger of two institutions with different main institutional VLEs necessitates review	1

Table 3.5 below sheds further light on the migration of WebCT users, with a broad range of destination platforms listed there. WebCT accounts for the vast majority of platform change activity, with four institutions moving from Blackboard to Moodle and one SharePoint institution following a similar pathway, whilst one Moodle institution has moved to Blackboard Learn. Most commonly VLE reviews have confirmed that institutions should stay with their current system, with nine reviews leading to a decision to upgrade to the latest version of the software they are using and four decisions to opt for external hosting rather than a local installation of the software.

Question 3.5: What was the outcome, or likely outcome, of the review? Which product did you review? And, if relevant, which did you switch to, or did you decide to continue with the same product?

Table 3.5: Outcomes of the VLE review

Factors	Frequency
Switch to a different VLE platform	**15**
• Blackboard to Moodle	(4)
• Blackboard WebCT to Moodle	(3)
• Blackboard WebCT to Blackboard Learn	(3)
• Blackboard WebCT to Desire2Learn	(1)
• Blackboard WebCT to Canvas Instructure	(1)
• Blackboard WebCT to Pearson eCollege	(1)
• Moodle to Blackboard	(1)
• SharePoint to Moodle	(1)
Continue with the same VLE platform	**15**
• Blackboard Learn	(12)
• Other VLE developed in house	(2)
• Moodle	(1)
Continue with the same platform and upgrade to latest version	**9**
• Blackboard Learn	(5)
• Moodle	(3)
• Sakai	(1)
Switch to external hosting for same VLE platform	**4**
• Blackboard Learn	(3)
• Moodle	(1)
Review process not yet complete	**2**

Note: n=45 for Table 3.5

Question 3.5a: Since the review have you undertaken an evaluation of your decision(s) that emerged from the review?

Table 3.5a: Evaluation of the VLE review decision

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	13	27%	18%	38%	0%	29%	0%	33%	-
No	35	73%	82%	62%	100%	71%	100%	67%	-

Note: n=48 for Table 3.5a

Table 3.5b: Methods by which VLE review decision has been measured

	Method	Frequency
How measured?	Analytics: system usage and performance; no. of modules using VLE platform	4
	Staff satisfaction: surveys; focus groups; online community discussion site	4
	Student satisfaction: surveys; focus groups; online community discussion site	3
	Benchmarking: sample number of VLE module sites per department/school evaluated to measure extent of engagement (tools usage/content provided)	2
When?	After first year: 12 months of platform usage	1
	Reviewed at regular management meetings	1
	Ongoing review via community discussion site	1

	Method	Frequency
By whom?	Learning Technologists and IT developers	1
	Steering group chaired by Deputy Vice Chancellor	1
	Project board	1
	TEL strategy forum	1

Note: n=13 for Table 3.5b

Question 3.5 parts (a) – (c) were introduced for the first time in the 2014 Survey, exploring whether institutions had evaluated the VLE review decisions that they had taken over the past two years. The results in Table 3.4 reveal that only a small number of institutions (n=13) have engaged in evaluation activity, although we should be careful not to read too much into this figure. Given the short time that has elapsed since the reviews, it may be too early in the change cycle for this evaluation activity to be taking place; we may anticipate a greater number of evaluations being undertaken once successor systems have had time to *bed in*. Table 3.5b reveals how those institutions which have conducted an evaluation have organised it, and the most commonly cited evaluation methods are system analytics tracking system performance and usage, along with staff satisfaction surveys, with no common practice regarding the timing and leadership of this activity, which appears to be context specific. Interestingly, only three of the institutions responding to this question indicated that they had consulted their students for feedback on their new platform.

Table 3.5c highlights the reported outcomes from the evaluation activity on the VLE review decision and the results reveal the varied frames of references which institutions have adopted for their inquiries – from a focus on system functionality and performance to staff/student engagement levels and the creation of a forward agenda for TEL development activity.

Table 3.5c: Outcomes from the evaluation of the VLE review decision

Outcomes of evaluation	Frequency
Switch to new platform brings greater staff/student engagement with VLE (broader use of tools) and higher satisfaction	5
Upgrade supports better functionality and is worth the effort	3
Suggestions made on improvements which are needed for VLE platform and *step change* requirements for how TEL is used within institution	3
Staff need more knowledge and confidence on how to make best use of the VLE	2
Upgrade brings slower system performance	1
Justification of decision to enhance current provision rather than change platform	1
Cost savings (through switch to new platform) have been realised	1
Inconsistency in VLE usage across module sites	1
Requirement for investment in new VLE platform and switch away from platform developed in house	1
Clarity over staff/student requirements for VLE platform for future	1

Note: n=13 for Table 3.5c

Question 3.6: Are you planning to undertake a review of the (main) institutional VLE in the *next two* years?

Table 3.6: Planning for review of the (main) institutional VLE in the next two years

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Planning review in next year	13	14%	11%	18%	11%	15%	0%	14%	0%
Planning a review in next two years	18	19%	20%	18%	22%	18%	20%	14%	100%
Not planning a review in next two years	63	67%	69%	64%	67%	67%	80%	71%	0%

Note: n=94 for Table 3.6

Table 3.6 shows that a third of responding institutions to the Survey are planning to conduct reviews of their VLE platforms over the next two years, and this represents a similar proportion of institutions to the figure recorded in the 2012 Survey, as set out in Table C3.6 in the Appendix. Table B3.6 in the Appendix sheds further light on planning intentions for the mission groups, with 50% of University Alliance planning to conduct a review.

Table 3.6a 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 planned over the next two years* (Table 3.6). The results show that institutions using Blackboard Learn as their main VLE record the highest frequency (n=20) and top the list of platforms which will be reviewed over the next two years, as was the case in 2012.

Table 3.6a: Planning for review *per platform* for main institutional VLE

	Planning one in next year		Planning one in next two years		Not planning one in next two years		Total
	No.	%	No.	%	No.	%	No.
Blackboard Learn	7	15%	13	28%	26	57%	46
Moodle	3	8%	3	8%	31	84%	37
Other VLE developed *in house*	1	25%	0	0%	3	75%	4
Desire2Learn	1	50%	0	0%	1	50%	2
Instructure Canvas*	0	0%	0	0%	1	100%	1
Pearson eCollege*	0	0%	1	0%	0	0%	1
SharePoint	0	0%	0	0%	1	100%	1
Sakai	1	50%	1	50%	0	0%	2
Total	13	14%	18	19%	63	67%	94

Note: n=94 for Table 3.6a

The leading factors prompting a planned review of the VLE are captured in Table 3.7 below, with timeliness at the top of the list, which suggests that the review process is now an established part of institutional practice, rather than a one off event. The emergence of alternative platforms such as MOOCs is the second most commonly cited factor, confirming that institutions are continuing to monitor the market and track platform developments. The full set of results recorded for this question is available in Table A3.7 in the Appendix.

Question 3.7: What has prompted the review?

Table 3.7: Factors prompting review of the main institutional VLE in the *next two years*

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Timely opportunity to review VLE landscape	17	57%	54%	64%	33%	58%	0%	50%	100%
Emergence of new platforms (such as MOOC platforms)	10	33%	31%	43%	0%	39%	0%	0%	0%
Approaching end of licence agreement	8	27%	8%	43%	33%	27%	0%	50%	0%
Other	8	27%	39%	21%	0%	27%	100%	0%	0%

Note: n=30 for Table 3.7

Table 3.7a: Other factors prompting review of main institutional VLE in the *next two years*

Other factors	Frequency
Normal business – ongoing evaluation of VLE system to review upgrades/inform future developments	4
Response to possible change in institutional strategy	1
Help provide a more complete understanding of current VLE usage, requirements and opportunities	1
Help inform step change in VLE usage from early adoption to full adoption	1
Merger of two institutions with different main institutional VLEs necessitates review	1

Question 3.8: Are there *departments* within your institution using a VLE in addition to the *main* centrally provided VLE?

Table 3.8: Departmental VLEs in use

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	37	39%	57%	26%	11%	40%	40%	29%	100%
No	57	61%	43%	74%	89%	60%	60%	71%	0%

Note: n=94 for Table 3.8

Questions 3.8 and 3.9 were first introduced in the 2010 Survey and aim to track the management of VLE platforms at a departmental or school level. The results in Table 3.8 are similar to those recorded in 2010 and 2012, with Pre-92 institutions most commonly possessing departmental platforms in addition to the main institutional VLE. Table B3.8 reveals that 67% of the Russell Group institutions responding to Q3.8 fit this profile, with their departments running VLE platforms independently of the main centrally supported system. Table 3.8a provides a different perspective on where departmental VLE usage is taking place, cross-tabulating results with the main VLE platform. The results show that institutions using Blackboard Learn as their main platform most commonly have departments running their own VLEs.

Table 3.8a: Cross-tabulation of departmental VLE usage results with the *main* institutional VLE

Main institutional VLE in use	Departmental VLEs in use		No additional VLEs		Total
	No.	%	No.	%	No.
Blackboard Learn	24	52%	22	48%	46
Moodle	10	27%	27	73%	37
Sakai	2	100%	0	0%	2
Instructure Canvas*	1	100%	0	0%	1
Other VLE developed *in house*	0	0%	4	100%	4
Desire2Learn	0	0%	2	100%	2
Pearson eCollege*	0	0%	1	100%	1
SharePoint	0	0%	1	100%	1
Total	37		57		94

Note: n=94 for Table 3.8a

Question 3.9: What is the context for this localised provision?

Table 3.9: Context for hosting of VLEs within departments

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
A case has been made for the departmental VLE based on pedagogical reasons	13	35%	39%	20%	100%	34%	50%	50%	0%
The institution has a devolved management structure that permits departments to deploy their own software	12	32%	42%	10%	0%	34%	0%	50%	0%
The departmental VLE predates introduction of institutional VLE	11	30%	39%	10%	0%	28%	0%	50%	100%
A case has been made for the departmental VLE based on commercial reasons	10	27%	15%	60%	0%	25%	100%	0%	0%
Other context	9	24%	23%	30%	0%	22%	0%	100%	0%

Note: n=37 for Table 3.9

Question 3.9 explores the rationale for localised VLE provision. The results show that pedagogic reasons most commonly support the rationale for a separate platform at a departmental level. Of the *Other* reasons that were cited (Table 3.9a), continuous professional development (CPD) and distance learning requirements were mentioned, and in two institutions departments also had their own software developers to deliver a customised solution to best fit their teaching requirements. Table B3.8 in the Appendix provides a breakdown of the data by mission group and shows that the Russell Group has the highest frequency of institutions (n=12) with departmental VLEs, followed by University Alliance (n=6); GuildHE have two institutions with departmental platforms and Million+ have none. Table

C3.9 confirms that the drivers for localised provision remain unchanged since 2010, with pedagogical reasons most commonly cited by institutions.

Table 3.9a: Other context for hosting of VLEs within departments

Other context	Frequency
Departments possess software developer resources to develop customised platform best suited to their teaching requirements	2
CPD activity to externals (non-award based)	1
Departmental platform supports services that main institutional VLE cannot deliver	1
Unilateral decision by department – no case was made	1
Dedicated platform established to support distance learning	1
Department is committed to investment in Microsoft technology	1

Question 3.10: Which, if any, *centrally supported* technology enhanced learning software tools are used by *students* in your institution?

Question 3.10 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 VLEs, digital/learning repository, media streaming, screen casting and personal response systems were all added as new options for 2014, reflecting the increase in use of these tools and services in supporting student learning.

Table 3.10: Centrally supported software tools used by students

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
VLE*	88	95%	100%	92%	75%	95%	100%	86%	100%
Plagiarism detection	88	95%	96%	95%	88%	94%	100%	100%	100%
e-Submission tool	79	85%	83%	90%	75%	85%	100%	71%	100%
e-Portfolio	72	78%	70%	92%	50%	76%	100%	71%	100%
Blog	68	73%	76%	74%	50%	71%	100%	71%	100%
e-Assessment tool (e.g. quizzes)	66	71%	76%	69%	50%	70%	60%	86%	100%
Personal response systems (including handsets or web based apps)*	65	70%	78%	69%	25%	69%	60%	86%	100%
Wiki	61	66%	70%	64%	50%	64%	100%	57%	100%
Media streaming system*	60	65%	61%	67%	75%	60%	80%	100%	100%
Lecture capture tools	59	63%	74%	59%	25%	60%	80%	86%	100%
Reading list management software*	51	55%	61%	59%	0%	56%	60%	29%	100%
Podcasting	43	46%	54%	44%	13%	44%	80%	43%	100%
Document sharing tool	42	45%	44%	49%	38%	46%	40%	43%	0%
Digital/learning repository*	32	34%	28%	44%	25%	36%	40%	14%	0%
Content management systems	30	32%	37%	23%	50%	31%	60%	29%	0%
Screen casting*	29	31%	28%	39%	13%	31%	20%	29%	100%
Other software tool	28	30%	37%	26%	13%	29%	40%	29%	100%
Social networking	14	15%	13%	18%	13%	15%	0%	14%	100%
Social bookmarking	5	5%	4%	5%	13%	6%	0%	0%	0%

Note: n=93 for Table 3.10

Table 3.10 shows that VLE systems and plagiarism detection tools are most commonly supported by institutions across the sector, although the 95% figure returned here for VLEs does not match the 100% return for *main institutional VLE* recorded by 94 respondents for Question 3.1b at the beginning of this section; the inconsistency may possibly be attributed to incomplete submissions or user error for this question. The results for the most commonly supported tools are remarkably similar to those returned in the 2012 Survey, although e-assessment tool usage has decreased by a few percentage points.

Table C3.10 in the Appendix compares results with previous Surveys dating back to 2008. Some immediate changes are apparent, such as the rise of lecture capture tools which have increased in adoption from 51% in 2012 to 63% in this Survey, whilst podcasting has dropped from the high watermark of 69% (2008 and 2010) to 46%, and these developments may well be related to the increasing adoption of lecture recording and media streaming (65%), which appear to be replacing podcasting tools in many cases. Document sharing has also dropped off, down from 51% in

2012 to 45%. Social networking has reduced considerably from 33% to 15% as a centrally supported tool. Of the new response items introduced in this survey, personal response systems (70%) have had the greatest uptake (70%).

Table B3.10 in the Appendix provides a breakdown of these results by mission group, and a similar picture to the one reported in 2012 emerges, with Russell Group institutions (n=14) leading on investment in lecture capture solutions, and content management systems (n=9). Investment in e-portfolio tools appears though to be more evenly spread across the sector than the picture reported in 2012, with University Alliance, Million+ and Russell Group all showing high percentages of adoption.

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 A3.10 a – s. 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 show that Blackboard and Learning Objects remain the leading suppliers for a range of software tools including wikis, blogs, and podcasting tools, although the number of users of Learning Objects tools is much reduced from the results recorded in the 2012 Survey. In this year's Survey, Blackboard also leads the categories for content management, digital/learning repository, e-assessment tools and social bookmarking tools. Turnitin GradeMark is the leading solution for e-submission (63%) and Turnitin OriginalityCheck is the standard tool used by higher education institutions for text comparison by some margin. One notable change from 2012 is the rise of Panopto as a lecture capture solution, with 19 institutions adopting it as their centrally supported solution, as opposed to nine in 2012, placing it ahead of Echo360 (n=16) in the rankings.

On the whole, the results reveal a wide range of software being used for Web 2.0 applications and e-assessment activities, but there appears to be less choice available to institutions in terms of reading list software and document sharing solutions, with the former category dominated by Talis Aspire and the latter category by SharePoint, Google docs and Microsoft Office 365.

