UCISA REPORT

2012 Survey of Technology Enhanced Learning for higher education in the UK

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Universities and Colleges
Information Systems Association

2012 Survey of Technology Enhanced Learning for higher education in the UK

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SURVEY

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Executive summary

This Report records the results from a national survey undertaken by UCISA, with financial support from the JISC, into matters relating to Technology Enhanced Learning (TEL) in UK higher education (HE) institutions. It builds upon similar surveys which were conducted in 2001, 2003, 2005, 2008 and 2010 and 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 2012 Survey, which again focused on institutional engagement with technologies in support of learning and teaching activities. This Report presents the results from the 2012 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 2010 followed a year after the publication of HEFCE's revised strategy for e-learning[1], which challenged institutions to employ technologies to enhance learning, teaching and assessment activities. Since then, of course, the HE landscape has changed quite dramatically, with the Browne review heralding the new economic climate and budgetary challenges that HE institutions are now facing. The case studies of institutional TEL activities which accompanied the 2010 Survey Report suggested some immediate consequences of these changes for TEL activities, with institutions focusing on efficiency savings as a result of restricted budgets realised through voluntary redundancies, reorganisations and more selective staff development. The case studies also highlighted the importance of networks and cross institutional relationships in sharing services and resources, a theme that has subsequently been magnified in publications such as the Online Learning Task Force's Report to HEFCE, *Collaborate To Compete* (Jan 2011)[2]. The agenda for the 2012 Survey sought to track the adjustments that institutions have been making to meet these challenges.

Beyond financial pressures, the Online Learning Task Force's Report to HEFCE also highlighted the greater emphasis on student choice in the deregulated market place, with student expectations driving an improved level of service provision by higher education institutions, particularly through the use of technologies to support application and course selection procedures. The 2012 Survey sought to capture progress in these areas too, particularly the growth in online services offering more flexible opportunities for learning, such as through the development of mobile learning provision.

The Report provides an overview of TEL developments since the 2010 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 2010 and 2008 Surveys, namely *meeting student expectations* and *improving access to learning for students off campus*.

Availability of TEL support staff remains the leading factor in encouraging the development of TEL, followed by *central university* and *school/departmental senior management support*, which have overtaken *availability and access to tools* in the rankings.

Encouragingly, *academic staff knowledge* has dropped to fifth in the list of barriers influencing TEL development, indicating greater progress with staff training and awareness of TEL. However, the top two barriers to TEL development remain the same as those identified in the previous survey, namely lack of *time* and *money*.

Institutional strategies continue to influence TEL development, with *teaching, learning and assessment* consolidated longitudinally as the leading internal strategy cited by respondents.

The key change since 2010 has been the emergence of *corporate* strategies, which have overtaken *library and learning resources* as the second most commonly cited internal strategy influencing TEL. In contrast, the declining influence of dedicated *e-learning strategies* since the high water mark of 2008 when they were the second most commonly cited strategy influencing TEL is confirmed. External strategies such as the HEFCE and JISC publications are identified as influential in informing institutional thinking on TEL developments.

Blackboard Learn is still the most used enterprise or institutional virtual learning environment (VLE), but *Moodle* has increased in usage as an enterprise solution and remains the most commonly used VLE platform, when

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

2 *The Online Learning Task Force's Report to HEFCE, Collaborate To Compete (Jan 2011) is available at: http://www.hefce.ac.uk/pubs/year/2011/201101/*

departmental/school implementations are also considered. Adoption of other commercial and open source platforms is negligible across the sector. Evaluation activity in reviewing VLE provision is well established, with nearly two thirds of institutions who responded to the Survey having conducted reviews over the last two years. Institutions using *Blackboard WebCT* as their main VLE have the highest level of evaluation activity for their platform, in comparison with other VLE groups. Change in supplier provision for supported systems tops the list of reasons given for initiating a review.

Plagiarism detection, e-submission, and e-assessment tools remain the most common centrally supported software in use across the sector. E-portfolio, wiki and blog tools are also well established but support for podcasting tools has declined since the 2010 Survey. Social networking, blog and document sharing tools are the most common non-centrally supported tools in use across Pre- and Post-92 institutions.

Encouragingly, the ways in which these tools are being used to support learning are gradually changing from the picture presented in 2003. Although supplementary use of the web to support module delivery remains the most common use of TEL, the proportion of *web supplemented modules* has steadily decreased over the years since the 2003 Survey when this question was first posed, with *web dependent modules* involving interaction with content and modules involving interaction with a combination of content and communication tasks both increasing in activity. This suggests that progress has been made in embedding TEL as a key element of course delivery, engaging students in its use as a feature of their learning experience. However, *fully online courses* have decreased as a proportion of TEL activity over the years and remain a niche area of activity.

Evaluation of the impact of TEL tools and systems on the student learning experience is well established with over half of the institutions responding to the Survey having conducted studies, but evaluation of pedagogic practices is less common. Scottish universities have the highest proportion of institutions which have conducted evaluation studies of pedagogic practices.

There has been notable progress towards the optimisation of services for mobile devices by institutions, particularly in support of access to *library services*, *email* and *course announcements* for iPhone, iPad and Android devices. *Timetabling information*, *access to course materials* and *personal calendars* are also popular mobile enabled services.

The economic climate appears to have had an impact on institutional services with just under half of respondents reporting changes made in TEL support staff provision, with just under a quarter reporting a reduction in the number of TEL staff and ten institutions reporting the restructuring of their departments since the last Survey. The establishment of outsourced support for TEL services remains quite limited though across the sector and has only really been implemented for student email services and, to a lesser degree, for VLE hosting.

There has also been a financial impact on the training and development activities promoted to TEL support staff, with institutions reporting reduced attendance at events and reduced budgets as the major changes since 2010. Whilst *national conferences/seminars* and *internal staff* development remain the most promoted development activities, there has been a marked increase in the promotion of accreditation, in particular, HEA and CMALT accreditation. Looking to the future, institutions anticipate increased virtual attendance at events.

Mobile technologies have moved to the top of the list of the items making the most demand on TEL support teams. *E-assessment* and *lecture capture* remain 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. Web 2.0 is now seen as much less demanding and podcasting has disappeared from the list of items making demands on support. Mobile technologies top the list of challenges which institutions face, followed by staff development, legal/policy issues and e-assessment. Staff development, strategies/policies and support staff are seen as the primary remedies – echoing similar responses to the 2010 Survey.

Acknowledgements

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

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Preface

The changing language of past surveys neatly reflects the evolving development of support provision for TEL tools across the sector. From an initial focus on Virtual Learning Environment (VLE) and Managed Learning Environment (MLE) platforms (2001 and 2003 Surveys respectively), the Survey broadened its focus to take account of e-learning (2005) and then a much wider coverage of technology enhanced learning tools (2008). For the 2012 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 2012 Survey is a continuation of those conducted between 2001 and 2010 but it also endeavours to capture contemporary issues that have emerged in the intervening period since the 2010 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 and 2010 Surveys are available on the UCISA website[3]. A peer reviewed analysis for the 2008 Survey is also available[4], a short article was published in the Association for Learning Technology Newsletter[5] and a short article and podcast[6] were also published by Talis on the results from the 2010 Survey.

On each occasion, the 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 2010 Survey, the focus of attention is firmly on the institutional agenda. The support community may sometimes feel 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 perform. Technological advances have continued to be rapid since the 2010 Survey, bringing new educational opportunities and additional support headaches. It is these new challenges which the 2012 Survey wished to capture. Also, although many staff from the UCISA membership 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 general feedback from the support communities, most notably those represented by the Association for Learning Technology and Heads of e-Learning Forum. Crucially, we also received financial backing from the JISC to conduct the 2012 Survey.

The publication of HEFCE's revised strategy for e-learning in 2009 represented an important landmark for the sector in terms of strategic thinking on TEL development. 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 revised 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 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.

Since the publication of the strategy, there have been further publications (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[7], which have initiated a discussion on learning platforms and their contribution to student learning. These publications, events and online discussions presented an important backdrop to the 2012 Survey and the questions which we were proposing to raise on the embedding of TEL tools across the sector.

3 *Reports on the UCISA surveys are available at: http://www.ucisa.ac.uk/groups/ssg/surveys.aspx*

4 *Jenkins, M., Browne, T., Walker, R. and Hewitt, R. (2010) The development of technology enhanced learning: findings from a 2008 survey of UK higher education institutions. Interactive Learning Environments 18(1), 1-19.*

5 *Key Findings from 2010 technology enhanced learning survey. ALT News Online (October 2010). Available at: http://archive.alt.ac.uk/newsletter.alt.ac.uk/newsletter.alt.ac.uk/1lxwmlg2xdb.html*

6 *Podcast in Focus: UCISA talks about its latest survey of UK technology enhanced learning. Panlibus magazine (Spring 2011) p/20. Available at: http://www.capita-softwareandmanagedservices.co.uk/software/Documents/libraries-panlibus20.PDF*

7 *Association for Learning Technology's Learning Environment Review Special Interest Group: http://lersig.alt.ac.uk/pages/lersig_remit*

As with all continuing surveys, we faced the challenge of maintaining continuity with previous ones, whilst not collecting merely stagnant data, and also keeping pace with new developments. The core of the questionnaire has been maintained to enable longitudinal analysis, although new response options have been added to some questions to ensure that the Survey remains up to date with sector practices. For instance, the range of internal strategies influencing TEL development was extended to include options on mobile strategies and strategies on the student learning experience: the range of VLE platforms was extended to include the Pearson eCollege system.