Table 3.10a: Centrally supported blog

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard	28	41%	43%	38%	50%	40%	20%	60%	100%
WordPress	20	30%	31%	31%	0%	32%	20%	20%	0%
Learning Objects Campus Pack	15	22%	20%	24%	25%	18%	80%	20%	0%

Note: n =68 for Table 3.10a

Table 3.10b: Centrally supported content management system

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard	16	53%	59%	56%	25%	52%	67%	50%	0%
SharePoint	5	17%	0%	33%	50%	12%	33%	50%	0%

Note: n =30 for Table 3.10b

Table 3.10d: Centrally supported document sharing tool

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
SharePoint	22	52%	50%	53%	67%	51%	50%	67%	0%
Google Docs	14	33%	35%	37%	0%	35%	50%	0%	0%
Office365	6	14%	10%	21%	0%	14%	0%	33%	0%

Note: n =42 for Table 3.10d

Table 3.10e: Centrally supported e-Assessment tool

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard	33	50%	51%	48%	50%	48%	33%	67%	100%
Moodle	19	29%	29%	26%	50%	30%	33%	17%	0%
Questionmark Perception	15	23%	29%	19%	0%	20%	67%	33%	0%

Note: n =66 for Table 3.10e

Table 3.10f: Centrally supported e-Portfolio

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Mahara	28	39%	31%	42%	75%	38%	40%	60%	0%
PebblePad	23	32%	28%	39%	0%	34%	20%	20%	0%
Blackboard	9	13%	16%	8%	25%	8%	20%	40%	100%

Note: n =72 for Table 3.10f

Table 3.10g: Centrally supported e-Submission tool

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Turnitin	50	63%	72%	64%	100%	40%	100%	80%	100%
Blackboard	30	38%	53%	31%	50%	38%	20%	60%	0%
Moodle	17	22%	31%	19%	0%	22%	20%	20%	0%

Note: n =79 for Table 3.10g

Table 3.10h: Centrally supported lecture capture tool

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Panopto	19	32%	35%	30%	0%	31%	75%	0%	100%
Echo360	16	27%	35%	17%	0%	33%	0%	0%	0%
Camtasia Relay	6	10%	3%	17%	50%	4%	0%	67%	0%

Note: n =59 for Table 3.10h

Table 3.10i: Centrally supported media streaming system

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Helix	19	32%	25%	46%	0%	29%	50%	29%	100%
Planet eStream	8	13%	0%	19%	50%	15%	25%	0%	0%
In house developed	7	12%	21%	4%	0%	13%	0%	14%	0%
Kaltura	7	12%	14%	12%	0%	15%	0%	0%	0%

Note: n =60 for Table 3.10i

Table 3.10j: Centrally supported personal response system

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Turning Point	45	69%	72%	67%	50%	71%	100%	33%	100%
Poll Everywhere	3	5%	6%	4%	0%	4%	33%	0%	0%
Promethean	3	5%	3%	7%	0%	5%	0%	0%	0%

Note: n =65 for Table 3.10j

Table 3.10k: Centrally supported plagiarism detection

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Turnitin	86	98%	100%	95%	100%	96%	100%	100%	100%
Safe Assign	2	2%	2%	3%	0%	3%	0%	0%	0%
Package not stated	1	1%	0%	3%	0%	1%	0%	0%	0%

Note: n =88 for Table 3.10k

Table 3.10m: Centrally supported reading list management software

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Talis Aspire	34	67%	61%	74%	0%	67%	67%	50%	100%
In house developed	9	18%	25%	9%	0%	20%	0%	0%	0%
Rebus:list	4	8%	7%	9%	0%	7%	33%	0%	0%

Note: n =51 for Table 3.10m

Table 3.10n: Centrally supported screen casting tool

Top 3	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Camtasia	13	45%	38%	53%	0%	44%	0%	100%	0%
Echo360	5	17%	15%	20%	0%	20%	0%	0%	0%
Jing	3	10%	15%	7%	0%	8%	0%	0%	100%

Note: n =29 for Table 3.10n

Table 3.10q: Centrally supported virtual learning environment

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard	42	48%	50%	47%	33%	45%	80%	50%	100%
Moodle	41	47%	48%	42%	67%	45%	80%	50%	0%

Note: n =88 for Table 3.10q

Table 3.10r: Centrally supported wiki

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard	25	41%	41%	40%	50%	43%	20%	50%	0%
Learning Objects Campus Pack	16	26%	22%	32%	25%	22%	80%	25%	0%
Moodle	9	15%	13%	16%	25%	14%	20%	25%	0%
Atlassian Confluence	8	13%	22%	4%	0%	12%	0%	25%	100%

Note: n =61 for Table 3.10r

Question 3.11: And which, if any, technology enhanced learning tools that are used by students are *not* centrally-supported? For example, those used by particular departments or even individuals.

Question 3.11 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 new response options were added for 2014, reflecting the emerging use of personal response systems, screen casting and media streaming systems.

Table 3.11: Software tools used by students which are *not* centrally supported

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Social networking	54	64%	61%	69%	50%	61%	80%	86%	0%
Document sharing tool	53	62%	61%	67%	50%	58%	80%	86%	100%
Blog	50	59%	51%	67%	63%	58%	40%	71%	100%
Social bookmarking	26	31%	39%	28%	0%	32%	40%	14%	0%
Media streaming system*	22	26%	20%	31%	38%	22%	40%	57%	0%
Personal response systems*	22	26%	29%	25%	13%	25%	20%	43%	0%
Screen casting*	22	26%	29%	25%	13%	26%	40%	14%	0%
Other software tool	22	26%	27%	28%	13%	24%	40%	29%	100%
Podcasting	18	21%	24%	19%	13%	17%	60%	43%	0%
Virtual Learning Environment	17	20%	12%	33%	0%	19%	0%	43%	0%
e-Portfolio	16	19%	22%	17%	13%	18%	20%	29%	0%
Lecture capture tools	16	19%	32%	6%	13%	17%	40%	29%	0%
Wiki	14	17%	27%	6%	13%	15%	20%	29%	0%
e-Assessment tool (e.g. quizzes)	12	14%	17%	11%	13%	13%	0%	43%	0%
e-Submission tool (assignments)	8	9%	12%	6%	13%	8%	20%	14%	0%
Digital/learning repository*	7	8%	5%	11%	13%	8%	0%	14%	0%
Content management systems*	6	7%	12%	0%	13%	6%	0%	14%	100%
None used	5	6%	10%	0%	13%	7%	0%	0%	0%
Reading list management software*	3	4%	0%	8%	0%	3%	20%	0%	0%

Note: n=86 for Table 3.11

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 2012 (Table C3.11) shows that social networking remains the most common non centrally supported software used by students, followed by document sharing, which has now risen above blogs in the list of tools.

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 and the full set of results is available in Tables A3.11 a – s. 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 3.11a: Non centrally supported blog tool

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
WordPress	39	78%	71%	83%	80%	76%	100%	80%	100%
Blogger	12	24%	24%	21%	40%	26%	0%	20%	0%

Note: n =50 for Table 3.11a

Table 3.11d: Non centrally supported document sharing tool

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Google Docs	43	81%	80%	79%	100%	76%	100%	100%	100%
Dropbox	30	57%	52%	67%	25%	57%	75%	33%	100%

Note: n =53 for Table 3.11d

Table 3.11i: Non centrally supported media streaming system

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
YouTube	17	77%	50%	91%	100%	75%	100%	75%	0%
Vimeo	9	41%	25%	45%	67%	38%	0%	75%	0%

Note: n =22 for Table 3.11i

Table 3.11n: Non centrally supported screen casting tool

Top 2	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Camtasia	10	45%	50%	44%	0%	42%	100%	0%	0%
Jing	6	27%	25%	33%	0%	26%	50%	0%	0%

Note: n =22 for Table 3.11n

Table 3.11p: Non centrally supported social networking tool

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Facebook	49	91%	80%	100%	100%	89%	100%	100%	0%
Twitter	34	63%	64%	56%	100%	57%	100%	83%	0%
Google+	8	15%	8%	20%	25%	16%	0%	17%	0%
LinkedIn	8	15%	8%	16%	50%	18%	0%	0%	0%

Note: n =54 for Table 3.11p

Question 3.11a: Have you discontinued or abandoned any centrally supported TEL services or tools *in the past two years*?

Table 3.11a: Discontinued or abandoned TEL services or tools *in the past two years*

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	27	29%	33%	28%	13%	30%	20%	29%	0%
No	66	71%	67%	72%	88%	70%	80%	71%	100%

Note: n=93 for Table 3.11a

Question 3.11a was a new question which aimed to track the range of TEL tools or services which had been introduced and centrally managed by an institution, but had been dropped due to lack of usage over the past two years. Possibly the short timeframe for this question may explain why only 29% of respondents confirmed that they had in fact abandoned tools. Of the TEL services mentioned, Second Life and Wimba Create topped the list, although in the latter case, the institutional requirement for digital content creation tools may be being met by another solution. Other services which were mentioned included podcasting, personal response systems, text messaging tools and web conferencing. Table 3.11c captures the reasons why these TEL services have been abandoned, with lack of usage by staff and students topping the list, followed by prohibitive licensing costs and overlapping functionality provided by other existing systems or open source solutions.

Question 3.11b: Please write in details of the TEL service or tools you have discontinued/ abandoned

Table 3.11b: Discontinued/abandoned TEL services or tools

Top 3	Frequency
Second Life	4
Wimba Create (digital content creation)	4
Questionmark Perception (e-assessment)	3

Question 3.11c: Why did you discontinue/abandon this/these TEL services or tools?

Table 3.11c: Reasons why TEL services or tools discontinued/abandoned

Reasons why TEL services or tools discontinued/abandoned	Frequency
Limited use of solution by staff and students for teaching and learning	14
Cost – high licensing cost prohibitive (prohibitive given limited usage)	8
Similar functionality available elsewhere (e.g. open source) or replaced by other systems	7
Poor solution – lacking functionality/usability/good performance	4
Solution is difficult to support (vendor support is poor)	4
Solution is no longer supported/developed by vendor	3
Dedicated funding for service has ended	2
Lack of institutional buy-in (senior management support) for solution	1

Question 3.12: Approximately what proportion of all modules or units of study in the technology enhanced learning environment in use in your institution fall into each of the following categories?

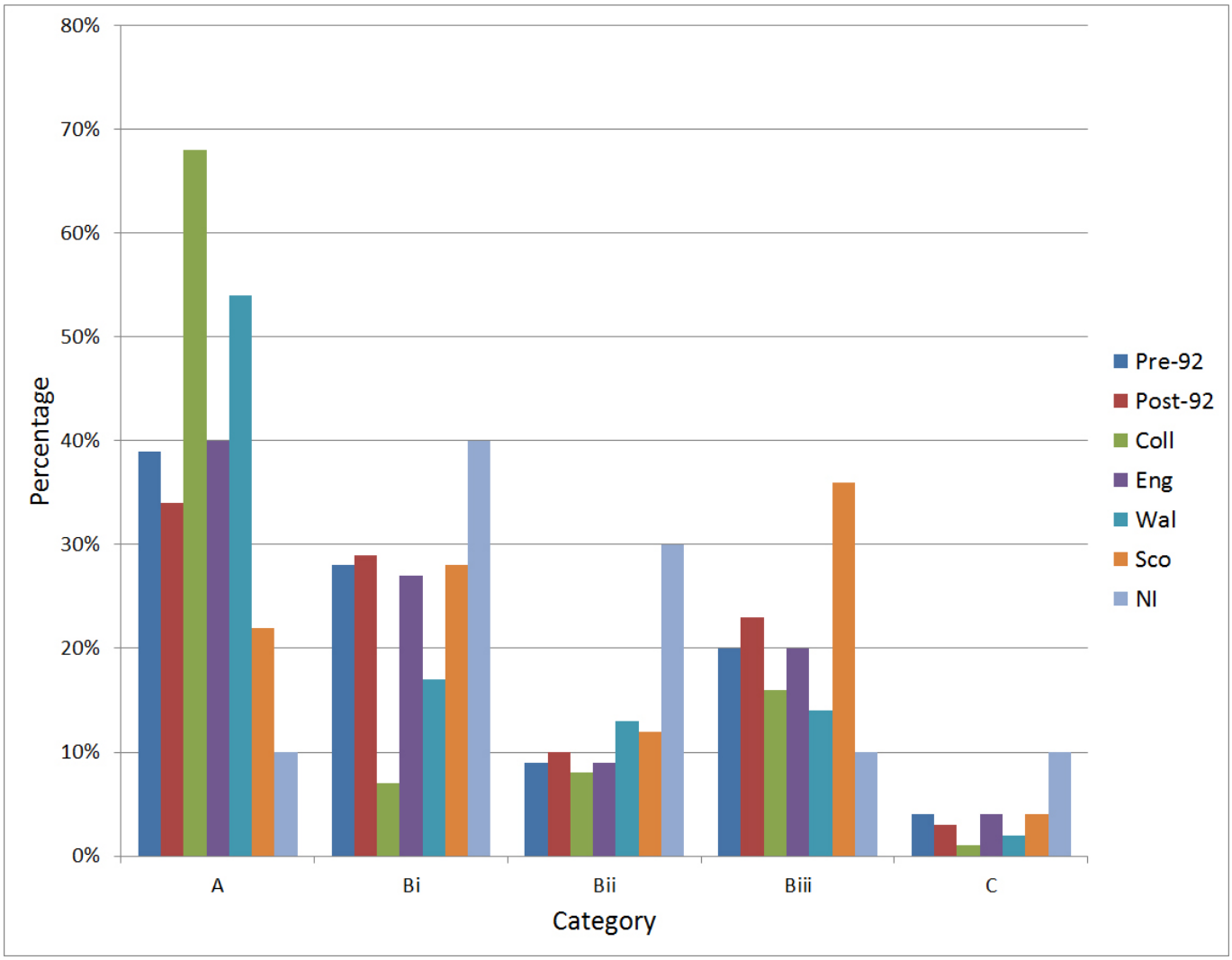

Figure 3.12: Proportion of all modules or units of study in the TEL environment in use

Question 3.12 invited respondents to indicate how technology enhanced learning is being used to support module delivery within their institutions, estimating usage in relation to five broad categories ranging from supplementary web delivery to fully online modules. The results are captured in Figure 3.12 and the full data is available in Table A3.12.

These categories have been adapted from Bell et al (2002)[20] where:

- Category A – web supplemented, in which online participation is optional for students
- Category B – web dependent, requiring participation by the student for an online component of a face to face course, measured against three subcategories of participation:
  - interaction with content;
  - communication with staff/students;
  - interaction with content and communication.
- Category C – fully online courses

20 *Bell M., Bush D., Nicholson P., O'Brien D. and Tran T. 2002, Universities Online: A survey of online education and services in Australia. Department of* Education, Science and Training, Canberra.

The results show that supplementary use of the web to support module delivery represents the most common use of TEL with a mean score of 39%, identical to the figure recorded in the 2012 Survey. From the blended delivery approaches which require student participation, interaction with content (Category Bi) is the most common with a sector mean score of 27%. Fully online modules, however, represent a very small proportion of institutional TEL activities with a mean score of 3% for the total population.

Table B3.12 offers a breakdown of mean scores for these categories by mission group. GuildHE institutions recorded the highest proportion of web supplemented modules (51%). Million+ institutions recorded the highest proportion of web dependent modules for categories B(i) (interaction with content) at 38%.

A longitudinal picture of TEL usage in support of modules and units of study is presented in Table 3.12 below.

Table 3.12: Proportion of all modules or units of study in the TEL environment in use (longitudinal)

	Sector mean 2014	Sector mean 2012	Sector mean 2010	Sector mean 2008	Sector mean 2005	Sector mean 2003
N =	82	85	80	64	69	78
Category A	39%	39%	46%	48%	54%	57%
Category Bi	27%	29%	26%	24%	16%	13%
Category Bii	9%	10%	17%	13%	10%	10%
Category Biii	21%	18%	18%	13%	13%	13%
Category C	3%	3%	3%	4%	6%	5%

Note: n=82 for Table 3.12

[NB the responses for 2010 shown in Table 3.12 are averages of the figures provided by all respondents. It should be noted, however, that of the 80 respondents completing this question in 2010, 26 (29%) provided figures that did not total to 100%; most were greater, some were less. The figures for 2010 do not therefore add up to 100%; clearly within these figures there is an over estimate, but the source cannot be identified.]

Table 3.12 reveals that the proportion of Category A web supplemented modules has steadily decreased over the years since the 2003 Survey when this question was first posed. However, this downward trend is not sustained with the 2014 data recording a similar figure to 2012. In contrast, web dependent modes for interaction with content (*Category Bi*) and communication with staff and students (*Category Bii*) have both reduced in activity whilst there is a small increase in interaction with content and communication (*Category Biii*). This may indicate that a greater emphasis is being placed on the use of TEL tools in a holistic way to increase interaction between participants and the materials made available to them in blended courses. The results also show that fully online courses (*Category C*) have remained constant as a proportion of TEL activity over the last four years since 2010 and remain a niche area of activity. MOOC activity would naturally fit into this category, but is a long way from being a mainstream concern, as evidenced through the data we have collected on institutional drivers for TEL (Question 1.1) and the adoption of MOOC platforms (Question 3.1).

Looking at the longitudinal picture from a different perspective, when combining the content focused categories of TEL course delivery (namely categories A and Bi), we may observe that there has been little change in the proportion of modules/units using TEL tools in this way, with a combined total of 70% of modules in 2003 and 66% in 2014. A similar observation may be made for the interactive categories of TEL tools usage (namely Bii and Biii), which have had only a small increase from the combined total of 23% in 2003 to 30% in 2014.

Question 3.13: Are there any particular subject areas that make *more extensive* use of technology enhanced learning tools than your institutional norm?

Questions 3.13 and 3.14 were free text questions focusing on subject disciplines and their use of TEL tools to support learning and teaching activities. The responses have been grouped together by cluster analysis, using – where possible – the same subject categories employed in previous Surveys dating back to 2008.

Table 3.13: Institutions which have subject areas that make *more extensive* use of technology enhanced learning tools than the institutional norm

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	63	71%	67%	74%	78%	70%	100%	57%	100%
No	26	29%	33%	26%	22%	30%	0%	43%	0%

Note: n=89 for Table 3.13

Table 3.13a: Subject areas that make *more extensive* use of technology enhanced learning tools than the institutional norm

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Medicine, Nursing, Health	37	62%	70%	67%	0%	59%	100%	33%	100%
Management, Accountancy, Finance, Business etc.	24	40%	44%	37%	33%	43%	0%	33%	100%
Science(s), not specified	17	28%	26%	30%	33%	33%	0%	0%	0%
Social Sciences, Psychology, Law, Teaching etc.	17	28%	11%	41%	50%	31%	0%	33%	0%
Art, Music, Drama	16	27%	15%	19%	100%	27%	0%	67%	0%
Education	15	25%	22%	33%	0%	20%	60%	67%	0%
Science, specified e.g. Chemistry	7	12%	15%	4%	0%	10%	0%	0%	0%
Computing	6	10%	4%	15%	17%	8%	40%	0%	0%
Engineering	6	10%	11%	7%	17%	10%	20%	0%	0%
Geography, History	6	10%	11%	7%	17%	10%	20%	0%	0%
Languages	5	8%	11%	7%	0%	10%	0%	0%	0%
Humanities	3	5%	4%	4%	17%	6%	0%	0%	0%

Note: n = 60 for Table 3.13a

Medicine, Nursing and Health and *Management, Accountancy, Finance and Business* top the list of subject areas making more extensive use of TEL tools than the institutional norm, reflecting a similar pattern to previous Surveys (2012, 2010 and 2008) when both categories were singled out as extensive users of TEL. However, if we compare figures with the previous Survey, *Medicine, Nursing and Health* has experienced a 19% drop in the use of TEL (from 81% in 2012). *Engineering* has also experienced a drop in the use of TEL by 8% since 2012. In contrast, *Art, Music and Drama* has increased in the extensive use of TEL by 9% since 2012.

62% of respondents identified *Medicine, Nursing and Health* as making extensive use of TEL; of this number 83% of the Russell Group, 80% Million+ and 78% of University Alliance institutions reported an extensive use of TEL in this area, which was commonly associated with the abundance of electronic study materials available to students.

Management, Accountancy, Finance and Business related courses were highlighted by 40% of respondents. Qualitative responses indicated that this subject area made use of collaborative tools and quizzes. Distance learning was also highlighted as an established delivery mode, where TEL tools were reportedly used to preserve the prestige of the course and enable flexible delivery to students. Another feature of this discipline was the links with industry and cross-institutional delivery that increased connectivity over TEL tools.

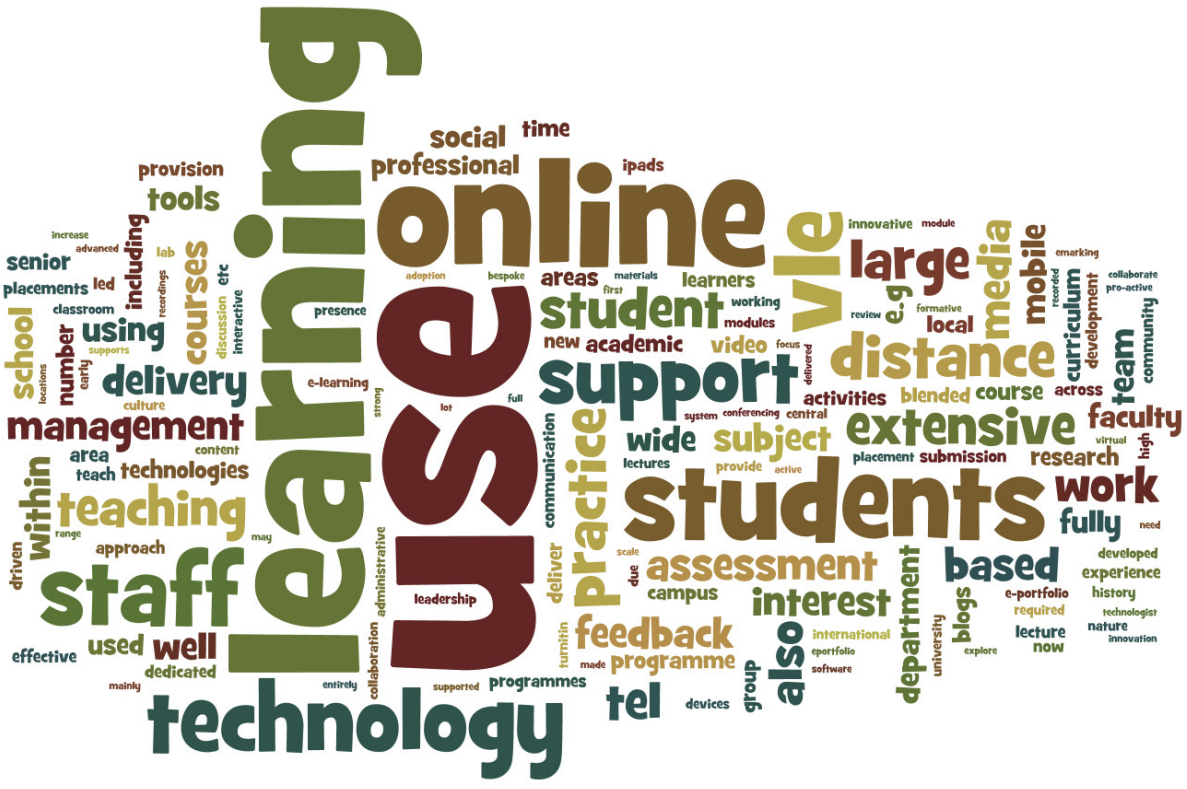

Figure 3.13: Word cloud showing most commonly mentioned words from reasons for *more extensive* use of TEL

Table 3.13b provides a summary of the leading explanations for extensive use of TEL with sample quotations from respondents. A focus on electronic resources that promote communication and collaboration was evident as well as e-submission as a driver for wider TEL initiatives. New approaches such as the flipped classroom and teaching large cohorts were also reasons for more extensive use of TEL.

Table 3.13b: Reasons given for *more extensive* use of TEL tools

Reason for more extensive use	Sample quotation
Driven by local strategies	Faculty wide adoption of online submission over three years. Use of standard VLE based tools. Adoption driven by the locus of control for the project being firmly based in faculty and school administrative and academic senior roles, supported by growing student demand for e-submission. Submission of text based assignment still prevalent in arts and humanities subjects, and requires a considerable administrative overhead, and undermines university commitment to sustainability agenda.
Use by *Champions*	Local learning technology support, local champions, TEL interest is active in discipline.
Staff skills	Use of the VLE to coordinate online learning activities. Flipped classroom approach adopted to facilitate more practical face to face work.
Subject driven	Course specific: the large distance learning/elearning MBA courses run for students in over 100 countries ... is integral to delivery with all learning materials, discussions and assessments management within it.
Use of specific technology	Online community of practice developed using Blogger to enhance tutors' ability to monitor and feedback on student work
Staff skills	Critical mass of technology confident staff and aligns to collaborative established existing pedagogic practice
Increasing provision	Wide and deep use of VLE and e-portfolio. Increasingly looking at video conferencing and use of streaming media. Drivers include: need to teach off campus in health and social care settings, desire to increase flexibility, and improving student experience.
Standardisation	More consistent use across all modules due to subject, students working as well as studying and academic acceptance of management leadership in this area.

Question 3.14: Are there any particular subject areas that make *less extensive* use of technology enhanced learning tools than your institutional norm?

Table 3.14: Institutions which have subject areas that make *less extensive* use of technology enhanced learning tools than the institutional norm

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	46	52%	37%	63%	75%	51%	60%	43%	100%
No	43	48%	63%	37%	25%	49%	40%	57%	0%

Note: n=89 for Table 3.14

Table 3.14a: Subject areas that make *less extensive* use of technology enhanced learning tools than the institutional norm

Top 10	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Art, Music, Drama	40	100%	100%	100%	100%	100%	100%	100%	100%
Humanities	10	25%	21%	30%	0%	25%	0%	0%	100%
Management, Accountancy, Finance, Business etc.	8	20%	7%	26%	20%	22%	0%	0%	0%
Social Sciences	7	18%	21%	13%	20%	17%	33%	0%	0%
Engineering	5	13%	7%	17%	0%	11%	33%	0%	0%
Geography, History	5	13%	29%	4%	0%	14%	0%	0%	0%
Science(s), not specified	3	8%	0%	13%	0%	8%	0%	0%	0%
Computing	3	8%	7%	0%	40%	0%	0%	100%	0%
Education	3	8%	0%	9%	20%	8%	0%	0%	0%
Maths	3	8%	14%	4%	0%	8%	0%	0%	0%

Note: n = 40 for Table 3.14a

Table 3.14a captures the leading responses for subject areas that make less extensive use of TEL tools. *Art, Music and Drama* is cited by all of the respondents (70% in 2012), followed by *Humanities* (17% in 2012) and the *Management* disciplines (11% in 2012). *Art, Music and Drama* and *Humanities* appeared in the top three list of subject areas making less extensive use of TEL tools in both 2012 and 2010.

For the full list of results, please view Table A3.14a and for results by mission group, please view Table B3.14a.

Figure 3.14: Word cloud showing most commonly mentioned words from reasons for *less extensive* use of TEL

Table 3.14b provides a summary of reasons for less extensive use of TEL. The most popular reason cited for *Art, Music and Drama* was related to pedagogic matters – i.e. that technology was not deemed to be appropriate for the discipline. Respondents frequently cited a lack of enthusiasm/skills for TEL as a feature of the academic culture in some disciplines.

Table 3.14b Reasons given for less extensive use of TEL

Reason for less extensive use	Sample quotations
Traditional pedagogic approaches	Attitudes of staff towards the appropriateness of technology in their subject areas. Technology often doesn't support the tutors' teaching styles and identities.
Cultural factors in the discipline area	Staff are artists first and foremost. Concerns about copyright issues.
Focus on specific classroom based technologies or alternative technologies	Tends toward face to face teaching modes, with supporting material on VLE.
Lack of vision	Academics who are not digitally literate and do not see relevance. More importantly, academics see themselves as individuals who should have the freedom to ignore any departmental and university policies.
Lack of strategy/support	No academic coordinator to act as a champion for use of TEL tools across taught programmes. Take-up of technology restricted to individual usage. Closed departmental culture to what's going on across the university.
Staff skills	Many hourly paid academics who are not digitally literate and do not see the relevance of technology.
Impact on students	The focus of teaching is on small group discussions, which are best operated in a face to face setting.

Question 3.15: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

Table 3.15: Proportion of courses using TEL tools

Tool	100%	75% – 99%	50% – 74%	25% – 49%	5% – 24%	1% – 4%	0%	Don't Know
Access to external web based resources or digital repositories	8%	35%	12%	12%	13%	6%	0%	14%
eSubmission of Assignments	6%	34%	22%	9%	8%	1%	4%	6%
Plagiarism detection software	5%	31%	34%	11%	12%	2%	0%	5%
Formative eAssessment (e.g. quizzes as part of course delivery)	5%	1%	16%	16%	39%	12%	0%	12%
Summative eAssessment (e.g. defined response tests as part of course delivery)	2%	5%	4%	13%	36%	26%	4%	11%
Audio/video lecture recordings	2%	1%	5%	7%	48%	23%	4%	11%
Document sharing tools (e.g. Google documents)	1%	2%	6%	7%	31%	20%	2%	30%
Online student presentations (individual and group)	1%	2%	6%	6%	25%	25%	7%	28%
Asynchronous collaborative working tools (e.g. discussion forums, blogs, wikis)	0%	7%	19%	29%	28%	7%	0%	10%
Personal response systems*	0%	1%	5%	7%	37%	28%	11%	11%
Electronic essay exams*	0%	1%	4%	6%	0%	25%	40%	25%
ePortfolio/PDP/progress files	0%	1%	2%	13%	39%	26%	5%	13%
Podcasting	0%	0%	1%	7%	29%	39%	6%	18%
Screen casting*	0%	0%	1%	6%	30%	35%	5%	23%
Voice based tools (e.g. voice emails, Skype)	0%	0%	1%	5%	17%	37%	8%	1%
Simulations and games	0%	0%	1%	4%	12%	52%	10%	21%
Synchronous Collaborative tools (e.g. virtual classroom)	0%	0%	1%	1%	23%	56%	10%	10%
Peer assessment tools	0%	0%	0%	1%	24%	46%	12%	16%

Note: n = 84 for Table 3.15

This question was retained from previous Surveys with the aim of tracking TEL usage across institutions. Table 3.15 captures the way in which TEL tools are being used to support teaching and learning practices, highlighting the scale of their adoption in course delivery. The main change to this question from 2012 was the introduction of an additional response column at the lower end of the scale to bring clearer definition to tool adoption in the lower quartile (i.e. from 1% – 24% as a proportion of courses using TEL tools). This was achieved by creating two additional ranges (1% – 4%) and (5% – 24%), and it was anticipated that this would distinguish between tools being piloted or at the very earliest stages of adoption, and those with a greater level of take-up across the institution.

Data for this question requires some circumspection, as the results reflect estimates by respondents of the proportion of courses using TEL tools within their institutions. When comparing the output with the 2012 Survey, we see continuing growth in areas like *Access to external web based resources* or *Digital repositories*, *eSubmission of Assignments*, *Formative eAssessment* (e.g. quizzes as part of course delivery) and *Plagiarism detection software*, all of which have increased percentages scores in the 100% and 75% – 99% columns this year compared with 2012. This growth suggests that an assessment driven agenda in TEL adoption has been vigorously pursued by institutions over the past two years. A breakdown of results for the top five leading tools is presented below with the full results for each item available in the Appendix (Tables A3.15a–r). For a full comparison of results for the 2012, 2010 and 2008 Surveys, please view Table C3.15.

Table 3.15a: Access to external web based resources or digital repositories

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	7	8%	15%	3%	0%	9%	0%	0%	0%
75% – 99%	30	35%	27%	46%	29%	34%	60%	40%	0%
50% – 74%	10	12%	12%	11%	14%	12%	20%	0%	0%
25% – 49%	10	12%	10%	14%	14%	11%	0%	40%	0%
5% – 24%	11	13%	17%	11%	0%	12%	20%	0%	100%
1% – 4%	5	6%	2%	3%	43%	5%	0%	20%	0%
Don't know	12	14%	17%	14%	0%	16%	0%	0%	0%

Note: n = 85 for Table 3.15a

Table 3.15b: eSubmission of Assignments

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	5	6%	5%	3%	29%	7%	0%	0%	0%
75% – 99%	29	34%	29%	43%	14%	35%	20%	40%	0%
50% – 74%	27	32%	32%	38%	0%	31%	80%	0%	0%
25% – 49%	8	9%	12%	5%	14%	7%	0%	40%	100%
5% – 24%	7	8%	5%	5%	43%	8%	0%	20%	0%
1% – 4%	1	1%	2%	0%	0%	1%	0%	0%	0%
0%	3	4%	2%	5%	0%	4%	0%	0%	0%
Don't know	5	6%	12%	0%	0%	7%	0%	0%	0%

Note: n = 85 for Table 3.15b

Table 3.15c: Plagiarism detection software

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	4	5%	5%	0%	29%	6%	0%	0%	0%
75% – 99%	26	31%	28%	39%	14%	29%	60%	40%	0%
50% – 74%	28	34%	35%	36%	14%	38%	20%	0%	0%
25% – 49%	9	11%	8%	17%	0%	7%	20%	40%	100%
5% – 24%	10	12%	13%	8%	29%	13%	0%	20%	0%
1% – 4%	2	2%	3%	0%	14%	3%	0%	0%	0%
Don't know	4	5%	10%	0%	0%	6%	0%	0%	0%

Note: n = 83 for Table 3.15c

Table 3.15d: Formative eAssessment (e.g. quizzes as part of course delivery)

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	4	5%	8%	3%	0%	5%	0%	0%	0%
75% – 99%	1	1%	0%	0%	14%	1%	0%	0%	0%
50% – 74%	13	15%	10%	22%	14%	15%	20%	20%	0%
25% – 49%	13	15%	20%	14%	0%	11%	20%	60%	100%
5% – 24%	33	39%	35%	49%	14%	41%	40%	20%	0%
1% – 4%	10	12%	10%	8%	43%	12%	20%	0%	0%
Don't know	10	12%	18%	5%	14%	14%	0%	0%	0%

Note: n = 84 for Table 3.15d

Table 3.15e: Summative eAssessment (e.g. defined response tests as part of course delivery)

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	2	2%	3%	0%	14%	3%	0%	0%	0%
75% – 99%	4	5%	5%	5%	0%	5%	0%	0%	0%
50% – 74%	3	4%	5%	3%	0%	3%	20%	0%	0%
25% – 49%	11	13%	15%	14%	0%	12%	20%	0%	100%

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
5% – 24%	30	36%	30%	43%	29%	34%	40%	60%	0%
1% – 4%	22	26%	23%	30%	29%	27%	0%	40%	0%
0%	3	4%	5%	0%	14%	3%	20%	0%	0%
Don't know	9	11%	15%	5%	14%	12%	0%	0%	0%

Note: n = 84 for Table 3.15e

Access to external web based resources or digital repositories in Table 3.15p is still the most popular option and has experienced noticeable growth since 2012. Between the 75% – 100% bands, 30% of respondents indicated use in 2012. This increased to 43% in 2014 within the same two bands.