New questions were introduced to capture new trends in TEL service delivery and provision, such as:

- budgetary concerns – how funding issues may be impacting on central and local support and staffing provision and on training and development opportunities;
- outsourcing of key TEL infrastructure and services and the outsourcing approach being employed (covering normal and/or out of hours service) and intentions for the future;
- modes of institutional collaboration in delivering TEL services;
- mobile services in support of learning and teaching;
- review of institutional VLE provision;
- evaluation of the impact of TEL tools on the student learning experience and pedagogic practice.

Moving with the times, we also adapted the distribution methods for the Survey, inviting respondents to complete the Survey online rather than by completing a hard copy. In the past the Survey has been posted out to VCs and Principals, but for 2012 an open invitation was publicised on the Heads of e-Learning Forum (HeLF)[8] list in mid January 2012, directing institutional representatives to UCISA's online survey tool, Vovici. This new approach was adopted to facilitate access to the Survey for the principal stakeholder group targeted with submitting an institutional response. The invitation was also published on the UCISA Directors list to capture those institutions without a HeLF representative. This approach resulted in an improved response rate, maintaining the trend of the past two Surveys. The online survey tool was closed to submissions in the first week of March 2012.

The workers

The Survey was conducted by UCISA, through the work of Richard Walker (University of York), Julie Voce (Imperial College London) and Jebar Ahmed (University of Huddersfield) with support from UCISA's Academic Support Group and with help from Martin Jenkins (Christchurch Polytechnic Institute of Technology, New Zealand), 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). JISC generously provided essential funding and valuable guidance.

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

Institutions surveyed

Notwithstanding changes to the distribution method, all 165 institutions as defined by the home countries higher education funding councils were targeted to complete the Survey. This represented the same population which has been targeted in previous Surveys, of which 131 institutions are located in England, 11 in Wales, 19 in Scotland and 4 in Northern Ireland[9].

Presentation of data

The presentation of the data is broken down into four main parts. The main text **focuses** on results from the 2012 Survey and where appropriate, highlights from that data **are** presented in tabular or graphical form. In most cases, only the leading responses for each question **are** given in the tables within the main report (e.g. top five responses). The full tabular data for each question for 2012 is presented in Appendix A. For this year's 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.

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), but an additional layer of

8 Heads of e-Learning Forum: http://w01.helfcms.wf.ulcc.ac.uk/

9 For further details on the UK HE sector, please see: http://www.universitiesuk.ac.uk/UKHESector/Pages/OverviewSector.aspx

data has also been introduced by mission group. Note that the membership of mission groups is based on the makeup of these groups in February/March 2012 when the Survey was being completed, and therefore, does not reflect subsequent changes in group membership – specifically the recent movement of some institutions from the 1994 Group to the Russell Group.

Although 98 institutions submitted responses to the Survey, not all questions were attempted by all respondents. Completion totals have therefore been indicated for free text questions and those with a reduced level of response. It is worth noting that some country and group populations are relatively small in size (e.g. Wales, n = 6; Northern Ireland, n = 1; GuildHE institutions, n=8; HE Colleges, n=7) and are thus susceptible to dramatic swings in percentage scores when the number of respondents in these groups is reduced for particular questions. As a result, care is 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 Survey 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 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 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 3.1 the number of institutional instances of Blackboard Learn as *main* VLE in use is one greater than the total number of instances of Blackboard Learn in use. Clearly, this reflects a data entry error by one respondent in failing to confirm that Blackboard Learn is used both as a VLE *and* as the main institutional platform. 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 2012 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 2010 Survey.

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 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 98 of the 165 HE institutions targeted – an impressive response rate of 59% (compared with 55% in 2010), maintaining the upward trend in the level of responses recorded since 2008 (44%). The profile of those taking part is 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[10]	No. responding	% responding	Universe	Sample
Pre-92	72	46	64%	44%	47%
Post-92	68	45	66%	41%	46%
HE College	25	7	28%	15%	7%
Total	165	98	59%	100%	100%

10 The figures for this column are based on the breakdown for the 2010 Survey. HESA (http://www.hesa.ac.uk/) does not provide up to date figures for institutional type, based on the Pre-/Post-92 distinction.

Table B: UK Country

Country	Total possible	No. responding	% responding	Universe	Sample
England	131	79	60%	79%	81%
Wales	11	6	55%	7%	6%
Scotland	19	12	63%	12%	12%
Northern Ireland	4	1	25%	2%	1%
Total	165	98	59%	100%	100%

Table C: Mission Group

Country	Total possible[11]	No. responding	% responding	Universe	Sample
Russell Group	20	14	70%	12%	14%
1994 Group	20	16	80%	12%	16%
University Alliance	23	18	78%	14%	18%
Million+	26	18	69%	16%	18%
GuildHE	22	8	36%	13%	8%
Unclassified	54	24	44%	33%	24%
Total	165	98	59%	100%	98%

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

Table D: institutional responses for the last five Surveys

	Surveys	No.
2012 and:	2010 + 2008 + 2005 + 2003	16
	2010 + 2008 + 2005	19
	2010 + 2008	35
	2010	57
2012 only	-	12
2012 and:	2008	44
2012	2005	49
2012	2003	55
2012	2010 + 2008 + 2003	26
2012	2010 + 2005 + 2003	21
2012	2010 + 2005	32
2012	2010 + 2003	35
2012	2008 + 2005 + 2003	20
2012	2008 + 2005	21
2012	2008 + 2003	30
2012	2005 + 2003	30
Total		98

Some institutions have not responded to any of the Surveys. Only 16 of the 98 that responded to the 2012 Survey also responded to the 2010, 2008, 2005 and 2003 Surveys[12]. 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.

11 The numbers are based on membership of the university mission groups in February/March 2012 when the Survey was being completed by institutions.

12 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 16 institutions.

Response scales

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

1 = Not at all important

2 = Not very important

3 = Fairly important

4 = Very important

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

Summary of conclusions

1. *Enhancing the quality of learning and teaching* remains the primary driver for considering using TEL; the other leading drivers from the 2010 and 2008 Surveys — *meeting student expectations* and *improving access to learning for students off campus* remain at second and third place respectively in the rankings. *Improving access to learning for distance learners* has risen to fourth place in the rankings.
2. *Availability of TEL support staff* is still the leading factor in encouraging the development of TEL. *Central university senior management support* and *school/departmental senior management support* have risen to second and third places in the rankings, overtaking *availability and access* to tools. The other drivers remain unchanged in their rank order since the 2010 Survey.
3. The top two barriers to TEL development remain the same as those identified in the 2010 Survey, namely *lack of time* and *money*. *Departmental/school culture* — a new response option for the 2012 Survey – was ranked third. Encouragingly, *academic staff knowledge* has dropped to fifth in the rankings, indicating greater progress with staff training and awareness of TEL.
4. *Teaching, learning and assessment* remains the leading internal strategy influencing institutional TEL development. The key change since 2010 has been the emergence of the *Corporate strategy*, which has overtaken *Library and learning resources* as the second most commonly cited internal strategy. This is particularly noticeable within Post-92 institutions. In contrast, the declining influence of dedicated *e-learning strategies* is further confirmed. HEFCE and JISC strategies remain the leading external strategies informing institutional thinking on TEL developments.
5. *Blackboard Learn* is still the most used enterprise or institutional VLE, but *Moodle* has increased in usage as an enterprise solution and 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, reflecting the further maturing of the VLE market.
6. Evaluation activity in reviewing VLE provision is well established across the sector, with nearly two thirds of institutions which responded to the Survey having conducted a review in the last two years. Institutions using *Blackboard WebCT* as their main VLE have recorded the highest level of evaluation activity for their platform, in comparison with other VLE groups reflected in the survey data. Change in supplier provision for a supported system tops the list of reasons given for initiating a review.
7. Plagiarism detection, e-submission and e-assessment tools remain the most common centrally supported software in use across the sector. E-portfolio, wiki and blog tools are also well established but support for podcasting tools has declined since the 2010 Survey.
8. Social networking and blog tools remain the most common non-centrally supported software controlled by staff and students. Document sharing also appears to be well established. 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. Blog provision and document sharing tools, in contrast, are well established in both domains across institutions.
9. Although supplementary use of the web to support module delivery remains the most common use of TEL, the proportion of *web supplemented modules* has steadily decreased over the years since the 2003 Survey when this question was first posed, with *web dependent modules* involving interaction with content and modules involving interaction with a combination of content and communication tasks both increasing in activity. This suggests that progress has been made in embedding TEL as a key element of course delivery, engaging students in its use as a feature of their learning experience. However, *fully online courses* have decreased as a proportion of TEL activity over the years and remain a niche area of activity.
10. The leading services optimised for mobile devices by institutions are *access to library services*, *email* and *course announcements*. *Timetabling information*, *access to course materials* and *personal calendars* are also popular mobile enabled services. These developments are being implemented institution wide as centrally supported services, most commonly in support of iPad, iPhone and Android devices. The more interactive tools in support of learning and teaching activities such as collaboration software (blogs, wikis and discussion boards) have not attracted as much investment to date as centrally supported mobile services.
11. Evaluation of the impact of TEL tools and systems on the student learning experience is well established with well over half of the institutions responding to the Survey having conducted studies, but evaluation of pedagogic practices is less common. Scottish universities have the highest proportion of institutions which have conducted evaluation studies of pedagogic practices.
12. The economic climate appears to have had an impact on institutional services with just under half of respondents reporting changes made in TEL support staff provision, with just under a quarter reporting a

reduction in the number of TEL staff and ten institutions reporting the restructuring of their departments since the last Survey. The establishment of outsourced support for TEL services remains quite limited though across the sector and has only really been implemented for student email services and to a lesser degree for VLE hosting.

13. There has also been a financial impact on the training and development activities promoted to TEL support staff, with institutions reporting reduced attendance at events and reduced budgets as the major changes since 2010. Whilst *national conferences/seminars* and *internal staff* development remain the most promoted development activities, there has been a marked increase in the promotion of accreditation, in particular HEA and CMALT accreditation. Looking to the future, institutions anticipate increased virtual attendance at events in the future.
14. *Mobile technologies* have moved to the top of the list of the items making the most demand on TEL support teams. *E-assessment* and *lecture capture* remain 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. *Web 2.0* is now seen as much less demanding and *podcasting* has disappeared from the list of items making demands on support.
15. *Mobile technologies* also top the list of challenges which institutions face, followed by staff development, legal/policy issues and e-assessment, with staff development, strategies/policies and support staff seen as the primary remedies – echoing similar responses to the 2010 Survey.

Section 1: Factors encouraging development of Technology Enhanced Learning

Section 1 of the Survey looked at the factors encouraging the development of TEL within institutions and retained the same questions which were used in the 2010 Survey.

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

Table 1.1a: Mean values and Ranks for ALL and Type

Rank2012	Driving factors	ALL	Pre-92		Post-92		Coll	
Top five			Mean	Rank	Mean	Rank	Mean	Rank
1	Enhancing quality of learning and teaching in general	3.81	3.82	1	3.84	1	3.57	2=
2	Meeting student expectations	3.71	3.76	2	3.71	2	3.43	4=
3	Improving access to learning for students off campus	3.42	3.29	3	3.51	3	3.71	1
4	Improving access to learning for distance learners	3.21	3.16	6	3.20	6=	3.57	2=
5=	Improving access to learning for part time students	3.15	2.87	14	3.42	4	3.29	6
5=	Helping create a common user experience	3.15	3.11	7=	3.20	6=	3.14	7=

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

Rank2012	Driving factors	ALL	England		Wales		Scotland		N. Ireland	
Top five			Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Enhancing quality of learning and teaching in general	3.81	3.83	1	3.83	2	3.67	2	4.00	1=
2	Meeting student expectations	3.71	3.71	2	4.00	1	3.58	3	4.00	1=
3	Improving access to learning for students off campus	3.42	3.37	3	3.50	4=	3.75	1	3.00	11=
4	Improving access to learning for distance learners	3.21	3.14	5	3.42	5	3.42	5	4.00	1=
5=	Improving access to learning for part time students	3.15	3.09	7	3.33	6=	3.50	4	3.00	11=
5=	Helping create a common user experience	3.15	3.13	6	3.50	4=	3.08	11=	4.00	1=

Table 1.1a and Table 1.1b summarise the responses 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 ranking 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.

The top three drivers for TEL development remain unchanged from the 2010 Survey, with *enhancing the quality of learning and teaching* again leading the list. However, for this year's Survey, *improving access to learning for distance learners* has risen to 4th place in the rankings, with HE colleges marking a shift in their estimation of this factor's importance; the 2010 mean score for HE Colleges was 2.38, but it is now rated with a mean score of 3.57. GuildHE institutions also rate *Distance learning* at a similar level (3.50), marking the rise in importance of distance learning on the TEL agenda.

Another key development from the 2010 Survey is the rise up the rankings of *creating/improving competitive advantage* as a driver, from 11th in 2010 (mean=2.80) to 7th in 2012 (mean = 3.14), with Russell Group universities returning the highest mean score (3.29) of the mission groups for this factor.

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

Table 1.2: Other driving factors for TEL development

Other driving factor Leading factors identified	Frequency
Improving academic programme design • Supporting flexible delivery	5
Improving NSS scores and relevant rankings	4
Institutional capacity development • Scaling up teaching delivery to larger cohorts	2
Environmental concerns/green agenda	2
Supporting staff development • Promoting innovative pedagogic practice	2
Developing students' digital literacy	2
Facilitating the integration of research with teaching	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. Thirty institutions suggested alternative drivers, although some of the responses reflected precoded options in Question 1.1. The additional factors highlighted the need for greater flexibility in programme delivery, as well as the pressure of improving NSS scores and moving up the ranking tables, which is 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

Rank2012	Question	ALL	Pre-92		Post-92		Coll	
Top five			Mean	Rank	Mean	Rank	Mean	Rank
1	Availability of TEL support staff	3.77	3.74	1	3.80	1	3.71	1
2	Central university senior management support	3.49	3.46	2=	3.53	2	3.43	2=
3	School/departmental senior management support	3.44	3.46	2=	3.44	3	3.29	4=
4	Availability and access to tools across the institution	3.39	3.46	2=	3.33	5	3.29	4=
5	Availability of committed local *champions*	3.36	3.37	5	3.38	4	3.14	6

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

Rank2012	Question	ALL	England		Wales		Scotland		N. Ireland	
Top five			Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank
1	Availability of TEL support staff	3.77	3.76	1	4.00	1=	3.67	1=	4.00	1=
2	Central university senior management support	3.49	3.53	2	4.00	1=	3.00	7	3.00	4=
3	School/departmental senior management support	3.44	3.51	3	3.33	5=	3.08	6	3.00	4=
4	Availability and access to tools across the institution	3.39	3.33	4	3.83	3	3.50	4	4.00	1=
5	Availability of committed local *champions*	3.36	3.32	5	3.33	5=	3.67	1=	3.00	4=

Table 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. The *availability of TEL support staff* remains the leading encouraging factor, in line with the 2010 Survey results. However, *central university* and *school/departmental senior management support* now occupy the 2nd and 3rd rankings in the table, jumping above the *availability and access to tools across the institution*, perhaps highlighting the different stage that institutions have now reached in embedding, rather than acquiring learning technologies and employing the tools as a standard feature of course delivery.

Table B1.3 presents the rankings for university mission groups. The top four encouraging factors for the sector are reflected in the list of rankings across all groups, with the exception of Russell Group institutions which highlight *availability of committed local champions* and GuildHE institutions which include *technological changes/developments* in their top four rankings. In both cases these factors are ranked above *availability and access to tools across the institution*.

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
Student pressure and feedback	10
Availability of university committees, steering groups and centres to encourage development	6
Peer support for professional support staff • Community of practice across service departments	4
Peer support for academic staff • Staff networking and show and tell meetings	4
Availability of open resources and tools	4
Availability of external communities of practice in TEL development	2
Support from suppliers	1
Cross faculty collaboration and cooperation	1
Availability of recognition awards for staff	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.

Student petitions and feedback providing pressure for TEL development represented the most common encouraging factor, an observation shared in previous Survey results (2010 and 2008). Respondents also highlighted the *availability of appropriate organisational structures* such as university committees, steering groups and centres to foster TEL development across an institution. *Peer support* also featured in the list of responses to this question, both for academics and professional staff within service departments.

However, only one institution highlighted *recognition and awards for TEL development* as an encourager, and as responses to Question 5.1 show, lack of recognition for career development is viewed as an important barrier to institutional development of TEL tools.

Section 2: Strategic questions

Section 2 of the Survey assessed the importance of internal and external strategies in influencing the development of TEL development. This section was restructured from the 2010 Survey to incorporate a wider range of strategy questions within the Survey, inviting respondents to consider the strategies that institutions possess and the documents that they consult, as well as the impact that these resources have on their practice. This has resulted in a question on the influence of strategies on TEL practice (Q2.4) being moved to this section, along with Q2.5 exploring the link between strategy and institutional policies, as well as the way in which TEL adoption is enabled within the institution (Q2.6). These questions were all previously located in Section 3 of the Survey (2010 and previous ones).