Table 3.15j shows that the proportion of courses making use of *eSubmission of Assignments* has also increased from the 2012 Survey; from 16% of courses in 2012 for the 75% – 99% band and 3% in the 100% band, to 34% and 6% respectively for 2014. This data corroborates the findings of the UK Heads of e-Learning Forum research conducted in March/April 2013, which highlighted the increasing adoption of e-submission practices across the HE sector[21].

There has also been a discernible increase in the use of *plagiarism detection software tools* since the last Survey. Table 3.15k reveals that *plagiarism detection software tools* are now being widely adopted by instructors, with 69% of respondents reporting 50% or more of their courses making use of this tool, an increase from the 46% figure recorded in 2012. The longitudinal data related to this question can be seen in Table C3.16.

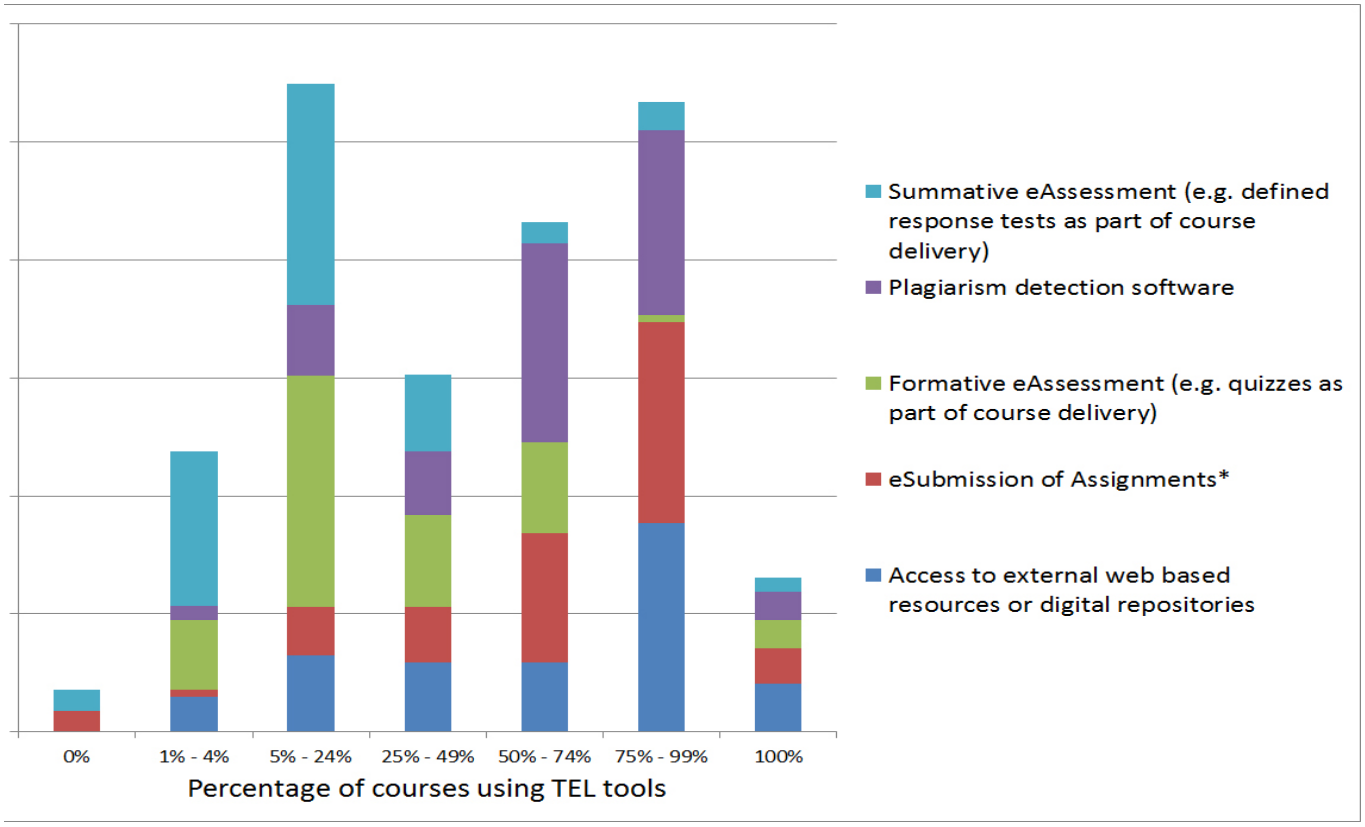

Figure 3.15: Chart showing proportion of courses using (top five) TEL tools

A breakdown of the data is available for mission groups in Tables B3.15a – r, and reveals that Russell Group institutions have the highest estimated proportion of courses using assignment submission and plagiarism detection tools, with 57% of responding institutions from this group employing these tools for 50% or more of their courses.

21 *Newland, B., Martin, L., Bird, A., and Masika, R. (2013). HELF* – Electronic Management of Assessment Survey Report 2013. *docs.google.com/a/york.ac.uk/file/d/0B8aF5QN3s_UDUHhyaGFPZWVDZDg/edit*

Question 3.16: Which of the following types of services, if any, have been optimised by your institution to be accessible via mobile devices beyond standard web based access?

Table 3.16: Optimised services for mobile devices

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Access to email	58	64%	70%	66%	25%	65%	80%	57%	0%
Access to course materials and learning resources	56	62%	70%	58%	38%	61%	80%	57%	100%
Access to course announcements	54	60%	68%	58%	25%	58%	80%	57%	100%
Access to communication tools (e.g. discussion boards, blogs and wikis)	43	48%	59%	42%	13%	45%	60%	57%	100%
Access to library services	39	43%	50%	39%	25%	47%	20%	29%	0%
Access to lecture recordings and videos	35	39%	41%	45%	0%	42%	20%	14%	100%
Access to personal calendars	26	29%	32%	26%	25%	32%	0%	14%	0%
Access to grades	26	29%	30%	32%	13%	29%	0%	43%	100%
Access to timetabling information	25	28%	34%	24%	13%	32%	0%	0%	0%
Services are not optimised	17	19%	11%	21%	50%	19%	20%	14%	0%
Other service	14	16%	16%	16%	13%	17%	20%	0%	0%

Note: n = 90 for Table 3.16

Table 3.16 presents the range of services that have been optimised for mobile devices, offering an insight into the way that HE institutions are responding to this challenge.

The leading optimised services are now *Access to email*, in comparison to 2012 when *Access to library services*, was the most optimised service alongside *Access to email* and *Access to course announcements*. Table C3.16 reveals that percentage scores for these service enhancements have approximately doubled in their value since 2012.

The primary function of mobile devices is to communicate and the results suggest that the optimisation of services is mainly being exploited by institutions to improve the communication of information to learners. *Timetabling information*, *access to course materials* and *access to personal calendars* are also popular mobile enabled services. Indeed, all of the top six services can be viewed collectively as channels for pushing out information to learners. *Access to lecture recordings and videos* has trebled since 2012 from 13% to 39% in 2014. However, it is noteworthy that the more interactive tools in support of learning and teaching activities such as collaboration software (blogs, wikis and discussion boards) have also more than doubled since 2012.

Reviewing the data by mission groups, Russell Group universities have the highest proportion of members which have optimised services for the leading our categories, although in absolute numbers they are similar to the other mission groups. Table B3.17 provides a full breakdown of results by mission group.

Other responses to this question included optimisation of services for access to quizzes, student file storage, ePortfolio and apps developed in house, such as a PC finder.

Question 3.17: For which types of devices does the institution provide active user (staff and student) support to connect to these services?

Table 3.17 Mobile devices with active user support

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
iOS devices (e.g. iPad and iPhone)	59	81%	77%	90%	50%	81%	100%	67%	100%
Android devices	56	77%	74%	83%	50%	76%	100%	67%	100%
Windows Mobile devices*	42	58%	62%	57%	25%	56%	100%	33%	100%
Blackberry devices	37	51%	62%	40%	25%	50%	75%	33%	100%
Other device	9	12%	15%	10%	0%	13%	0%	17%	0%
No active user support provided	8	11%	8%	0%	0%	5%	%0%	0%	0%
Don't know	3	4%	3%	0%	0%	3%	0%	0%	0%

Note: n = 73 for Table 3.17

Table 3.17 outlines the range of devices that are supported by institutions. The data reveals that *iOS devices* are most commonly supported by institutions 81% (73% in 2012), followed by *Android devices* which are supported by 77% of institutions (69% in 2012); *Blackberry devices* are supported by 51% of institutions (58% in 2012). *Windows Mobile devices* was a new response option for this question, with 58% of respondents indicating support for this

brand of mobile device. Of the mission groups, all GuildHE institutions indicated support for *iOS* and *Android* devices. 83% of University Alliance members indicated support for *iOS devices* and 75% support for *Android devices*. 75% of Russell Group and Million+ institutions indicated support for *iOS devices*. The proportion of Russell Group members supporting *Android devices* was 75%. 50% of Million+ members supported *Android devices*. *Blackberry devices* were more commonly supported by Russell Group institutions (63%).

Question 3.18: How does your institution promote the use of student/staff owned mobile devices in support of learning, teaching and assessment activities?

In a new question for the 2014 Survey, respondents were asked to select the methods that their institutions used to promote the use of mobile devices, choosing from a list of pre-coded options.

Table 3.18: How use of mobile devices is promoted

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Loaning of devices to staff/students	37	42%	28%	59%	38%	43%	40%	43%	0%
Funding for mobile learning projects	31	35%	28%	43%	38%	35%	20%	57%	0%
Other method of promoting use mobile devices	26	30%	33%	30%	13%	32%	20%	14%	0%
Institution does not promote use of mobile devices	21	24%	28%	19%	25%	24%	20%	14%	100%
Free provision of devices to staff/students	16	18%	14%	22%	25%	20%	20%	0%	0%
Institutional switch on policy to encourage use of devices by staff and students for learning, teaching and assessment	15	17%	14%	22%	13%	16%	20%	29%	0%

Note: n = 88 for Table 3.18

Institutional efforts towards the promotion of mobile learning appear to be focused on making the technology available through the loaning of devices to staff and students (42%) and through dedicated funding for mobile learning projects (35%), rather than through pedagogic initiatives and staff development activities. It will be interesting to track how promotion strategies evolve in future years, once the availability and connectivity issues surrounding the use of mobile devices are successfully resolved, which may lead to a stronger focus on pedagogical issues.

The mission group data in Table B3.18 shows that 70% of the GuildHE group loaned devices to staff / students, with only 38% of Russell Group institutions loaning devices to staff/students. Million+ institutions appear to be the most active group in providing funding for mobile projects (40%).

Other free text responses for this question are captured in Table 3.18a. Investment in extensive wifi provision across campus is most commonly mentioned, followed by investment in the development of institutional mobile apps for teaching and learning, with references also made to dedicated staff development sessions and peer support provision by four institutions. Development of institutional *Bring Your Own Device* (BYOD) policies or strategies also features in this list.

Table 3.18a: Other methods for prompting the use of mobile devices

Other methods	Frequency
Investment in extensive wifi provision across campus	5
Investment in the development of institutional mobile apps for teaching and learning	5
Development of BYOD policy/dedicated mobile strategy	4
Provision of staff development sessions and peer support network	4
Upskilling of library helpdesk staff	3
Investment in commercial apps to support learning and teaching (e.g. Blackboard Mosaic)	2
Identification of recommended providers for purchase of hardware	1
Partial costs of devices absorbed as part of programme costs	1
Main web pages use responsive design	1
Ownership of mobile devices for management level staff	1
Establishment of student technology fellows	1

Question 3.19: Please indicate from the list below the systems which are linked (i.e. some form of data flow is supported between the systems) to the main VLE within your institution.

This question was first used in the 2005 Survey to focus on data integration links between the VLE and other institutional systems. In subsequent Surveys the scope of the question was expanded to consider linkages between these other systems, but for 2014 the focus returned to the VLE with respondents asked to report on those systems that have some form of data flow with the VLE.

Table 3.19: Systems that are linked to the VLE

Top 6	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Student records	72	80%	82%	84%	50%	77%	100%	100%	100%
Library: system providing access to reading lists and electronic reading resources	66	73%	75%	74%	63%	74%	40%	86%	100%
Registration and enrolment	64	71%	70%	76%	50%	70%	80%	71%	100%
eSubmission: system managing assignments and coursework*	61	68%	66%	71%	63%	68%	100%	43%	100%
eAssessment system: system supporting defined response testing and quizzes	45	50%	48%	50%	63%	48%	60%	57%	100%
ePortfolio	41	46%	34%	61%	38%	43%	60%	57%	100%

Note: n = 90 for Table 3.19

Table 3.19 displays the results for the top six systems that institutions reported as being linked with the VLE through some form of data flow. The student records system is the most commonly linked system (80%), with the same percentage score as in 2012. In 2012, the library system was ranked 6th (50%), however, in 2014 it has been identified as the second most commonly linked system with the VLE, with 73% of institutions reporting a data connection. Links between the VLE and *registration and enrolment* systems are also quite common (71%) alongside *eSubmission* (68%) and *eAssessment* (50%).

Mission group data shows that the University Alliance institutions have the highest number of institutions linking their student records system to the VLE (93%). In contrast, only 60% of the Million+ institutions indicated that this link existed. The University Alliance group has the highest percentage of institutions integrating their VLE with library systems (93%), followed by the Russell Group (76%), with Million+ recording the lowest percentage adopting this link (50%).

Table 3.19a: Systems linked to the VLE (longitudinal)

Systems linked to the VLE	2014	2012	2010	2005
Student records	80%	80%	78%	63%
Library: system providing access to reading lists and electronic reading resources	73%	50%	60%	30%
Registration and enrolment	71%	60%	63%	51%
eSubmission: system managing assignments and coursework*	68%	-	-	-
eAssessment system: system supporting defined response testing and quizzes	50%	57%	-	38%
ePortfolio	46%	51%	59%	15%
Lecture capture system	40%	32%	-	-
Portal	37%	54%	49%	29%
Media Server	33%	41%	44%	-
Digital/learning repository*	32%	-	-	-
Timetabling*	29%	-	-	-
Survey systems*	21%	-	-	-
Content Management System	16%	31%	26%	-
HR system	11%	30%	20%	-
Attendance monitoring*	9%	-	-	-
Online payments	9%	9%	6%	-
Other system linked to	8%	8%	8%	-
No systems are linked to main VLE	1%	-	-	-

Table 3.19a provides a longitudinal view of systems integration with the VLE. The table reveals that data integration with *Student records* has been the most common form of system linkage over the years. One of the striking developments in recent years has been the rise in the number of institutions linking *Library systems* to the VLE, increasing from 50% (2012) to 73% (2014). In contrast, the linkage between *Portal systems* and the VLE has experienced a considerable decline since 2010 (49%) and 2012 (54%) to 37% in 2014. There have been several new response items for this question including *Timetabling*, *eSubmission* and *Survey* systems, with *eSubmission* systems most commonly linked to the VLE from this new set of response options. In the 2012 Survey Report the results suggested a trend of connectivity with the VLE increasingly focused towards student facing systems that are directly related to teaching and learning. This trend is still evident in the 2014 results, with systems that are not directly linked to teaching and learning (e.g. *Attendance monitoring* and *HR system*) appearing much lower in the *linked to VLE* list.

Other linked systems suggested by participants included:

- Web conferencing tools (Pre-92)
- Identity management systems (Pre-92)
- Tutor management systems (Pre-92)
- Two institutions suggested that there is greater systems connectivity with the portal than with the VLE

Question 3.20 Have you evaluated the impact of technology enhanced learning tools and systems on the *student learning experience* across the institution as a whole?

Questions 3.20 – 3.24 were introduced as a combined set in the 2012 Survey to explore the extent and range of evaluation activity taking place across the sector in measuring the impact of TEL on the user experience. For the 2014 Survey questions 3.21 and 3.23 were extended to explore the key purpose of the evaluation work that institutions are undertaking. Question 3.21a was also added as a new question to this section, inviting respondents to comment on how the results of an evaluation into student learning experiences have informed TEL provision and support within their institution.