Existing questions were also revised, with new response items added to Questions 2.1, 2.3 and 2.6, and the rewording of one item for Question 2.2. New response items are marked with an asterisk in the tables.

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

Institutional strategy Top six	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Teaching, Learning and Assessment strategy	91	93%	91%	96%	86%	91%	100%	100%	100%
Corporate strategy	66	67%	54%	84%	43%	67%	50%	75%	100%
Library/Learning Resources strategy	63	64%	63%	64%	71%	66%	67%	50%	100%
Information and Communication Technology (ICT) strategy	55	56%	54%	58%	57%	54%	83%	50%	100%
Student Learning Experience strategy*	43	44%	48%	42%	29%	44%	50%	33%	100%
Technology Enhanced Learning or E-learning strategy	42	43%	48%	42%	14%	47%	33%	17%	100%

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.) For the 2012 Survey, four new response items were included (marked by an asterisk in the full table A2.1) and the Teaching and Learning and E-Learning strategy items were reworded to reflect the more inclusive language which is now more standard for these items.

Table 2.1 shows that the *Teaching, Learning and Assessment* strategy tops the list and remains the most commonly cited strategy (93%) informing TEL development across institutional type, country and mission group categories. The key change since 2010 is the rise of *Corporate* strategies (67%) in the rankings, replacing *Library/Learning Resources* in second place in the list. The influence of the *Corporate* strategy on TEL development is most commonly cited by Post-92 institutions (84%) and specifically by respondents from Million+ (100%), University Alliance (61%) and unclassified institutions (71%). *Information and Communication Technology* strategies have risen to fourth place in the rankings, perhaps reflecting the broader overlap between TEL and IT service provision within HE institutions.

Of the four response items that were introduced for the first time in the 2012 Survey, the *Student Learning Experience* strategy was the most commonly cited, featuring most prominently amongst Post-92 institutions (48%) and by respondents from Million+ (56%) and 1994 Group (50%) institutions. However, for the other items, only 19 institutions confirmed that they had a *Mobile* strategy informing TEL development, with *Distance Learning* (n=12) and *Digital Media* (n=9) strategies also appearing to be less in vogue across the sector. It may well be that these specific areas of strategic development are being addressed in the broader institutional strategies appearing at the top of the list.

Certainly, the trend for dedicated *Technology Enhanced Learning or E-Learning* strategies appears to be on the decline. Whilst e-learning strategies remain in 6th place in the rankings, they are less frequently cited (43%) than in 2010 (48%), and appear much diminished in influence since the high water mark of 2008 (76%).

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 the following strategies: Innovation and Engagement; Employability; International Strategy; Research Strategy and Sustainability Strategy.

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

External strategy document Top seven	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
HEFCE e-learning strategy (2005 and 2009)	68	69%	70%	69%	71%	79%	0%	42%	100%
JISC strategies	66	67%	65%	69%	71%	70%	67%	58%	0%
Strategies from professional bodies or agencies	31	32%	35%	33%	0%	33%	33%	25%	0%
Other HEFCE strategy documents	29	30%	33%	31%	0%	34%	0%	17%	0%
DfES e-learning strategy (2005)	24	25%	20%	31%	14%	28%	17%	8%	0%
Enhancing Learning and Teaching through Technology: refreshing the HEFCW strategy 2011*	23	24%	15%	33%	14%	19%	100%	17%	0%
Joint Scottish Funding Councils e-learning Report	11	11%	11%	11%	14%	0%	0%	92%	0%

Table 2.2 provides a summary of the leading external strategy documents which inform TEL development. *HEFCE strategies* remain the leading category and is most commonly cited by institutional and mission groups, with the exception of Russell Group institutions which refer to *JISC strategies* more frequently. Similar to the picture recorded in 2010, 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 92% of Scottish institutions citing their own national e-learning report as an influential TEL document.

Other documents that were mentioned by respondents included the HEA Professional Standards Framework and the Department of Health's TEL Framework.

A longitudinal picture of responses is available in Table C2.2. The results recorded for 2012 are much lower than for previous years, perhaps suggesting a declining influence of external strategy documents on TEL development.

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

External reports or documents Top six	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Effective Practice in a Digital Age (JISC; 2009)	64	65%	65%	67%	57%	61%	100%	75%	100%
JISCinfoNET: Emerging Practice in a Digital Age (2011)*	59	60%	52%	71%	43%	54%	100%	75%	100%
NUS's Student Perspectives on Technology report (2010)*	52	53%	54%	56%	29%	54%	67%	33%	100%
HE in a Web 2.0 World (JISC; 2009)*	50	51%	48%	56%	43%	52%	33%	58%	0%
JISCinfoNET: Exploring Tangible Benefits of e-learning in HE (2008)	49	50%	44%	60%	29%	48%	50%	67%	0%
Online Learning Task Force's Study of UK online learning (2010)*	43	44%	41%	51%	14%	47%	33%	33%	0%

This question was retained from the 2010 Survey, with the intention of tracking the influence of other reports (not strategies) informing the development of TEL; new response items were added to reflect the publication of reports and documents since the last Survey. The results in Table 2.3 reveal that JISC's *Effective Practice in a Digital Age (2009)* has stood the test of time and remains the leading publication cited by respondents, as it was in 2010, topping the list for Pre-92 and HE colleges. JISCinfoNET's *Emerging Practice in a Digital Age (2011)* tops the list for Post-92 institutions. The NUS's *Student Perspectives on Technology (2010)* report, the JISC's *HE in a Web 2.0 World (2009)* and JISCinfoNet's *Exploring Tangible Benefits of e-learning in HE (2008)* publication are all cited by 50% or more of Pre- and Post-92 institutions.

However, in the full list of results in Table A2.3a it is noticeable how HEFCE publications appear to have made only a limited impression on the sector in terms of their influence on TEL development. Table C2.3 shows that reference levels for external reports and documents are generally much lower than the figures recorded for 2010.

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	13	13%	15%	11%	14%	10%	50%	8%	100%
Strategies influence implementation	58	59%	52%	71%	29%	62%	33%	58%	0%
Strategies have limited influence on implementation	25	26%	28%	18%	57%	25%	17%	33%	0%
Strategies have no influence on implementation	0	0%	0%	0%	0%	0%	0%	0%	0%
Not answered	2	2%	4%	0%	0%	3%	0%	0%	0%

The figures in Table 2.4 confirm that strategies are still felt to have an influence on TEL implementation across the sector, although there has been a tempering of enthusiasm for their influence compared with results in previous Surveys. Only 13% of total respondents agreed that strategies have a great influence on implementation, whereas 33% agreed with this statement in 2010. Variations between the national groups are evident in the response data, with 50% of Welsh respondents (n=3) agreeing that strategies have great influence in comparison with only 10% of English respondents and 8% of Scottish respondents. Table B2.4 also reveals variations by university mission groups, with Million+ respondents (n=18) all agreeing that strategies influence implementation, a level of response which is not reflected in the data for the other mission groups.

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

Table 2.5a: Linkage between institutional policies and implementation of TEL tools

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Institutional policies link strategy and implementation of TEL tools	74	76%	70%	84%	57%	75%	83%	75%	100%
There is no linkage between policies and implementation of TEL tools	22	22%	26%	16%	43%	23%	17%	25%	0%
Not answered	2	2%	4%	0%	0%	3%	0%	0%	0%

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

Institutional policies Top six	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
VLE usage policy (minimum requirements)	21	21%	9%	33%	29%	20%	33%	25%	0%
Faculty or departmental/school plans	20	20%	20%	24%	0%	20%	33%	17%	0%
Learning, Teaching and Assessment strategy	18	18%	9%	29%	14%	19%	33%	8%	0%
TEL or e-learning strategy/action plan	18	18%	15%	24%	0%	20%	0%	17%	0%
e-Assessment/e-submission policy	15	15%	15%	16%	14%	14%	33%	17%	0%
VLE guidelines/description of VLE service	11	11%	15%	7%	14%	10%	0%	25%	0%

Following on from Question 2.4, respondents were invited to identify any policies that link institutional strategies with the implementation of TEL tools. 76% of respondents confirmed that their institutions did possess policies linking strategy with implementation activities, with Post-92 institutions responding with the highest frequency (84%). University Alliance and Million+ institutions recorded the highest levels of agreement (89%) of the mission groups to this question. Of the policies that were mentioned, *VLE usage policies* were the most frequently cited, with 33% of Post-92 institutions possessing a statement establishing minimum requirements for the use of their VLE in teaching and learning activities. *Faculty or departmental/school plans* and the institutional *Learning, Teaching and Assessment strategy* also featured prominently in responses to this free text question. The full list of policies mentioned by respondents is set out in Table A2.5b.

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

Table 2.6a: How is the adoption and use of technology enhanced tools enabled within your institution?

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Providing support and training to academic staff	95	97%	94%	100%	100%	98%	100%	92%	100%
Delivery of PG Cert programme for academic staff*	75	77%	70%	87%	57%	75%	83%	83%	100%
Allowing academic staff development time	47	48%	50%	51%	14%	48%	50%	42%	100%
Allowing support staff development time	45	46%	50%	44%	29%	43%	67%	50%	100%
Delivery of other forms of accredited training for academic staff	33	34%	33%	38%	14%	35%	0%	42%	0%
Other enabling approach	29	30%	37%	24%	14%	25%	50%	42%	100%
Contractual obligation/part of job specification for academic staff	15	15%	11%	22%	0%	14%	33%	8%	100%
Adoption and use of TEL is *not* enabled	0	0%	0%	0%	0%	0%	0%	0%	0%
Not answered	2	2%	4%	0%	0%	3%	0%	0%	0%

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 2012 Survey, the reference to CETL initiatives was removed but a new item was included on the delivery of Post Graduate Certification programmes for academic practice.

Table 2.6a reveals that *providing support and training to academic staff* remains the primary way of enabling the adoption of TEL tools, as it was in the 2010 Survey, with all institutional types and mission groups selecting this as their leading enabler. Using the *delivery of PG Cert. programmes* as a way of promoting TEL tools also features strongly in institutional responses, particularly amongst Post-92 institutions (87%). 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. It is worth noting though that Russell Group and Million+ universities buck this trend; in the case of the former mission group, 71% of respondents confirmed that their institutions allowed development time for support staff.

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 staff rewards and dedicated project funding for TEL developments. A summary of the leading approaches is presented in Table 2.6b below, with the dissemination of good practice through *show and tell* meetings and communities of practice most commonly mentioned by respondents.

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

Other enabling approaches Top five	**No.**	**%**
Platforms for sharing good practice (e.g. networks, show and tell meetings)	7	7%
Faculty/school based champions leading initiatives	5	5%
Project funding/internal grants	4	4%
Drop in TEL service offering consultation services for staff	4	4%
Student involvement in academic projects	4	4%

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 restructured from the 2010 Survey design, enabling a new set of questions to be introduced looking at how institutions are reviewing their VLE provision and whether they have evaluated the impact of e-learning services on the student and staff experience. Keeping up with the times, a new series of questions were also added on mobile service provision and outsourcing developments.

Question 3.1: What VLE(s), if any is *currently* used in your institution?

Table 3.1a: VLEs currently used

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Moodle	57	58%	72%	44%	57%	60%	83%	42%	0%
Blackboard Learn	37[13]	38%	35%	40%	43%	35%	67%	33%	100%
Blackboard WebCT	16	16%	13%	22%	0%	17%	0%	25%	0%
Blackboard Classic	6	6%	7%	7%	0%	8%	0%	0%	0%
Other VLE developed *in house*	11	11%	15%	9%	0%	13%	0%	8%	0%
Other intranet based developed *in house*	7	7%	9%	7%	0%	8%	17%	0%	0%
SharePoint	6	6%	7%	7%	0%	4%	17%	17%	0%
Other *commercial* VLE	6	6%	4%	9%	0%	6%	0%	8%	0%
Sakai	3	3%	7%	0%	0%	4%	0%	0%	0%
Desire2Learn	2	2%	2%	0%	1%	1%	17%	0%	0%
Other *open source* VLE	2	2%	0%	4%	0%	3%	0%	0%	0%
FirstClass	1	1%	2%	0%	0%	0%	0%	8%	0%
Commercial intranet based product	1	1%	0%	0%	0%	1%	0%	0%	0%

This question was retained from previous Surveys, enabling a longitudinal analysis of institutional VLE usage from 2001 onwards (see Table A3.1a). Results from the 2010 Survey identified Moodle as the leading platform in terms of institutional usage, with 55% of respondents identifying its deployment. The 2012 results confirm Moodle's leading position with a slight increase in usage to 58%, although the combined suite of Blackboard products exceeds this figure in terms of the total percentage of platform usage in Table 3.1a (60%)[14].

The results reflect a further maturing of the VLE market, with a number of commercial platforms such as Top Class, Colloquia, Lotus Domino and Learning Space no longer being cited by respondents and others such as Sharepoint and FirstClass much reduced in terms of their presence across the sector. Pearson's eCollege was not returned in the results and does not appear to have made an impression on the HE market. Of the *Other commercial* VLEs that were cited, Pebblepad, Minerva, Claroline and Atheni from Academic Synergy were all mentioned, as well as a platform based on the IBM Domino system, and a system based on Luminus – a commercial intranet product. Both examples of *Other open source* platforms related to instances of Mahara.

Table 3.1b: The *main* VLE in use

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard Learn	38	39%	39%	38%	43%	34%	83%	42%	100%
Blackboard WebCT	9	9%	4%	16%	0%	9%	0%	17%	0%
Blackboard Classic	9	9%	11%	9%	0%	10%	0%	8%	0%
Moodle	30	31%	30%	27%	57%	33%	17%	25%	0%
Other VLE developed *in house*	7	7%	11%	4%	0%	9%	0%	0%	0%
Sakai	2	2%	4%	0%	3%	0%	0%	0%	0%

13 Note that the number of institutional instances of Blackboard Learn as main VLE in use (Table 3.1b) is one greater than the total number of instances of Blackboard Learn currently used. Clearly this reflects a data entry error by one respondent in failing to confirm that Blackboard Learn is used both as a VLE and as the main institutional platform.

14 A cautionary note should be raised here in interpreting these figures at face value, as the totals may have been inflated by institutions either trialling different platforms or being engaged part way through a migration process in moving from one VLE system to another, possibly leading to a double count of institutional platforms in use.

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Desire2Learn	1	1%	0%	2%	0%	1%	0%	0%	0%
SharePoint	1	1%	0%	2%	0%	1%	0%	0%	0%
Other *commercial* VLE	1	1%	0%	2%	0%	0%	0%	8%	0%

Table 3.1b shows that 70% of responding institutions use either Blackboard Learn or Moodle as their main institutional platform. Blackboard WebCT has declined in usage as an enterprise solution, down from 20% in 2010 to 9% in 2012. However, the Blackboard suite of platforms as a whole account for 57% of enterprise wide usage. Other commercial and open source platforms have only a small level of adoption (12%).

Further changes may seem likely for main institutional VLE platforms in the future, given that a large proportion of universities are either reviewing their VLE provision (see Table 3.3) or are committed to doing so in the future. As Table 3.6b below shows, three institutions currently using Blackboard Classic and two using Blackboard WebCT are committed to conducting reviews in the next two years and may well migrate to a different solution, and a large number of Blackboard Learn (n=18) and Moodle users (n=9) will also be conducting reviews in the next two years, offering the possibility of further changes to the VLE landscape across the sector.

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

Table 3.2a: Hosting results for main institutional VLE

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Locally managed	78	80%	85%	76%	71%	80%	83%	75%	100%
Hosted	20	20%	15%	24%	29%	20%	17%	25%	0%

This was a new question for the 2012 Survey, which aimed to determine the extent to which VLE provision is being outsourced by HE institutions. The results confirm that hosting is still an emerging trend, with the majority of institutions continuing to manage their VLE platform in house. Table B3.2a reveals that 31% of 1994 Group institutions have opted for a hosted solution, which marks the highest proportion of institutions choosing VLE hosting services across the university mission groups.

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

	Locally managed		Hosted		Total
	No.	%	No.	%	No.
Blackboard Learn	31	82%	7	18%	38
Moodle	22	73%	8	27%	30
Blackboard WebCT	8	89%	1	11%	9
Blackboard Classic	5	56%	4	44%	9
Other VLE developed *in house*	7	100%	0	0%	7
Sakai	2	100%	0	0%	2
Desire2Learn	1	100%	0	0%	1
Sharepoint	1	100%	0	0%	1
Other *commercial* VLE	1	100%	0	0%	1
Total	**78**		**20**		**98**

Table 3.2b provides a breakdown of results per platform, performed through a cross tabulation of data for the *main institutional VLE* (Table 3.1b) and if it is a *hosted* setup (Table 3.2a). The results show that institutions using Blackboard Classic as their main VLE platform have the highest proportional use of hosted services (44%), whereas Moodle (n=8) and Blackboard Learn (n=7) have the highest actual number of institutions using hosted services. Although hosting services remain uncommon across the sector, the results indicate a new development in open source provision, with 27% institutions opting for external commercial services to manage Moodle as their main institutional platform.

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

As reported in the 2010 Survey, there has been considerable interest across the HE sector in the evaluation of VLE provision (following on from the Higher Education Academy's e-learning benchmarking exercise in 2006), evidenced through the emergence of special interest groups such as the Learning Environment Review Special Interest Group (LERSIG)[15] which was set up by the Association for Learning Technology. 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.

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

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	61	62%	59%	64%	71%	60%	67%	75%	100%
No	37	38%	41%	36%	29%	40%	33%	25%	0%

Table 3.3a confirms that evaluation activity in reviewing VLE provision is well established, with nearly two thirds of institutions which responded to the Survey having conducted a review in the last two years. This activity appears to be evenly distributed across the sector. Table B3.3 shows that all mission groups reported evaluation activity for over 50% of their affiliated institutions, with the highest level of activity recorded by Million+ universities (72%).