Table 3.20 Evaluation of the impact of TEL tools and systems on the student learning experience

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	47	52%	57%	53%	25%	49%	80%	57%	100%
No	43	48%	43%	47%	75%	51%	20%	43%	0%

Note: n=90 for Table 3.20

Table 3.20 reveals that just over half of the institutions responding to the Survey had evaluated the impact of TEL on their students' learning experience, although as Table C3.20 in the Appendix reveals, this percentage figure is down on the 61% (n=54) recorded in 2012. Evaluation activity for Pre-92 and Post-92 institutions remains at a similar level to the activity recorded in the 2012 Survey, but there has been a notable drop in HE colleges activity from 43% to 25%, although we need to take care here in drawing conclusion for why this is the case, given the small number of HE colleges (n=8) responding to this question. The other key difference from 2012 has been the increase in Welsh institutions evaluating the impact of TEL tools on the student learning experience, with four institutions confirming that they have done so.

Of the mission groups, the University Alliance, Million+ and Russell Group institutions have similar percentage scores to the 2012 Survey. Again, the University Alliance had the highest number (n=10) and percentage of respondents (67%) who had evaluated the impact of TEL. The sustained level of evaluation activity on the student learning experience is not entirely unexpected, given the national focus on evaluation data driven through the establishment of the new Unistats website[22] in September 2012 to provide prospective undergraduate students with comparative official course data from UK universities and colleges. GuildHE institutions buck this trend, with only two institutions confirming that they had conducted an evaluation – a similar picture to the one recorded in the 2012 Survey data.

Question 3.21: *How* has the impact has been measured, *when*, by *whom* and for *what* purpose?

Question 3.21 was extended for the 2014 Survey to include a section on the intended purpose of the evaluation into the impact of TEL on students' learning experiences and a choice of options were presented based upon the free text answers given in the 2012 Survey.

22 *unistats.direct.gov.uk*

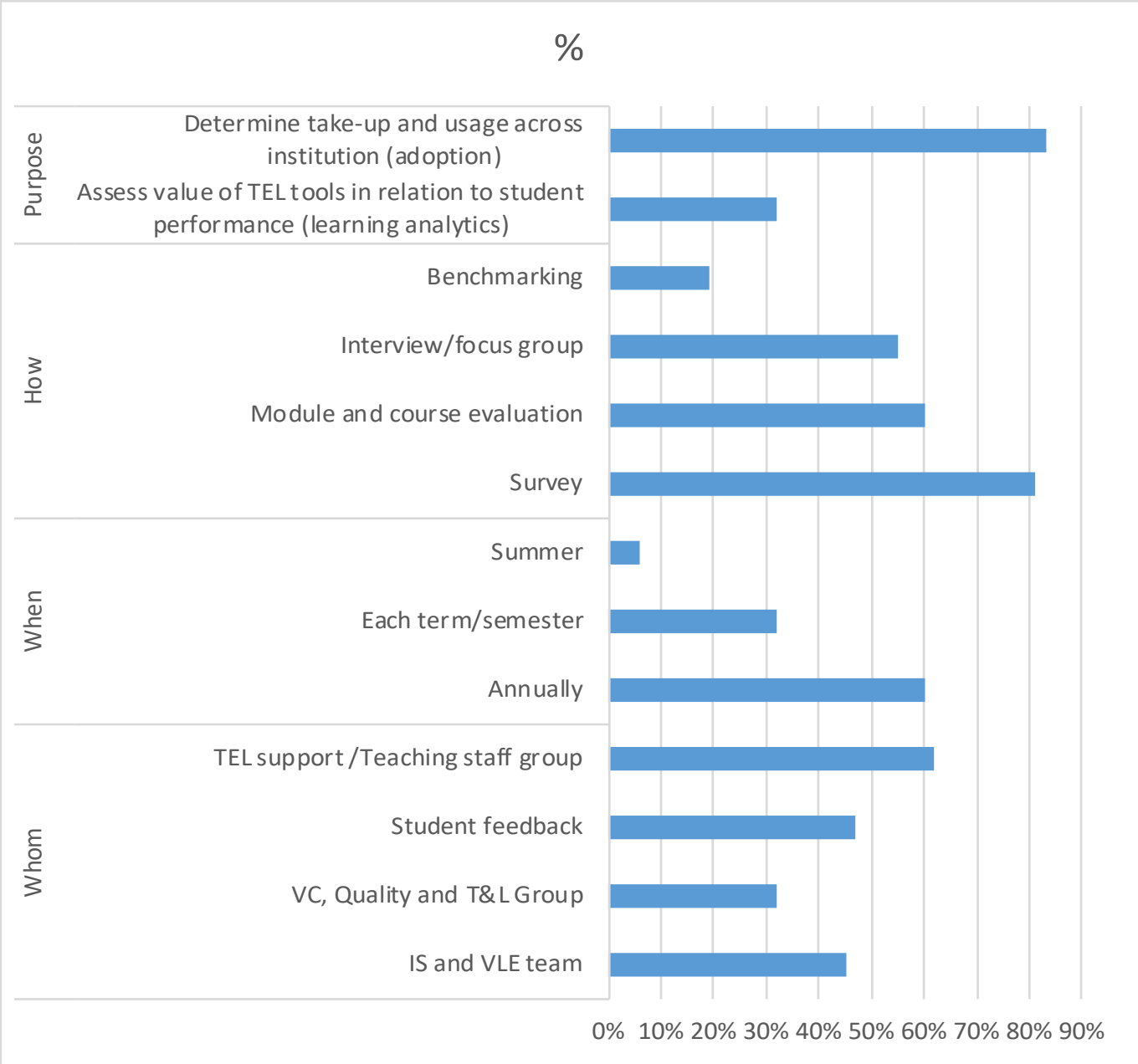

Figure 3.21: Details of how the impact of TEL tools on the *student learning experience* has been measured, when, by whom and for what purpose

Figure 3.21 provides a breakdown of the categories detailing by whom, when, how and for what purpose the impact of TEL tools on the student experience has been measured. The categories of groups who have evaluated TEL are organised as follows:

- The TEL/Teaching staff category includes non-technical TEL support staff, normally faculty, department or school based. Teaching staff have also been placed in this category;
- The IS and VLE team category covers staff with a technical focus to their support provision;
- Educational Development Units (EDU) or their equivalents are grouped under the Vice Chancellor's Office, Quality and Teaching and Learning (TandL) Group;
- The student feedback category also includes National Student Survey (NSS) data, where this was used to inform the evaluation of impact.

The full data for this question is available in Table A3.21.

A variety of methods/tools have been used to measure impact – the most popular of which are surveys that take the form of annual surveys and questionnaires. There is a noticeable increase in the popularity of all other methods/tools used to measure impact, indicating that responding institutions are utilising a wide range of tools to inform their evaluations.

The most common groups directing the impact measuring exercises are TEL support or teaching staff. This may reflect the increase in module evaluations as a popular method for evaluation. Student feedback is also cited as a popular choice.

The most popular driver for undertaking an evaluation of student learning experiences is determining the take up and usage of TEL across an institution. 50% of responding institutions also cited a direct link with evaluating the student experience, as well as informing future developments or service improvements. Of the *Other* purposes that were mentioned by respondents, impact evaluation is being used to inform general planning and strategic thinking, such as on how to prepare for the launch of a mobile strategy or how to tackle digital literacy.

Question 3.21a: 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.

This was a new free text question for the 2014 Survey, inviting respondents to comment on the impact of the TEL evaluation work on the student learning experience and the conclusions that they had drawn from this activity. Table 3.21a below captures the leading conclusions that were reported by respondents. The full data is available in Table A3.21a.

Table 3.21a: Broad conclusions from the evaluations undertaken into the impact of TEL on the student learning experience

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
TEL appreciated by students	14	34%	40%	37%	50%	44%	25%	25%	0%
Students value consistency	12	29%	35%	21%	0%	26%	25%	50%	0%
Mixed use of TEL	12	29%	5%	16%	0%	9%	0%	0%	0%
Increase in TEL adoption	10	24%	15%	37%	0%	24%	25%	25%	0%

Note: n=41 for Table 3.21a

The evaluation activity most commonly reveals that TEL services are appreciated by students (34%). Another key theme arising from the evaluations relates to the value that students place on consistency in TEL usage and provision of services.

In terms of future planning with TEL, e-assessment, mobile access and lecture capture were all mentioned in the responses to this question. It is interesting to note that while Question 2.3 cites the *Jisc: Developing Digital Literacies (2012)* as the second most commonly referenced external report informing the development of TEL in institutions, only four institutions have cited the importance of digital literacies in their evaluation findings.

Table 3.21b: Reasons given for conclusions arising from TEL evaluations on the student learning experience

Category	Sample comments
TEL appreciated by students	Students appreciate the availability and access to guidance and module information, learning materials, announcements.
Students value consistency	Demand for greater consistency and level of use of tools by staff (demand from students); Students want more of it, and would like a more consistent experience of TEL across all modules/programmes.
Mixed use of TEL	Good use of system by some but not all staff and students.
Increase in TEL adoption	Extensive take up of learning technology; Use of TEL is increasing year on year and is more widely embedded across modules and programmes.
Interest in more e-assessment	Extensive and increasing use of electronic assessment management.
Demand for mobile support	An increase in mobile use and expectations.
Concern about digital literacy of staff	Levels of staff literacy and awareness continue to need significant support.
Demand for lecture capture	Strong endorsement for investing and scaling up of lecture capture service.

Question 3.22 Have you evaluated the impact of technology enhanced learning tools and systems on *pedagogic practices* across the institution as a whole?

Question 3.22 was first introduced in the 2012 Survey. In the last Survey it was noted that evaluation of the impact of TEL services on pedagogical practices was not as well established as evaluations on the student learning experience. Question 3.22 was extended for the 2014 Survey to include a section on the intended purpose of the evaluation into the impact of TEL on pedagogic practices and a choice of options was presented, based upon the free-text answers which were given in the 2012 Survey.

Table 3.22: Details of how the impact of TEL tools and systems on *pedagogic practices* has been measured, when and by whom

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	27	30%	30%	34%	13%	29%	60%	14%	100%
No	63	70%	71%	66%	88%	71%	40%	86%	0%

Note: n=90 for Table 3.22

Table 3.22 reveals a similar picture to the one reported in 2012 with the evaluation of pedagogic practices less well established across the sector than impact evaluation on the student learning experience; only 30% of respondents confirmed that they have conducted such studies. Northern Ireland and Wales have the highest proportion of institutions that have done so, but the numbers are very small (n=1 and n=3, respectively), and so it is difficult to draw firm conclusions on national differences from this data.

Further analysis by institution type reveals very little difference between Pre-92 and Post-92 institutions, but only one HE college has undertaken evaluation activity. Table C3.22 in the Appendix reveals the longitudinal picture for the sector, showing that the scope of evaluation activity is slightly reduced from the figures recorded in 2012, with only 27 institutions conducting evaluations in 2014, compared with the 34 recorded in 2012.

Table B3.22 provides a breakdown of the 2014 results per mission group. Of the mission groups the University Alliance (53%) has the highest percentage and number (n=8) of members which have conducted studies into the impact of TEL on pedagogic practices. Conversely, the Russell Group (24%) and Million+ (10%) have the lowest proportion of members reporting studies. It is interesting to note that there is a discernible difference between Million+ members conducting studies into the impact of TEL on pedagogic practices in the 2014 Survey (10%), compared with the figure recorded in the 2012 Survey (39%).

Question 3.23: *How* has the impact on *pedagogic practices* been measured, *when*, by *whom* and for *what* purpose?

Question 3.23 was first introduced in the 2012 Survey. For the 2014 Survey it was extended to include a section on the intended purpose of the evaluation into the impact of TEL on pedagogic practices and a choice of options was presented based upon the free-text answers given in the 2012 Survey.

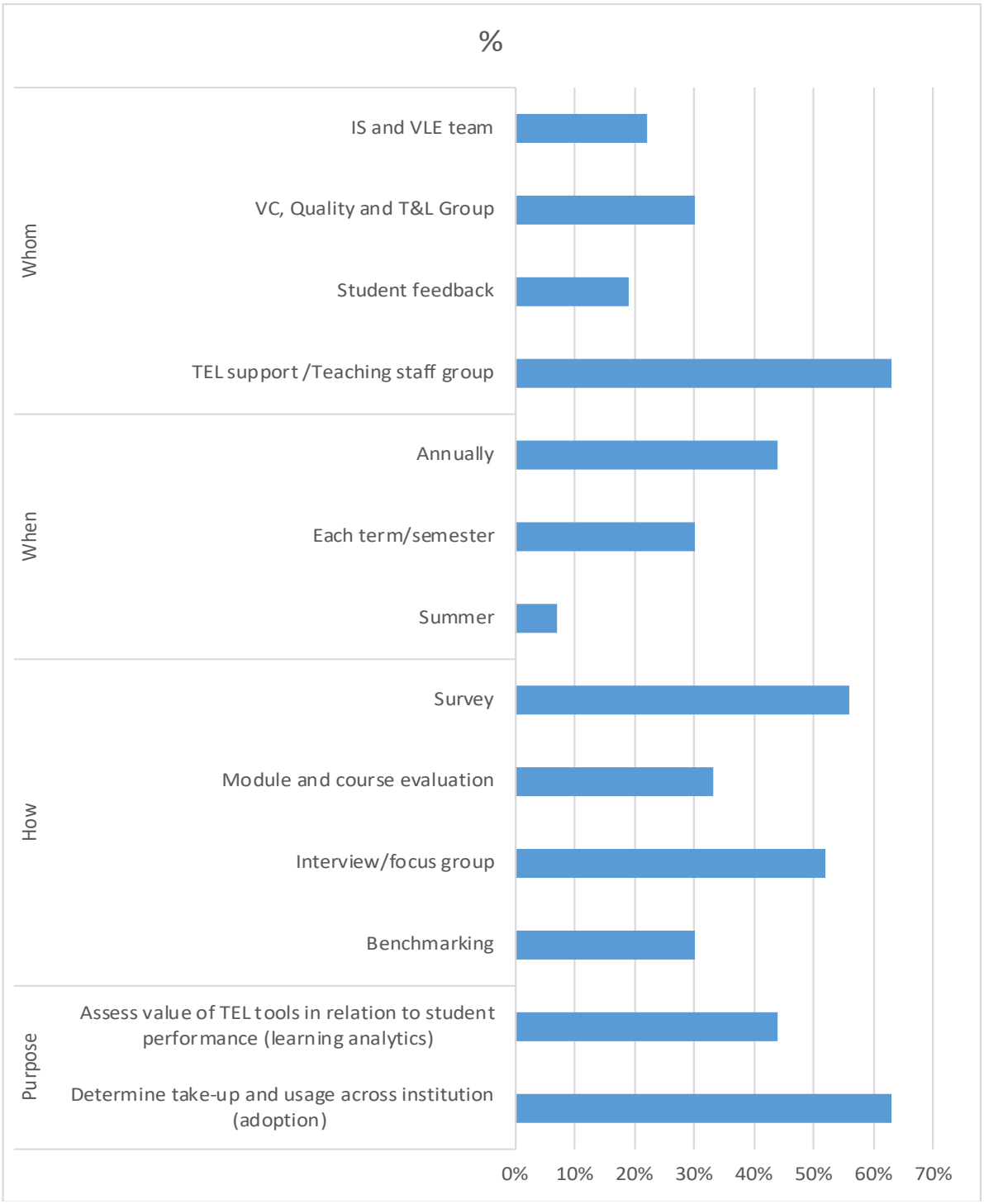

Figure 3.23: Details of how the impact of TEL tools on *pedagogic practices* has been measured, when, by whom and for what purpose

Figure 3.23 provides a breakdown of the categories detailing by whom, when, how and for what purpose the impact of TEL tools on pedagogic practices has been measured. The details of the options are the same as described for Question 3.21. The full data for this question is available in Table A3.23.

TEL support and Teaching Staff group represents the staff who most frequently measure the impact of TEL on pedagogic practices, as found in Question 3.21. These staff are often located in faculties, schools or departments, as opposed to *central* units. 30% of respondents also noted that the impact was measures by central units such as *Quality Enhancement*, *Teaching and Learning* or *Educational development* units. While both groups are involved in such evaluations, the former group appears to be much more heavily involved than reported in the 2012 Survey.

Surveys and interviews are again the most popular methods for measuring the impact of TEL, reflecting the preferred methods given in Question 3.21. However, as with Question 3.21, the most common frequency for undertaking evaluations was on an annual basis, though some respondents cited either various times throughout the year or that evaluations were determined as an integral part of a project.

The most popular purpose of undertaking an evaluation of pedagogic practice was *determining the take up and usage of TEL across an institution*, though the difference cited between that option and *assessing the value of TEL tools in*

relation to student performance is not as noticeable as in Question 3.21. Several respondents cited the purpose was to directly assess the impact of TEL on pedagogic practices, as well as to use the evaluation results to inform future planning.

Question 3.23a: 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 3.23a Broad conclusions from the evaluations undertaken into the impact of TEL on pedagogic practices

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Positive impact on staff teaching practice	7	30%	0%	54%	100%	32%	33%	100%	0%
Rethinking pedagogy, systems and workflows	5	22%	33%	0%	0%	16%	0%	0%	0%
Published works from TEL	4	17%	0%	0%	0%	0%	0%	0%	0%
Mixed practice	3	13%	11%	8%	0%	16%	0%	0%	0%
TEL valued as positive by students	2	9%	0%	23%	0%	21%	0%	0%	0%
More staff support	2	9%	11%	8%	0%	11%	0%	0%	0%

Note: n=23 for Table 3.23a

The purpose of Question 3.23a – as with Question 3.21a – was to identify the main conclusions arising from the evaluations of the impact of TEL for pedagogic practices. Table 3.23a captures the conclusions that were reported by respondents. 30% of respondents noted that where staff were found to be engaging with TEL tools, this was having a positive impact on staff teaching practices, whilst 13% noted that the evaluations revealed mixed practice by staff across the institution. 22% of respondents observed that the impact of TEL was providing opportunities for rethinking pedagogy, systems and workflows.

The number of respondents citing TEL as being positively valued by students was only 9%, although this issue was more a focus for responses to Question 3.21a. 17% of respondents had published work on TEL, although only a small proportion of publications had been peer reviewed.

Table 3.23b: Reasons given for conclusions arising from TEL evaluations on student learning experiences

Category	Sample comments
Positive impact on staff teaching practice	Most staff believe e-learning has had a positive effect on their teaching practice; evaluations have revealed that effective use of TEL tools has the potential to improve pedagogic practice.
Rethinking pedagogy, systems and workflows	Rethink of pedagogic practices; New teaching practices emerging which make use of TEL, such as flipped teaching.
Mixed practice	Some innovation, not full utilization of tools; TEL usage is generally very basic and not particularly innovative.
TEL valued as positive by students	Extensive use, well perceived by students; Improved student satisfaction.
More staff support	Staff still want more training and support around the use of TEL tools.

Section 4: Support for technology enhanced learning tools

Section 4 focused on the support available for TEL within institutions, looking at the different types of support units, the number of support staff and the range of support provision across the sector.

The questions in this section are a follow up to those originally introduced in the 2008 Survey and repeated in the 2010 and 2012 Surveys. Questions 4.4 and 4.5 focus on changes in staffing provision in response to budgetary pressures and were first included in the 2012 Survey. Questions 4.7 and 4.8 look at changes in the promotion of training and development activities related to budgetary pressures, and were asked for the first time in the 2012 Survey.

Question 4.1: Which, if any, support units are there in your institution that provide support for technology enhanced learning?

Table 4.1a: Support units that provide support for technology enhanced learning

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Information Technology Support	66	73%	75%	72%	63%	68%	100%	100%	100%
Learning Technology Support Unit (LTSU)	60	66%	66%	64%	75%	68%	40%	57%	100%
Library*	55	60%	50%	72%	63%	60%	60%	71%	0%
Local support (devolved to Faculty, School, Department)	55	60%	64%	67%	13%	60%	80%	43%	100%
Educational Development Unit (EDU)	46	51%	55%	56%	0%	49%	80%	43%	0%
Other	12	13%	9%	18%	13%	12%	60%	0%	0%
Outsourced support	8	9%	7%	10%	13%	9%	0%	14%	0%

Note: n=91 for Table 4.1a

Table 4.1a summarises the data for Question 4.1 and shows the percentage of institutions which have each of the support units listed. The absolute number of responses across all support units is substantially increased compared with figures recorded in the 2012 Survey. *Information Technology Support Units* continue to be the most prevalent unit providing TEL support and are marginally more common in Pre-92 institutions. In comparison to 2012, *Educational Development Units* drop down the list of TEL support providers from second to fifth place. However, Post-92 institutions show a sizeable increase in support provided by *Information Technology Support Units*, up from 58% reported in 2012 to 72% for 2014. In HE Colleges *Learning Technology Support Units* (LTSU) are revealed as the main TEL provider, with no support provided by *Educational Development Units*.

Comments submitted in response to this question in the 2012 Survey revealed that *Libraries* often provided TEL support. In the 2014 Survey the Library was included as a pre-coded response option and the results reveal that 60% of respondents are currently providing some form of TEL support through this service.

Where respondents indicated *Other support units* these included learning support and staff development provided by Human Resources, the Audio Visual Unit, Digital Learning Team, and a Student Advice Team.

Table 4.1b: Mean number of units providing support for TEL per institution

	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Mean number of support units	3.32	3.25	3.59	2.38	3.26	4.20	3.43	3.00

Note: n=91 for Table 4.1b

Table 4.1b summarises the responses for Question 4.1, focusing on the mean average number of support units per institution. The data shows that institutions continue to provide TEL support via a range of units. Table C4.1b in the Appendix shows that the mean average of support units has indeed increased from the 2012 Survey figure of 2.65 to 3.32, revealing a degree of expansion which is evident across Pre-92, Post-92 and HE colleges, with the exception of Northern Ireland. The Russell Group have the highest mean number of units with 4.00, followed by Million+ institutions with 3.80 and University Alliance institutions with 3.75 (See Table B4.1b in Appendix B).

Question 4.2: How many staff work in the unit?

Table 4.2: Mean number of staff working in each unit

	IT Support	LTSU	EDU	Library	Local support	Other	Outsourced/ Specialist
Mean number of learning technologists	1.89	4.90	3.12	1.84	5.80	4.50	0.33
Mean number of IT support staff	14.30	1.83	0.25	1.11	4.90	1.00	2.40
Mean number of administrative staff	1.44	0.71	1.85	4.13	2.36	1.67	0.00
Mean number of academic staff	0.25	1.27	3.40	1.00	30.47	1.84	0.00
Mean number of other staff	1.87	2.24	2.89	19.64	4.93	5.71	0.00
FTE of staff supporting TEL	6.95	7.05	3.71	5.10	9.36	3.77	0.40

Note: n=91 for Table 4.2

It should be noted that there were some unusual returns for Question 4.2 which resulted in outlying data points. These result from unique arrangements associated with one institution where academic staff in Schools have a recognised role in supporting TEL related activities.

Table 4.2 displays the mean average number of staff by staff type for each support unit for the sector as a whole. The full data for Question 4.2 is provided in Appendix A and Appendix B. In 2014, for the first time, the Library was included as one of the options for supporting TEL. Also, the mean Full Time Equivalent (FTE) of staff working in each type of unit has been captured and reported.

The table shows an increase in the number of learning technology staff in all units aside from *Information Technology Support* which shows a slight decrease from 2012 (down from 2.11 to 1.90 in 2014). The Library also contributes to the picture providing an average of 1.85 learning technologists. There is also a noticeable increase in the mean average number of learning technologists shown in the *Other* category (up from 2.94 in 2012 to 4.5 in 2014), suggesting that more learning technologists are operating outside of conventional organisational units.

The overall mean number of IT Support staff has reduced in number compared to 2012 (down from 16.04 to 14.3 in 2014). There is a marked decrease in the number of IT support staff evident in *Local Support Units* (down from 7.90 to 4.90 in 2014) and *Other* (from 5.00 to 1.00 in 2014).

Compared to 2012 there is a marked decrease in the mean number of administrative staff in Local Support Units (down from 10.00 to 2.36 in 2014), and most strikingly, the average number of academic staff working in Local (Devolved) Support is 30.47. Further analysis across type of institution and region (see Question A4.2e in Appendix A) shows that in Wales a very large number of academic staff provide TEL support in schools and faculties. Further investigations revealed that one Welsh institution, in particular, has taken this approach.

Local Support Units are revealed as having the highest mean FTE staff at 9.36, followed by LTSU with 7.05 and IT Support Units with 6.95.

Looking at the different mission groups, University Alliance institutions report a high mean number of *IT staff* (40.55) working in IT Support Units (see Table B4.2a in Appendix B), and this is noticeably higher than the means of all the other mission groups. The University Alliance institutions also report a high mean number of *Other staff* (47.06) working in Library Services (see Table B4.2d in Appendix B).

Question 4.3: What type of support is provided by the unit?

The Survey asked about the type of support provided by each unit. A cluster analysis was used to analyse the responses.

Information Technology Support Unit: The picture is very similar to 2012 with the main areas of support continuing to be described as general IT and technical support. IT helpdesk related support also feature strongly along with dedicated support for the VLE. Systems administration, development work and training are a common concern. Some respondents also mentioned lecture capture, audio-visual, mobile and pedagogy as areas they provide assistance with.

Learning Technology Support Unit (LTSU): This unit provides the broadest variety of support, with TEL support and related training featuring most strongly. Technical and pedagogical forms of support and advice, along with helpdesk, training, CPD and staff development are performed in many units. Media and content production, VLE administration and support, and administrative work in general are key contributions. A few respondents mentioned strategic and development initiatives and specific work relating to e-portfolios, MOOCs, lecture capture and assessment also featured.

Educational Development Unit (EDU): As revealed in previous Surveys, EDUs are primarily providing pedagogical related support services, delivered in the form of academic programmes, CPD initiatives and staff development activities and training courses. A sizeable number of units also report providing VLE and TEL support as well. A few units are also engaged in consultancy related work.

*Library**: Libraries are primarily concerned with the provision of online learning resources, including online journals, e-prints, multimedia repositories, OERs, reading lists and scanning services. Dedicated support for TEL and the VLE was widely reported along with helpdesk services. Of particular note, is the Library's strong role in enabling staff and student to develop information and digital literacies.

Local support: By far the most widely reported service was localised dedicated support for TEL and the VLE with faculties and schools providing tailored support for the development of learning technologies and for VLE administration. In some cases this also extended to providing technical and pedagogical support for e-learning activities and also course administrative support. There were also reports of localised training and teaching to promote the adoption of TEL.

Other: Other kinds of support included content development services, pedagogical help and staff development. In some cases consultancy services were provided and help with planning and strategy.

Outsourced: A few institutions indicated that they contract external services for TEL and the VLE as well as for staff training.

Overall, the type of support provided by the different units has not changed much from previous Surveys, along with the inclusion of the Library, which also provides dedicated support for TEL.

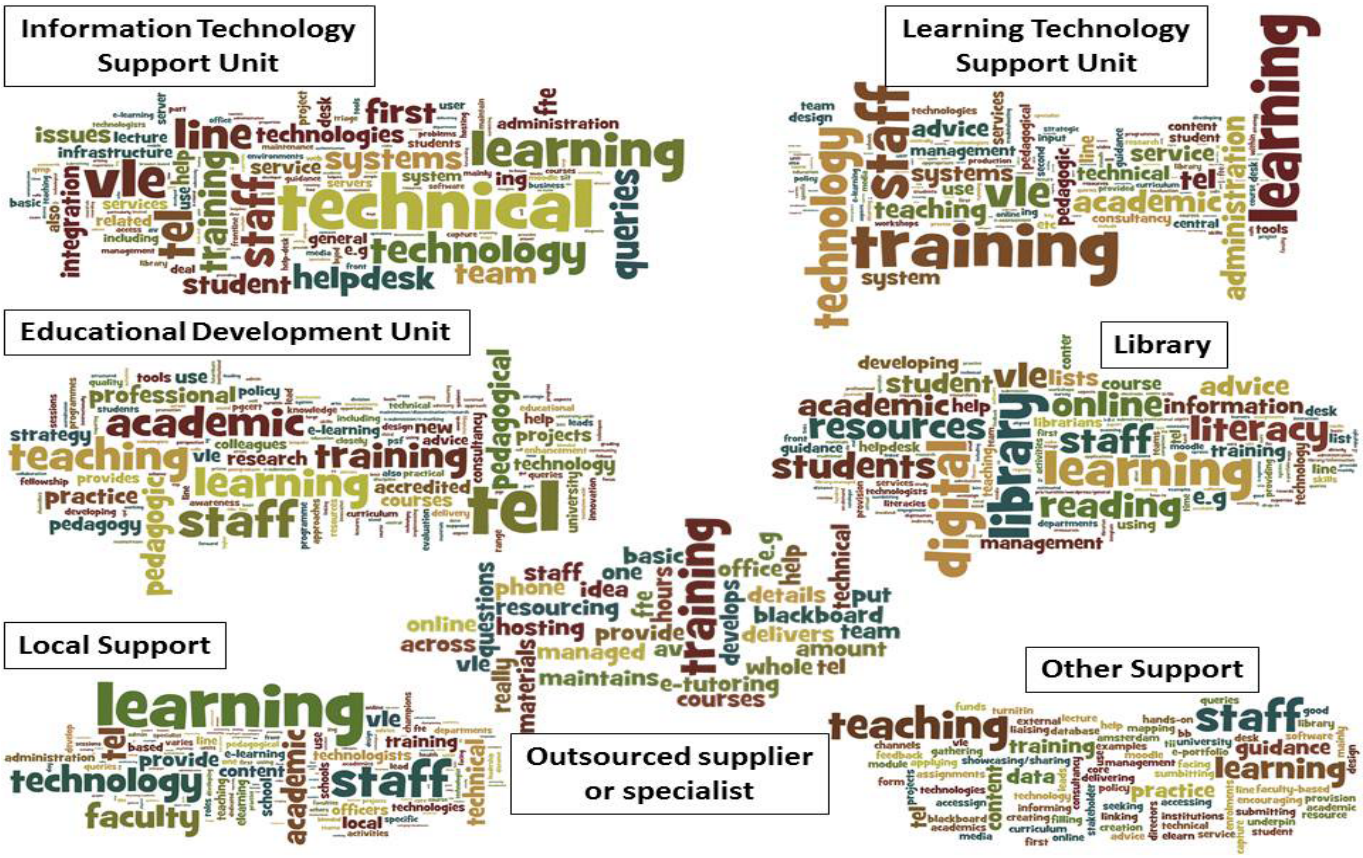

Figure 4.3: Word cloud visualisation of responses describing type of TEL support for each unit

Figure 4.3 shows word cloud visualisations of all responses for each part of Question 4.3. An initial visualisation of the responses showed that the terms *support* and *development* commonly appeared for each type of unit. When these terms were removed the more distinctive patterns of terms associated with each type of unit were revealed.

Responses associated with *Information Technology Support Unit* show *technical*, *technology*, *VLE* and *helpdesk* as the most common words. Whilst for the *Learning Technology Support Unit*, *training*, *learning* and *staff* stand out along with *technology*. Reassuringly, the *Educational Development Unit* highlights *teaching*, *academic*, *learning*, along with *pedagogy*, *pedagogic* and *pedagogical*. Responses associated with the *Library* include *resources*, *literacy*, *reading* and *digital* as the most salient terms included in the responses.

Question 4.4: What changes in staffing provision, if any, have been made over the *last two years* due to budgetary pressures or other reasons?

Table 4.4: Whether changes in staffing provision have been made due to budgetary pressures

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
No changes made	14	16%	7%	26%	13%	14%	20%	33%	0%
Changes made	76	84%	93%	74%	88%	86%	80%	67%	100%

Note: n=90 for Table 4.4

Prompted by the challenging economic climate, this question was first introduced in 2012. Table 4.4 shows that the vast majority of the responding institutions continue to make changes in staffing provision. The percentage of responding institutions having to make changes is similarly high across all categories and this is also reflected across mission groups (see Table B4.4 in Appendix B).

Table 4.4a: Changes made in staffing provision due to budgetary pressure

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Restructure of department(s)	42	47%	54%	41%	38%	46%	20%	67%	100%
Change of existing roles/incorporated other duties	40	44%	54%	39%	25%	49%	33%	33%	0%
Increase in number of staff	34	38%	42%	31%	50%	40%	20%	33%	0%
Delay/freeze in recruitment	21	23%	23%	23%	25%	26%	0%	17%	0%
Reduction in number of staff	17	19%	23%	13%	25%	19%	20%	0%	100%
No change in staffing provision	14	16%	7%	26%	8%	14%	20%	33%	0%

Note: n=90 for Table 4.4

Table 4.4a summarises the reasons institutions have given for making changes to their staffing provision. It is worth noting that the data for this question in the 2012 Survey was derived from a cluster analysis of free text responses, whereas the data from 2014 was from a selection of predefined options based on the 2012 categories. As a consequence, many more responses were received to this question in the 2014 Survey.

In comparison with findings from 2012, where Reduction in the number of staff topped the responses followed by Restructure of department(s), the 2014 Survey shows that the majority of respondents have identified Restructuring of department(s) followed by Changing roles as the main changes taking place, with Reduction in number staff moving from top to fifth. This suggests that institutions, following a period of downsizing, are now recruiting again and focusing more on organisational change.

Distance learning initiatives, the introduction of a new VLE and merger were given as reasons for prompting changes in staffing provision.

More than for the other mission groups, the Million+ affiliates, followed by the Russell Group, are looking to restructure departments and change existing roles or incorporate other duties into existing roles (see Table B4.4a in Appendix B).