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

	Have conducted review in last two years		Have not conducted review		Total
	No.	%	No.	%	No.
Blackboard Learn	24	63%	14	37%	38
Moodle	18	60%	12	40%	30
Blackboard WebCT	8	89%	1	11%	9
Blackboard Classic	6	67%	3	33%	9
Other VLE developed *in house*	4	57%	3	43%	7
Sakai	0	0%	2	100%	2
Desire2Learn	0	0%	1	100%	1
Sharepoint	0	0%	1	100%	1
Other *commercial* VLE	1	100%	0	0%	1
Total	**61**		**37**		**98**

Table 3.3b 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 3.3a). Whilst we cannot be absolutely sure that the reviews have taken place for the platforms mentioned in Table 3.3b (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 WebCT as their main VLE have recorded the highest level of evaluation activity (89%) for their platform, in comparison with other VLE groups reflected in the survey data. However, both Blackboard Learn (n=24) and Moodle (n=18) user groups record high frequencies of activity. The factors prompting this review activity are set out in Table 3.4 below.

Question 3.4: What prompted the review?

Table 3.4: Factors prompting review of the (main) institutional VLE

Factors	Frequency
Changes in supplier provision for current system • Phasing out of support for VLE platform (e.g. end of life for WebCT) • Poor support levels for licensed service	18
Perceived limitations in functionality and performance of current VLE system • VLE not fit for purpose to meet institutional requirements	15

15 *ALT Learning Environment Review Special Interest Group: http://lersig.alt.ac.uk/pages/lersig_remit*

Factors	Frequency
A decision to upgrade the VLE has already been taken • Options appraisal on which direction to go in upgrading the VLE	13
Cost factors • Value for money in renewing VLE licence	10
New institutional strategy for TEL provision • New requirements for TEL; part of wider curriculum review	7
Timely opportunity to review VLE landscape • An interval has passed since original implementation of VLE	6
Licence renewal • Approaching end of licence agreement	4
Staff dissatisfaction with current VLE provision	4
Students dissatisfaction with current VLE provision	3
Changes in technical infrastructure within institution	1
National teaching project necessitates review	1

Question 3.4 was a free text response inviting respondents to identify factors influencing the decision to review the main institutional VLE. Table 3.4 captures the list of factors that were identified by respondents. 59 responses were recorded for this question, with some responses citing multiple factors for the initiation of a review. Changes in supplier provision for a supported system tops the list of factors, and may explain why so many Blackboard WebCT users have conducted a review of their VLE provision, with Blackboard's announcement of *end of life* status for WebCT Campus Edition and Vista products prompting institutions to review their options.

Question 3.5: What was the outcome, or likely outcome, of the review? What product did you switch from and 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	29
• Blackboard WebCT to Moodle	(12)
• Blackboard WebCT to Blackboard Learn	(10)
• Blackboard Classic to Moodle	(3)
• Blackboard Learn to Moodle	(2)
• VLE developed in house to Moodle	(1)
• Blackboard WebCT to Desire2Learn	(1)
Continue with same VLE platform	25
• Continue with same platform and upgrade to latest version	(17)
...Upgrade from Blackboard Classic to Blackboard Learn	... (12)
...Upgrade from Moodle 1.x to Moodle 2.x	...(5)
• Continue with same platform	(6)
• Continue and expand same product, adding in new tools	(2)
Switch to external hosting for VLE platform	5
• External hosting for Moodle	(3)
• External hosting for Blackboard Learn	(2)
Review process not yet complete	5
Establish closer integration between VLE and other TEL systems	3
Reorganisation of TEL support provision and governance	1

Table 3.5 reveals the outcome of these reviews. It is worth noting that the numbers in the table do not neatly match the main institutional VLE scores recorded in Table 3.1b, but this may be because some migrations to new VLE platforms are still taking place and the new VLE system has not yet been established or been made operational. There is a similar mismatch with the results for Table 3.3b, as respondents simply indicated in this question whether they had conducted a review, as opposed to confirming whether they had completed a move to a different system.

The responses confirm that former Blackboard WebCT users are the key *switchers*, moving in comparable numbers to either Blackboard Learn (the convergence solution for Blackboard products) or to Moodle, with one institution choosing an alternative commercial platform Desire2Learn as its institutional VLE.

Of the other outcomes recorded, five former Blackboard Classic/Learn customers have moved to Moodle, but there has been no movement in the opposite direction, with Moodle institutions choosing instead to upgrade to Moodle 2 or consider a hosted service for their platform. Blackboard Classic customers have, on the whole, followed the company's convergence pathway with WebCT and upgraded to the *next generation* Blackboard Learn system, with two institutions also opting to move to a hosted service from the company.

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

Table 3.6a: 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	16	16%	11%	22%	14%	19%	17%	0%	0%
Planning a review in next two years	17	17%	13%	20%	29%	15%	33%	25%	0%
Not planning a review in next two years	62	63%	74%	53%	57%	62%	50%	75%	100%
Don't know/not answered	3	3%	2%	4%	0%	4%	0%	0%	0%

Table 3.6a shows that Pre-92 universities (42%) and HE colleges (43%) have the highest level of commitment to conducting reviews of their VLE platforms over the next two years. Table B3.6a sheds further light on planning intentions, with GuildHE and University Alliance institutions most committed in this regard, with over 50% of institutions from these mission groups planning to conduct a review.

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

	Planning one in next year		Planning one in next two years		Not planning one in next two years		Don't know/Not answered		Total
	No.	%	No.	%	No.	%	No.	%	No.
Blackboard Learn	8	21%	10	26%	20	53%	0	0%	38
Moodle	5	17%	4	13%	21	70%	0	0%	30
Blackboard WebCT	0	0%	2	22%	6	67%	1	11%	9
Blackboard Classic	2	22%	1	11%	6	67%	0	0%	9
Other VLE developed *in house*	1	14%	0	0%	5	71%	1	14%	7
Sakai	0	0%	0	0%	2	100%	0	0%	2
Desire2Learn	0	0%	0	0%	0	0%	1	100%	1
Sharepoint	0	0%	0	0%	1	100%	0	0%	1
Other *commercial* VLE	0	0%	0	0%	1	100%	0	0%	1
Total	**16**		**17**		**62**		**3**		**98**

Table 3.6b 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 3.6a). The results show that institutions using Blackboard Learn as their main VLE account for the highest frequency (n=18) and percentage within their platform group (47%) of institutions planning for a review over the next two years. The leading factors prompting a planned review of the VLE are captured in Table 3.7 below, with licensing costs featuring as one of the leading factors encouraging institutions to review their VLE provision. The full set of results recorded for this question is available in Table A3.7.Question 3.7: What has prompted the review?

Table 3.7: Factors prompting future review of the (main) institutional VLE

Leading factors	Frequency
Cost factors • Review of costs/benefits of VLE licence; judging whether there is sufficient value to renew VLE licence	8
Timely opportunity to review VLE landscape • An interval has passed since original implementation of VLE	8
Good practice to conduct regular review of technology	7
Perceived limitations in functionality and performance of current VLE system • VLE not fit for purpose to meet institutional objectives	4
User dissatisfaction with current VLE provision	4
Status of current licence agreement (timing) (e.g. at beginning/or nearing end of contract)	4

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	35	36%	48%	29%	0%	37%	50%	25%	0%
No	61	62%	50%	69%	100%	61%	50%	75%	100%
Not answered	2	2%	2%	2%	0%	3%	0%	0%	0%

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, with Pre-92 institutions most commonly possessing departmental platforms in addition to the main institutional VLE. Table B3.8 reveals that 71% of the Russell Group institutions responding to Question 3.8 fit this profile, with their departments running VLE platforms independently of the main centrally supported system. However, there has been a shift in localised provision within HE colleges, with no instances recorded for the 2012 Survey, as opposed to 15% in 2010.

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

Table 3.9a: 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	17	49%	36%	69%	0%	52%	33%	33%	0%
The institution has a devolved management structure that permits departments to deploy their own software	12	34%	50%	8%	0%	35%	33%	33%	0%
The departmental VLE predates introduction of institutional VLE	12	34%	41%	23%	0%	35%	33%	33%	0%
A case has been made for the departmental VLE based on commercial reasons	4	11%	5%	23%	0%	10%	0%	33%	0%
Other context	14	40%	46%	31%	0%	45%	0%	33%	0%

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, although Russell Group institutions cite their devolved management structures more frequently (70%) as the reason for this provision being in place. Of the *Other* reasons that were cited (Table 3.9b), requirements for a specific course were mentioned, prompting action by an individual to set up a platform, as well as CPD activity which is supported through a separate VLE platform.

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

Other context	Frequency
Individual initiative – a bespoke VLE platform has been selected for specific courses	4
CPD activity to externals (non-award based)	3
Departmental platform supports wider functionality including scheduling, timetabling and validating activities	2
Unilateral decision by department – no case was made	1
Local VLE service better resourced to meet needs of new internal partnership activity	1
Test environment to evaluate alternative VLE platform	1
Departmental technical infrastructure is more compatible with an alternative VLE platform (ease of systems integration at a departmental level)	1
Selection and availability of new centrally managed VLE platform is still not available to departments	1

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

Table 3.10: Centrally supported software tools used by students

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Plagiarism detection	90	92%	94%	93%	71%	90%	100%	100%	100%
e-submission tool	85	87%	85%	89%	86%	84%	100%	100%	100%
e-assessment tool	77	79%	83%	76%	71%	76%	100%	83%	100%
e-portfolio	74	76%	70%	82%	71%	73%	83%	83%	100%
Wiki	72	74%	78%	71%	57%	70%	100%	83%	100%
Blog	71	72%	74%	71%	71%	67%	83%	100%	100%
Podcasting	61	62%	80%	47%	43%	62%	100%	42%	100%
Document sharing tool*	50	51%	44%	60%	43%	51%	67%	42%	100%
Lecture capture tools*	50	51%	59%	49%	14%	49%	50%	58%	100%
Other software tool	41	42%	44%	40%	43%	41%	50%	50%	0%
Content management systems*	39	40%	46%	36%	29%	38%	17%	58%	100%
Social networking	32	33%	26%	36%	57%	33%	50%	25%	0%
Social bookmarking	9	9%	9%	11%	0%	8%	17%	17%	0%
None used	4	4%	0%	2%	0%	1%	0%	0%	0%

Note: n=94 for Table 3.10

Question 3.10 asked respondents 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 new response options were added for 2012, reflecting the emergence of document sharing, content management and lecture recording tools usage across the sector.

E-assessment tools dominate this area: Table 3.10 shows that they are most commonly supported by institutions across the sector and more extensively supported than Web 2.0 tools, reflecting a similar picture to the results recorded in 2010 (see Table C3.10). Institutional support for e-assessment encompasses plagiarism detection tools (92%), electronic submission of assignments (87%) and tools for online testing (79%) (e.g. multiple choice quizzes).

Comparing results with 2010, the key changes are the rise in support for e-portfolios (76% from 64% in 2010), which are particularly prominent in GuildHE and University Alliance mission group institutions, and the relative decline in support for podcasting tools (62% from 69% in 2010) and the negligible support for social bookmarking tools (9% from 17% in 2010) across the sector. Other than these changes, deployment patterns appear remarkably similar to 2010.

Of the new response items introduced for the 2012 Survey, document sharing and lecture capture tools are supported by 50% of institutions, with document sharing particularly prevalent within Post-92 institutions (60%) and lecture capture appearing to be well established within Pre-92 institutions. Table B3.10 provides a breakdown of results per mission group, revealing the high level of support within Russell Group institutions (64%) for lecture capture tools. Content management systems are less well established across the sector, although Russell Group institutions are again the exception to the rule, with 64% of respondents reporting support for a content management system within their institution.

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 tables for the leading tools cited by respondents is set out below and the full set of results is available in Tables A3.10a–m. 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 are the leading suppliers for a range of software tools including wikis, blogs, and podcasting tools. Blackboard also leads the categories for content management and e-assessment tools. Turnitin GradeMark is the leading solution for e-submission (58%) and Turnitin OriginalityCheck is the standard tool used by higher education institutions for text comparison by some margin.

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 e-portfolio and document sharing solutions, with the former category dominated by Pebblepad, Mahara and Blackboard and the latter category by Sharepoint and Google docs.

Table 3.10a: Centrally supported blog

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard (all versions)	27	38%	44%	31%	40%	34%	40%	50%	100%
Learning Objects	22	31%	26%	34%	40%	28%	60%	33%	0%
Wordpress	16	23%	24%	25%	0%	26%	0%	17%	0%

Table 3.10b: Centrally supported e-assessment tool (e.g. quizzes)

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard (all versions)	38	49%	47%	53%	40%	45%	50%	70%	100%
QuestionMark Perception	22	29%	32%	26%	20%	30%	33%	20%	0%
Moodle	21	27%	26%	24%	60%	28%	17%	30%	0%

Table 3.10c: Centrally supported e-portfolio

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Pebblepad	22	30%	25%	38%	0%	34%	20%	10%	0%
Mahara	20	27%	19%	30%	60%	29%	20%	20%	0%
Blackboard (all versions)	15	20%	19%	22%	20%	17%	20%	30%	100%

Table 3.10d: Centrally supported e-submission tool (assignments)

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Turnitin	49	58%	56%	60%	50%	56%	83%	58%	0%
Blackboard (all versions)	42	49%	49%	53%	33%	42%	83%	67%	100%
Moodle	19	22%	26%	18%	33%	23%	17%	25%	0%

Table 3.10e: Document sharing tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Sharepoint	23	46%	30%	52%	100%	45%	50%	60%	0%
Google docs	17	34%	40%	33%	0%	38%	25%	20%	0%

Table 3.10f: Lecture capture tool

Top four	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Echo 360	16	32%	48%	14%	0%	36%	0%	29%	0%
Panopto	9	18%	15%	23%	0%	15%	100%	0%	0%
Camtasia Relay	8	16%	19%	14%	0%	15%	0%	29%	0%
Blackboard Collaborate (Wimba/Elluminate)	6	12%	7%	23%	0%	18%	0%	0%	0%

Table 3.10g: Content management system

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Blackboard CMS	17	44%	38%	56%	0%	36%	100%	71%	0%
SharePoint	3	8%	5%	6%	50%	10%	0%	0%	0%
Terminal Four	3	8%	10%	6%	0%	3%	0%	29%	0%

Table 3.10h: Plagiarism detection tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Turnitin	80	89%	86%	90%	100%	89%	100%	92%	100%
Safe Assign	6	7%	9%	5%	0%	6%	17%	8%	0%

Table 3.10l: Wiki tool

Top three	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Learning Objects	22	31%	22%	38%	50%	25%	67%	40%	0%
Blackboard (all versions)	21	29%	39%	19%	25%	29%	33%	20%	100%
Moodle	14	19%	19%	16%	50%	20%	17%	20%	0%

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.

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	66	73%	71%	76%	75%	72%	83%	75%	100%
Blog	54	60%	64%	57%	50%	59%	67%	67%	0%
Document sharing tool*	47	52%	57%	50%	25%	52%	50%	50%	100%
Social bookmarking	36	40%	32%	50%	25%	41%	50%	33%	0%
Wiki	32	36%	30%	43%	25%	37%	33%	33%	0%
Other software tool	32	36%	30%	43%	25%	34%	33%	50%	0%
e-assessment tool	21	23%	27%	21%	0%	18%	33%	42%	100%
e-portfolio	21	23%	21%	29%	0%	25%	33%	8%	0%
Podcasting	20	22%	30%	14%	25%	18%	33%	33%	100%
Virtual Learning Environment	19	21%	32%	12%	0%	18%	50%	25%	0%
Lecture capture tools*	18	20%	30%	10%	25%	23%	17%	8%	0%
e-submission tool	7	8%	7%	10%	0%	9%	0%	8%	0%
Plagiarism detection	4	4%	5%	5%	0%	6%	0%	0%	0%
None used	5	6%	5%	7%	0%	6%	0%	8%	0%

Note: n=86 for Table 3.11

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 2012, reflecting the emerging use of document sharing and lecture recording tools.

Interpretation of the data for this question requires some circumspection, as the results reflect the perspectives of respondents (generally Heads of e-Learning) 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 2010 (Table C3.11) shows that social networking and blog tools remain the most common non-centrally supported software used by students. Facebook is by far and away the most common tool used by students to support social networking (n=53), with WordPress (n=30) the leading blog solution.

Document sharing – a new response item for 2012 – also appears to be widely used with over 50% of respondents confirming their use by students, with the exception of HE colleges. Google docs appears as the leading solution used by students (n=35), with Dropbox (n=17) following as the second most commonly used tool.

Table C3.11 compares responses for non-centrally supported software over the years. The results show that percentage scores for non-centrally supported tools have remained relatively stable, with the exception of wiki usage (36%) and podcasting (22%) which have both declined in usage since the last Survey.

Comparing centrally provided (Table 3.10) and non-centrally provided provision (Table 3.11), social networking tools appear to be firmly adopted at a local level, but are not a feature of central provision. Blog provision and document sharing tools, in contrast, appear to be well established in both domains across institutions.

A selection of the tables with leading responses is set out below. The full breakdown of tools cited by respondents in response to Question 3.11 is available in Tables A3.11a–m. Please note that the percentage scores are calculated based on the total number of respondents for this question, rather than the total population for the Survey.