Question 4.5: 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 4.5: Whether changes in staffing provision are foreseen in the near future

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
No changes foreseen	13	14%	12%	18%	13%	15%	0%	0%	100%
Changes foreseen	77	86%	88%	82%	86%	85%	100%	100%	0%

Note: n=90 for Table 4.5

This question was first introduced in 2012 and aimed to explore whether institutions anticipated any changes in staffing provision for supporting TEL in the near future. Table 4.5a reveals that the majority of respondents continue to foresee changes in staffing provision. With the exception of Northern Ireland, this pattern is reflected across all regions and types of institutions. The number of institutions anticipating change in 2014 is even more apparent than in the 2012 Survey.

Table 4.5a: Foreseen changes in staffing provision in the near future

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Increase in number of staff	38	42%	51%	28%	63%	45%	0%	50%	0%
Change of existing roles/incorporation of other duties	30	33%	37%	31%	25%	35%	20%	33%	0%
Anticipate change but unsure as to what this might be	29	32%	35%	33%	13%	31%	40%	50%	0%
Restructure of department(s)/TEL provision	27	30%	33%	23%	50%	30%	40%	33%	0%
Currently reviewing/intend to review situation	15	17%	21%	15%	0%	17%	20%	17%	0%

Note: n=90 for Table 4.5a

Table 4.5a summarises the returns for those institutions that do foresee changes in staffing provision and the table shows the top five responses for all the data, with the full list provided in Table A4.5a in the Appendix.

It is worth noting that the data in the 2012 Survey was obtained from a cluster analysis of responses, but the data for this question in the 2014 Survey was obtained from responses to pre-defined options. Consequently, this has resulted in far more responses compared to the 2012 Survey.

As with the 2012 Survey, *Increase in number of staff* tops the list of anticipated changes. This is followed by *Change of existing roles/incorporation of other duties* (a new response item), followed by A*nticipate change but unsure as to what this might be*, which was the second most commonly cited change in 2012. *Restructure of department(s)/TEL provision* and *Currently reviewing/intend to review situation* also feature in the top five as they did in 2012.

A comparison of the results with the 2012 Survey shows a rise in the number of GuildHE institutions (from 40% to 50%) envisaging an *Increase in number of staff*. In all the other mission groups the number of institutions foreseeing an *Increase in number of staff* is down (see Table B4.5a in Appendix B).

Compared to other types of institution which responded to this question HE colleges expect more change to happen in the form of *Restructure of department(s)/TEL provision*, and interestingly, they also foresee a greater increase in the number of staff compared to Pre-92 and Post-92 institutions.

Question 4.6: Which, if any, training and development activities are promoted to support *staff who help others* in the use of technology enhanced learning tools?

Table 4.6: Training and development activities promoted to support staff

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
National conferences/seminars	78	87%	84%	95%	63%	87%	60%	100%	100%
Internal staff development	75	83%	91%	80%	63%	87%	60%	50%	100%
Association for Learning Technology events	71	79%	84%	80%	50%	81%	40%	83%	100%
Higher Education Academy (HEA) events	68	76%	79%	80%	38%	46%	20%	33%	100%
Regional seminars	64	71%	61%	82%	75%	71%	60%	83%	100%

Note: n=90 for Table 4.6

Table 4.6 summarises the returns for Question 4.6 showing the top five results for all the data. Full data for this question is provided in Table A4.6. Comparing results with the 2012 Survey (Table C4.6) the top three sources of training and development activities remain exactly the same. *Higher Education Academy* (HEA) events and *Regional seminars* once again complete the Top 5, but have switched positions, with *HEA events* just edging ahead in the list as a source of training.

There is a noticeable difference in attendance at *Regional seminars* by Post-92 institutions compared with Pre-92 institutions, with Post-92 showing a preference for this form of development opportunity. As revealed in the 2012 Survey, HE colleges appear to make much less use of *ALT* and *HEA events* compared to Pre-92 and Post-92 institutions.

Comparing results with the 2012 and 2010 Surveys, this year has seen another increase in the popularity of achieving *HEA professional accreditation* which has continued to rise from 43% in 2010, 53% in 2012 and now 69% in 2014. There is also a slight continued rise in *CMALT accreditation* from 23% in 2010, 41% in 2012 to 43% in 2014. There is a noticeable drop in attendance at *Regional Support Centre (RSC) events* from 62% in 2012 to 49% in 2014.

Question 4.7: What changes in provision for training and development activities for *staff who help others* in the use of TEL tools, if any, have been made over the *last two years* due to budgetary pressures or other reasons?

Table 4.7: Whether changes in provision for training and development activities have been made over the last two years due to budgetary pressures

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
No changes made in staff training or development	67	74%	70%	74%	100%	78%	60%	50%	0%
Changes made in staff training or development	23	26%	30%	26	0%	22%	40%	50%	100%

Note: n=90 for Table 4.7

This question was first introduced in 2012 to find out whether the provision of staff development opportunities for support staff had changed as a result of budgetary pressures. Table 4.7 shows that for the 2014 Survey well over two-thirds of responding institutions have not made any changes in the last two years to their staff development provision. This contrasts with 2012 where it was revealed that the majority of responding institutions (45%) had implemented some level of change. This pattern is reflected across all types of institution and regions, with the exception of Scotland and Northern Ireland.

Table 4.7a: Top five changes in provision for training and development activities

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Reduction in travel and external events	10	43%	36%	50%	0%	47%	0%	33%	100%
Restructure and staff appointments	4	17%	27%	8%	0%	12%	50%	33%	0%
Increase in staff development and networking	3	13%	18%	8%	0%	12%	0%	0%	0%
Greater scrutiny of requests and limited financial support	2	9%	18%	0%	0%	12%	0%	0%	0%
Reduction in training and development	2	9%	18%	0%	0%	6%	50%	0%	0%

Note: n=23 for Table 4.7a

Table 4.7a summarises the data from institutions which have made changes in provision for training and development activities. The data was obtained using a cluster analysis of the responses and percentages are calculated for the population of 23 institutions that responded to the question.

The pattern of responses is similar to the 2012 Survey, with most responding institutions indicating a reduction in travel and attendance at external events. There is also increased scrutiny of requests to attend events and indications that some institutions are focusing more on local staff development initiatives and seeking to promote networking amongst staff, most likely with the aim of encouraging more peer based support. Restructuring and new staff appointments are mentioned as key developments by a number of institutions.

Question 4.8: Do you foresee changes in the provision of staff training and development activities in support of technology enhanced learning tools in the near future?

Table 4.8: Whether changes in provision of staff training and development activities in support of TEL tools are foreseen in the near future

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
No changes foreseen	51	57%	50%	62%	75%	58%	40%	50%	100%
Changes foreseen	38	43%	50%	39%	25%	42%	60%	50%	0%

Note: n=89 for Table 4.8

This question was first introduced in the 2012 Survey to establish whether institutions envisage changes in the provision of staff development for support staff as a result of budgetary pressures. Whilst this question was designed to follow on from Questions 4.6 and 4.7, respondents appeared to be confused as to whether the question referred to support and training opportunities for TEL support staff or to TEL support and training provided by the institution for academic/administrative staff. Table 4.8 shows the responses that relate to changes in provision of staff development for support staff.

Table 4.8 reveals that the majority of respondents do not anticipate changes in staff training provision. This pattern is consistent across type of institution and country aside from Wales where, for the relatively small number of responding institutions, this pattern is reversed.

Table 4.8a: Foreseen changes in provision for training and development activities promoted to support staff

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Increase in staff development	17	45%	43%	40%	100%	50%	0%	33%	0%
Increase in support activities	9	24%	29%	20%	0%	19%	66%	33%	0%
Bespoke development for school/faculty	6	16%	24%	7%	0%	16%	33%	0%	0%
Increase in online provision	5	13%	14%	13%	0%	13%	33%	0%	0%
New staff recruited for TEL	5	13%	14%	13%	0%	13%	33%	0%	0%

Note: n=38 for Table 4.8a

Table 4.8a summarises the returns for institutions that do foresee changes in training provision for support staff, showing the top five foreseen changes. Percentage scores are based on the total population of 38 institutions that responded to this part of Question 4.8. Table A4.8a in Appendix A provides the full list. The data was obtained using a cluster analysis of the responses.

Many of the institutions that responded to this question foresee an increase in staff development and support activities, especially for staff who have direct responsibility for enabling TEL. A number of institutions also intend to increase their use of TEL to facilitate staff development more generally.

Institutions also report a focus on developing staff IT skills and digital literacies. This corroborates a finding in Question 3.21a, which revealed that a few institutions (n=4) are *concerned about the digital literacy of staff*. Interestingly, in the 2012 Survey *Developing students digital literacy* was identified as a factor driving TEL development (Question 1.2). Although only a small number of institutions are highlighting the development of digital literacies as an issue, this may be something worth tracking in subsequent Surveys.

A few respondents anticipated an increase in the use of online resources with more webinar based support, as well as encouraging self-help amongst staff. This suggests that institutions are seeking to establish approaches that work to scale in their support to staff, whilst still operating within the constraints of limited resources.

There are also indications of demand for bespoke sessions tailored to requirements at department, school and faculty level and the need to provide discipline specific training and support. These findings are similar to those highlighted in the 2012 Survey.

In addition, a few institutions intend to do more to help staff gain professional accreditation and align their staff development provision with professional standards frameworks such as those provided by the HEA and CMALT.

Section 5: Looking to the future...

This section was entitled *Looking to the future* and asked questions relating to new and emerging trends in the use of TEL. It remains unchanged from the 2012 Survey, with minor updates to response options in questions 5.1, 5.2, 5.3 and 5.4. For ease of completion, questions 5.6 and 5.7 from the 2012 Survey were combined into one (questions 5.6a and 5.6b).

Question 5.1: Listed below are potential *barriers* to any (further) development of processes to promote and support technology enhanced learning tools. What, in your opinion, might be the barriers in your institution over the coming years?

Table 5.1 Ranked potential barriers to any (further) development of processes to promote and support technology enhanced learning tools

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Lack of time	1	3.55	3.40	3.72	3.50	3.51	3.80	4.00	3.00
Lack of academic staff knowledge	2	3.25	3.32	3.18	3.25	3.24	3.20	3.50	3.00
Lack of money (e.g. funding to support development)	3	3.19	3.21	3.13	3.38	3.18	3.60	3.00	3.00
Institutional culture	4	3.17	3.28	3.03	3.25	3.19	2.40	3.50	3.00
Departmental/school culture	5	3.11	3.12	3.03	3.50	3.14	2.20	3.50	3.00

Note: n=90 for Table 5.1

Table 5.1 summarises the responses for Question 5.1 and shows the Top 5 ranked barriers. The full data are in Tables A5.1 and B5.1. Longitudinal analysis is given in Table C5.1.

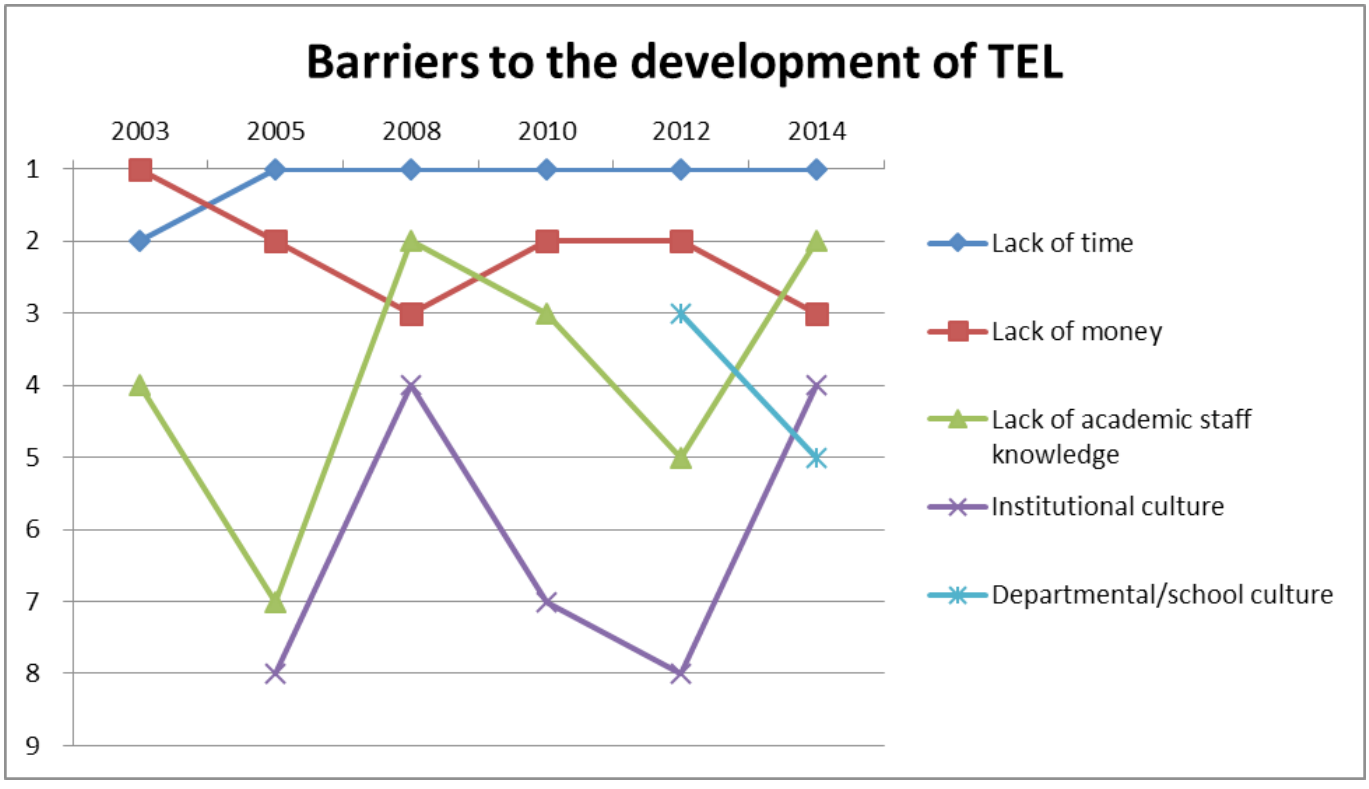

Figure 5.1 Longitudinal view of the 2014 Top 5 barriers

Overall, the mean averages for the barriers are higher than in 2012 with eight items with a mean above 3.00, compared with only two items in 2012. In terms of rankings, *Lack of time* retains its position as the highest ranked barrier, a position held since the 2005 Survey. *Lack of money* drops down to third place, whilst *Lack of academic staff knowledge* moves up to second place with a mean average of 3.25 – up from 2.86 in 2012. *Institutional culture* moves up four places to fourth place, whilst *departmental/school culture* has moved from third to fifth place. *Technical problems* continues a downward trend since the 2005 Survey moving from 12th in 2012 to 15th in 2014. *Competing strategic initiatives* was added as a new response option and appears in 9th place with a mean average of 2.98. The complete rank data across all years of the survey can be seen in Table C5.1 in Appendix C.

The Top 5 barriers for Pre-92 and Post-92 institutions generally follow the sector results with the odd exception, e.g. Pre-92 institutions rank *Lack of recognition for career development* in fifth place. HE colleges rank *Lack of support staff* in first place (10th across the sector), with *Lack of money* and *departmental/school culture* in joint second place.

Looking at regional differences, Scottish institutions show the most variance from the sector results, ranking *Lack of academic staff commitment* and *Lack of academic staff development opportunities* in the top five. Welsh institutions report *Institutional culture* and *Departmental/school culture* as much less of a barrier than the other countries.

Across the mission groups, Million+ institutions rank *Lack of money* lower than the rest in ninth place (mean of 2.90) and place *Competing strategic initiatives* in second place (mean of 3.60). As might be expected for research focused institutions, Russell Group members ranked *Lack of recognition for career development* as the second place barrier (see Table B5.1 in Appendix B).

Question 5.2: Does your institution currently outsource or is it formally considering the outsourcing of some or all of your *support* for any of the following? *Support* refers to outsourcing support for an institutionally managed/hosted service (e.g. support desk service for VLE)

Table 5.2a: Whether institutions currently outsource some or all of their support

	Currently outsource			
	Normal hours (9am – 5pm)		Out of hours	
	No.	Total	No.	Total
Student email	5	38%	14	67%
VLE	5	38%	6	29%
E-portfolio	2	15%	0	0%
Content creation*	2	15%	0	0%
Staff email	1	8%	7	33%
Digital repositories	1	8%	1	5%
Other	2	15%	8	38%
	n=13		n=21	

Table 5.2b: Whether institutions are formally considering outsourcing for some or all of their support

	Considering outsourcing			
	Normal hours (9am – 5pm)		Out of hours	
	No.	Total	No.	Total
VLE	7	64%	8	57%
Staff email	3	27%	3	21%
Content creation*	3	27%	0	0%
Student email	2	18%	3	21%
E-portfolio	2	18%	4	29%
Other	1	9%	2	14%
Digital repositories	0	0%	1	7%
	n=11		n=14	

Tables 5.2a and 5.2b summarise the responses for Question 5.2. For a full breakdown by country, institution type and mission type see Tables A5.2a–d and B5.2a–d. Longitudinal analysis is given in Tables C5.2a and C5.2b. *Content creation* is a new response item for 2014; the 2012 response item *Open Educational Resources* was removed.

Of those who **currently outsource support**, *student email* is ranked joint first with the VLE for support within normal hours and in first place for out of hours support. There is little outsourced support for *digital repositories*, *e-portfolio* and *content creation*, especially out of hours. Compared with support during normal hours, there is a noticeable increase in the number of respondents choosing out of hours support, in particular, for *student email* and *staff email*, which could indicate that support is provided in house during normal hours, but outsourced to ensure 24/7 coverage. Where respondents indicated that support was outsourced for *Other* services, the majority indicated that this was for general IT helpdesk or service desk support such as the service provided by NorMAN[23] where multiple services would be covered, and for specific tools such as the lecture recording solution Panopto.

23 NorMAN out of hours helpline – www.outofhourshelp.ac.

Pre-92 institutions are more likely to currently outsource support for their *VLE* compared with Post-92 institutions and HE colleges; however, it should be noted that around 90% of Post-92 institutions are considering outsourcing support for the VLE during normal hours. Russell Group and Million+ institutions are the only mission groups to report outsourcing within hours. All of the responding University Alliance institutions outsource support for *student email* out of hours. Institutions in Wales, HE colleges and Guild HE institutions did not report any outsourcing of support.

Of those who are **considering outsourcing support**, the *VLE* is the main contender, particularly for Pre-92 and Post-92 institutions. All of the responding GuildHE institutions indicated they are considering outsourcing support for the VLE both within normal hours and out of hours. Institutions in Wales and HE colleges did not report any consideration of outsourcing support.

Question 5.3: Does your institution currently outsource or is it 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 5.3a: Whether institutions currently outsource some or all of their provision

	Currently outsource			
	Normal hours (9am – 5pm)		Out of hours	
	No.	Total	No.	Total
Student email	35	80%	33	89%
VLE	21	48%	16	43%
E-portfolio	14	32%	12	32%
Staff email	11	25%	9	24%
Other	7	16%	6	16%
Digital repositories	4	9%	2	5%
Content creation*	2	5%	0	0%
	n=44		n=37	

Table 5.3b: Whether institutions are formally considering outsourcing for some or all of their provision

	Considering outsourcing			
	Normal hours (9am – 5pm)		Out of hours	
	No.	Total	No.	Total
VLE	13	52%	12	60%
Staff email	13	52%	12	60%
Student email	9	36%	7	35%
E-portfolio	6	24%	5	25%
Content creation*	3	12%	0	0%
Digital repositories	2	8%	0	0%
Other	1	4%	1	5%
	n=25		n=20	

Tables 5.3a and 5.3b summarise the responses for Question 5.3. For a full breakdown by country, institution type and mission type see Tables A5.2a–d and B5.2a–d. Longitudinal analysis is given in Tables C5.3a and C5.3b.

Of those who **currently outsource provision**, there is no change from the 2012 Survey in terms of the order. *Student email* remains the most outsourced service in terms of provision, followed by the *VLE* and *e-portfolio* both within normal hours and out of hours. There has been an overall increase in the number of people outsourcing both *student email* (from 69% in 2012 to 80% in 2014) and the VLE (from 31% in 2012 to 48% in 2014).

Where respondents indicated that provision was outsourced for *Other* services, these included plagiarism detection systems, lecture recording systems, e-assessment, blogs, wikis and survey tools.

Pre-92 institutions tend to outsource provision of the VLE less than the rest of the sector. Post-92, GuildHE and University Alliance institutions outsource e-portfolio provision more than the sector. Scottish institutions and Million+ institutions reported a greater preference for outsourcing the VLE.

There is some discrepancy between the results for VLE outsourcing as five institutions appear to only outsource provision within normal hours. It is unlikely that they bring their VLE provision back in house overnight and given the differing number of participants for normal hours and out of hours, it is possible that those institutions simply did not respond to the out of hours part of the question.

Additionally, data from Question 3.2 reveals that 31 institutions (33%) host their VLE with a third-party, yet 21 (48%) responded in Question 5.2 to outsourcing their VLE provision. Care must be taken when interpreting the results due to the reduced number of participants for Question 5.3.

Over half of respondents indicated that they are **considering outsourcing provision** for *staff email* and for the *VLE*. Both Pre-92 and Post-92 institutions follow this general trend, however HE colleges are not considering outsourcing provision for *staff email*.

The countries reflect different priorities over the most considered item for outsourcing with institutions in England ranking the *VLE* first, whilst institutions in *Scotland* rank *staff email* first – possibly due to high levels of existing outsourced *VLE* provision in Scotland.

Question 5.4: Has your institution formally considered *collaboration with other HE institutions* in the delivery of technology enhanced learning services or resources to staff?

Table 5.4: Considered collaboration with other HE institutions

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes, and do collaborate as a result	18	20%	28%	13%	13%	17%	20%	50%	100%
Yes, did consider but decided not to collaborate*	10	11%	14%	8%	8%	10%	40%	0%	0%
No, not considered	61	69%	58%	79%	75%	73%	40%	50%	0%

Note: n=89 for Table 5.4

Table 5.4 summarises the returns for Question 5.4. For a full breakdown by country, institution type and mission type see tables A5.4 and B5.4. For the 2014 Survey a new response item was added to identify cases where institutions have considered collaborating, but have chosen not to. This accounts for a small number of respondents. The Survey did not ask respondents to provide reasons for why they decided not to collaborate.

As in 2012, the majority of institutions have not considered or are not currently collaborating with other HE institutions and this finding possibly reflects the low impact of HEFCE's *Collaborate to Compete* (2011) report, which has informed TEL development for only 20 institutions, as revealed in Table A2.3. Pre-92 institutions would appear to be more likely to collaborate than Post-92 institutions and HE colleges. Institutions in Scotland and Northern Ireland are also more likely to collaborate, although it should be noted that this data is based on small numbers of respondents. It is interesting to note that Welsh institutions are collaborating less than in 2012 and around 40% considered collaborating but decided against it.

Considering the different mission groups, Million+ and Russell Group institutions are the most likely to collaborate; no GuildHE institutions reported that they collaborate with other HE institutions.

Of those that do collaborate or are considering collaborating with others, the majority mentioned shared services such as the VLE and lecture capture systems. Other examples included joint online programmes, joint graduate school/ doctoral training, open educational resources and shared training/events.

Question 5.5: Have any recent and prospective developments in technology started to make new demands upon you in terms of the support required by users?

Table 5.5: 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

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	72	81%	79%	84%	75%	82%	60%	83%	100%
No	17	19%	21%	16%	25%	18%	40%	17%	0%

Note: n=89 for Table 5.5

Question 5.5a: 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.

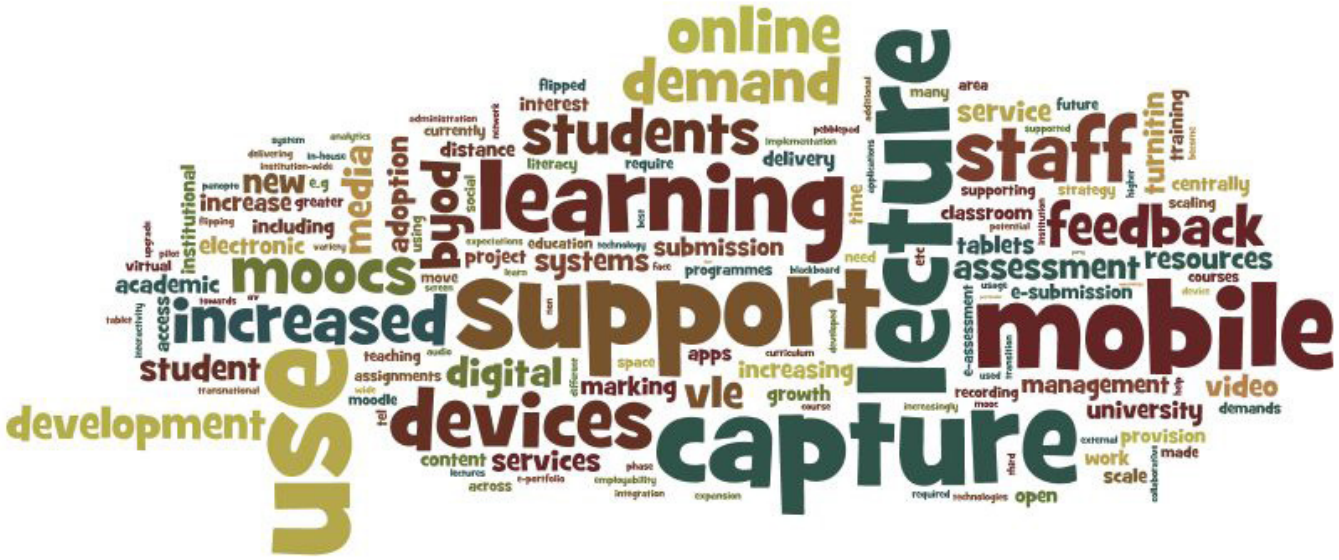

Figure 5.5a: Word cloud showing the developments making new demands

Table 5.5a: Recent and prospective developments in technology that are starting to make new demands in terms of the support required by users

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Mobile technologies/Bring Your Own Device (support, access to systems/content)	32	45%	33%	53%	50%	40%	33%	100%	100%
Lecture capture	26	37%	42%	38%	0%	38%	33%	25%	0%
E-assessment (e-submission, e-marking, e-feedback)	24	34%	15%	47%	50%	32%	67%	25%	100%
MOOCs	12	17%	27%	%6%	17%	19%	0%	0%	0%
VLE – new/change, embed, extend, customise	10	14%	15%	13%	17%	16%	0%	0%	0%

Note: n=71 for Table 5.5a

As in previous Surveys, this was an open question and respondents were invited to give up to three responses; 71 of the 72 respondents to Question 5.5 did so. The responses, many of which were multi-part, were then categorised. The top five demands are given in Table 5.5a. For a full breakdown by country, institution type and mission type see Tables A5.5a and B5.5a.

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 C5.5a.

Mobile technologies retains the top spot with 45% of respondents indicating it as the development making the most demand on support. *Lecture capture* moves into second place with an increase from 22% in 2012 to 37%. *E-assessment* remains in the top three, dropping to third place, but still with an increase from 31% to 34%. New in 2014 is the demand that *MOOCs* are placing on institutions; however, it is interesting to note that whilst institutions noted support demands from MOOCs, they are not considered a driver for developing TEL (Table A1.1).

There has been a decrease in the demands from developments such as social networking (10% to 3%) and Web 2.0 (8% to 0%), which could indicate that these tools are now embedded within institutions and part of established support provision.

Post-92 and HE colleges follow the sector with *Mobile* technologies as the leading development making demands; this was also the case for GuildHE and University Alliance institutions. Pre-92 institutions indicated that *Lecture capture* was the leading development and were the only ones who mentioned *classroom interactivity*, such as personal response systems.

E-assessment, in terms of e-submission, e-marking, e-feedback, was noted as a key development for HE colleges and institutions in Scotland, Wales and Northern Ireland. English institutions and Russell Group institutions were the only ones to identify *MOOCs* as a key development, and for Russell Group institutions it was ranked as the top development. *MOOCs* were of limited concern to Post-92 institutions.

Question 5.6: 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 5.6: Whether institutions consider that the developments identified in question 5.5 will pose support challenges over the next two to three years

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	59	82%	82%	81%	83%	83%	67%	80%	100%
No	13	18%	18%	19%	17%	17%	33%	20%	0%

Note: n=72 for Table 5.6

Question 5.6 was modified to first ask respondents to confirm whether the developments identified in Question 5.5 posed any challenges for support over the next two to three years; 59 respondents indicated that their developments did pose support challenges. Respondents were then invited to provide information about those challenges (Question 5.6a) and how they would overcome them (Question 5.6b).

Question 5.6a: 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.

Figure 5.6: Word cloud showing most commonly mentioned words for challenges reported in Question 5.6a

Table 5.6a: Challenges that these developments pose over the next two to three years in terms of support that will be required for staff and students

Top 5	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Lack of support staff/specialist skills/ resources	19	32%	46%	19%	20%	33%	0%	50%	0%
Mobile technologies/learning, BYOD (support, creating content and compatibility with systems)	16	27%	14%	35%	60%	27%	0%	25%	100%
Staff development	12	20%	0%	**42%**	20%	19%	50%	25%	0%
E-assessment (e-submission, e-marking, e-feedback)	11	19%	4%	38%	0%	17%	50%	25%	0%
Lecture capture/recording	10	17%	18%	19%	0%	17%	50%	0%	0%

Note: n=59 for Table 5.6a

Table 5.6a gives the five most commonly cited challenges. For a full breakdown by country, institution type and mission type see tables A5.6a and B5.6a. Totals and percentages are based upon 59 respondents who indicated that the developments mentioned in Question 5.5 would pose challenges over the next two to three years. As in previous Surveys, this was an open question and respondents were invited to give up to three responses.

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 (see Table C5.6a).

The 2014 Survey reports some change in the top five challenges from the 2012 Survey with *Lack of support staff/ specialist skills/resources* moving into first place from fifth. *Mobile technologies/learning* and *staff development* remain key challenges and despite both dropping a place in the ranking, their overall percentages have increased. *Lecture capture/recording* is new to the top five with an increase from 8% to 17%. *Legal/policy issues* have become less of a challenge in 2014, down to 5% from 14%. Whilst MOOCs featured in the top five developments making demands on support (Question 5.5), only four responding institutions identified them as a challenge in the next two to three years.

Lack of support staff/specialist skills/resources appears to be of more concern to Pre-92 institutions (46%) and Russell Group institutions (50%). Question 1.3 identifies *Availability of TEL support* staff as the leading factor encouraging development of TEL for both types of institution, which explains why this could be a major concern.

HE colleges and University Alliance institutions identify greater challenges with *Mobile technologies/learning* (60% and 55% respectively). *Staff development* is noted as the leading challenge for Post-92 institutions (42%) and Million+ institutions (57%), but not for Pre-92 and Russell Group institutions where no respondents highlighted this as a challenge. *Digital literacy* is a challenge noted by only University Alliance institutions (27%) and English institutions (13%).

Question 5.6b: How do you see these challenges being overcome?

Figure 5.6b: Word cloud showing most commonly mentioned words for overcoming the challenges reported in Question 5.6a

Table 5.6b: How institutions see the challenges identified in Question 5.6a being overcome

Top 4	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Investment (time, money, resources, support staff)	16	27%	36%	19%	20%	27%	0%	50%	0%
Review and revise support provision (increased/improved/devolved/extended hours)	15	25%	18%	31%	40%	27%	33%	0%	0%
Staff development	15	25%	11%	46%	0%	27%	0%	25%	0%
Development of strategies/policies	11	19%	29%	12%	0%	18%	0%	50%	0%

Note: n=59 for Table 5.6b

Table 5.6b lists the most commonly cited solutions to the challenges identified in Question 5.6a. For a full breakdown by country, institution type and mission type see tables A5.6b and B5.6b. Totals and percentages are based upon 59 respondents. As for previous Surveys, this was an open question and respondents were invited to give up to three responses.

Where possible, items have been classified 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 (see Table C5.6b).

Given that the leading challenge identified in Question 5.6a relates to a *Lack of support staff/specialist skills/resources*, it is perhaps no surprise that the top two ways of overcoming the challenges identified are *Investment* and *Review and Revise support provision*. *Review and revise support* provision is a new entry to the top four with an increase from 8% to 25%. *Staff development* remains in the top four, but continues its decline from 40% in 2010 to 25% in 2014. *Development of strategies/policies* remains in the top four with a similar score to 2012.

Of note is the decline of *Sharing good practice* (down from 12% to 5%) and the provision of *self-service support materials* (down from 13% to 0%) as a means to overcoming the challenges. It is, therefore, interesting that whilst *Providing platforms for sharing good practice* was cited by 87% of institutions in Question 2.6 as a means for enabling adoption and use of TEL, it is perhaps not appropriate for overcoming the current challenges identified in Question 5.6a.

There is a noticeable difference between the different types of institution when it comes to how they will overcome the challenges. *Staff development* is most commonly cited by Post-92 institutions (46%) but much less so for Pre-92 institutions (11%) and HE colleges (0%). For HE colleges, the solutions identified are to *Review and revise support provision* and to address issues relating to the use of *Mobile devices*.

Considering the different mission groups, University Alliance and Million+ institutions favour *Staff development*, whilst GuildHE have a strong focus on *Review and revise support provision* (67%). For Russell Group institutions, the primary solutions are cited as *Investment* and *Development of strategies/policies*; this is also reflected in the responses from Scottish institutions.