Table 3.11a: Non centrally supported blog tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
WordPress	30	56%	46%	71%	0%	50%	75%	75%	0%
Blogger	23	43%	25%	58%	100%	45%	25%	38%	0%

Table 3.11e: Non centrally supported document sharing tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Google docs	35	74%	64%	90%	0%	73%	100%	83%	0%
Dropbox	17	36%	32%	43%	0%	32%	67%	33%	100%

Table 3.11i: Non centrally supported social bookmarking tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Del.icio.us	28	78%	79%	81%	0%	72%	100%	100%	0%
Diigo	12	33%	21%	38%	100%	38%	0%	25%	0%

Table 3.11j: Non centrally supported social networking tool

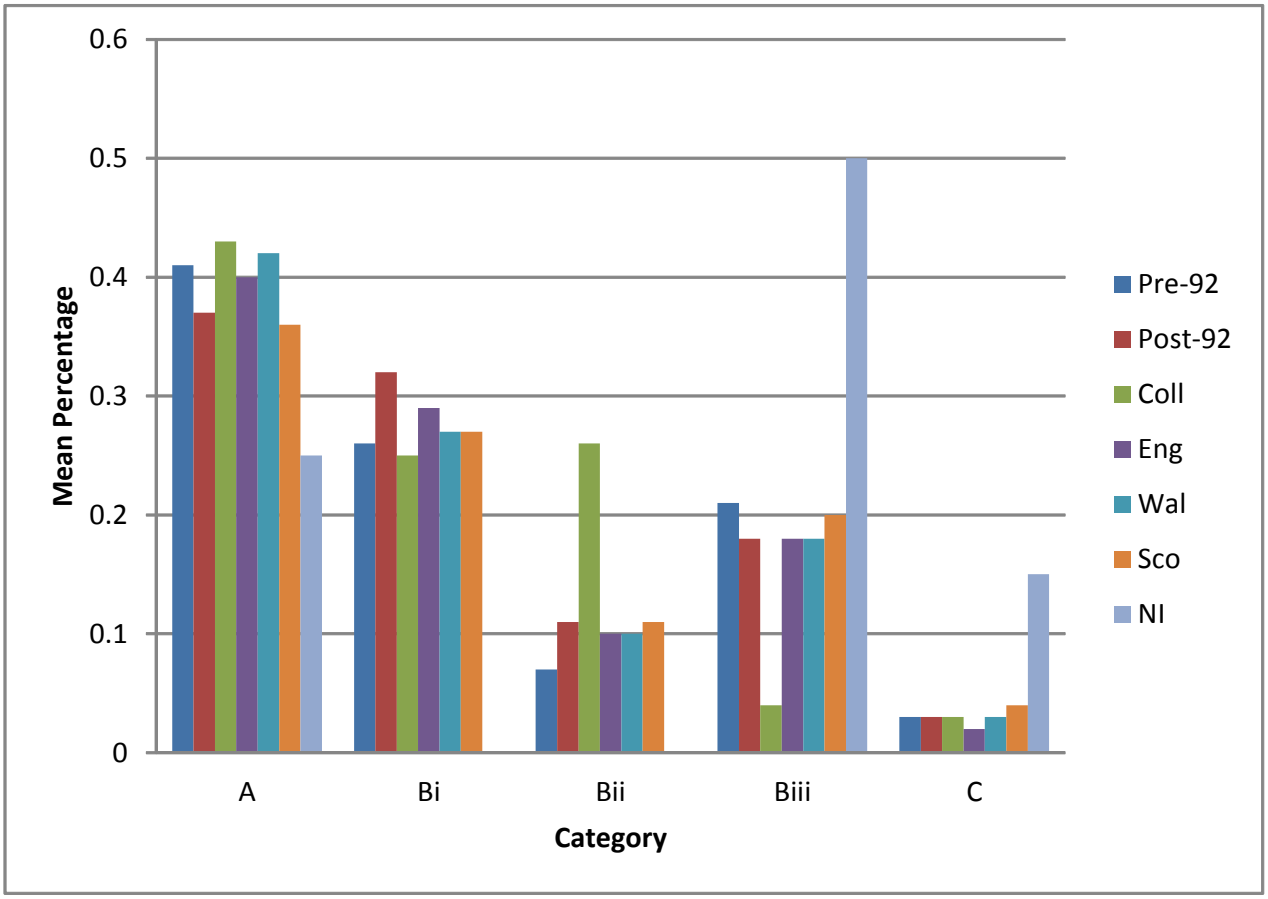
Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Facebook	53	80%	77%	88%	33%	80%	100%	78%	0%
Twitter	28	42%	39%	47%	33%	39%	60%	44%	100%

Table 3.11l: Non centrally supported wiki tool

Top two	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
PB Works (including PB Wiki)	16	50%	23%	72%	0%	50%	50%	50%	0%
MediaWiki	4	13%	31%	0%	0%	12%	0%	25%	0%

Question 3.12: Approximately what proportion of all modules or units of study in the TEL 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 four 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 taken from Bell et al (2002)[16] 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:
  i. interaction with content;
  ii. communication with staff/students;
  iii. interaction with content and communication.
- Category C – fully online courses

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%. Of the blended delivery approaches which require student participation, interaction with content is the most common with a sector mean score of 29%. 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. Russell Group institutions recorded the highest proportion of web supplemented modules (61%), nearly double the figure returned by 1994 Group and University Alliance institutions (33%). GuildHE institutions recorded the highest proportion of web dependent modules for categories B(i) (interaction with content) and B(ii) (communication with staff/students) with means scores of 35% and 24% respectively.

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

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

	Sector mean score 2012	Sector mean score 2010	Sector mean score 2008	Sector mean score 2005	Sector mean score 2003
N =	85	80	64	69	78
Mean % Category A	39%	46%	48%	54%	57%
Mean % Category B (i)	29%	26%	24%	16%	13%
Mean % Category B (ii)	10%	17%	13%	10%	10%
Mean % Category B (iii)	18%	18%	13%	13%	13%
Mean % Category C	3%	3%	4%	6%	5%

[NB the responses for 2010 shown in Table 3.12a 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 where cannot be identified.]

Table 3.12a reveals that the proportion of web supplemented modules has steadily decreased over the years since the 2003 Survey when this question was first posed, with web dependent modes for interaction with content (Category Bi) and content and communication (Category Biii) both increasing in activity. This suggests that progress has been made in embedding TEL as a key element of course delivery, engaging students in its use as a feature of their learning experience. However, Category C or fully online courses have decreased as a proportion of TEL activity over the years and remain a niche area of activity.

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

16 *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.*

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: 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	64	81%	81%	89%	43%	83%	67%	75%	100%
Management, Accountancy, Finance, Business etc.	30	38%	43%	34%	29%	41%	17%	25%	100%
Education	20	25%	24%	26%	29%	25%	0%	50%	0%
Social Sciences, Psychology, Law, Teaching etc.	19	24%	30%	20%	14%	23%	33%	25%	0%
Engineering	14	18%	24%	11%	14%	13%	33%	50%	0%
Art, Music, Drama	14	18%	14%	23%	14%	19%	17%	13%	0%
Science(s), not specified	12	15%	19%	11%	14%	13%	33%	25%	0%
Computing	10	13%	8%	20%	0%	11%	17%	13%	100%
Languages	8	10%	14%	9%	0%	9%	33%	0%	0%
Science, specified, e.g. Chemistry	7	9%	14%	6%	0%	8%	17%	13%	0%
Geography, History	7	9%	11%	6%	14%	6%	33%	13%	0%

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 (2010 and 2008) when they were both singled out as extensive users of TEL. The key development from the 2010 Survey is the rise of *Education* up the list to 3rd position from 5th in 2010.

81% of respondents identified *Medicine, Nursing and Health* as making extensive use of TEL; of this number 100% of the Russell Group and Million+ universities and 93% of University Alliance institutions affirmed extensive use of TEL in this area. Responses indicated that this subject area attracted extensive mobile device support, collaborative learning via Web 2.0 tools and a higher TEL culture amongst its staff than other subject areas.

Management, Accountancy, Finance and Business related courses were highlighted by 38% of respondents. Qualitative responses indicated that this subject area made notable use of collaborative tools and quizzes. Distance learning was also highlighted as an established delivery mode, particularly for MBA courses, where TEL tools were reportedly used to preserve the prestige of the course and enable flexible delivery to students.

Art, Music and Drama did not feature in the 2010 Survey as a subject area making notable use of TEL tools, but for 2012 18% of respondents indicated that it did so.

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

Table 3.13a below provides a summary of the leading explanations for extensive use of TEL with sample quotations from respondents. A focus on distance learning provision, a requirement for more collaborative learning and e-assessment were amongst the most popular explanations for extensive use of TEL which were recorded in responses to this question.

Table 3.13a Reasons given for more extensive use of TEL tools

Reason for more extensive use	Sample quotations
Meeting expectations	Online learning through use of VLE is an integral part of undergraduate and postgraduate certificate courses, high expectations of students. Highly competitive nature of sector.
Use by champions	Enthusiasm of tutors on the course and existing understanding of a range of technologies. Tutor's role as a Senior Teaching Enhancement Fellow.
Increasing provision and modes of delivery	Well developed and supported e-Learning strategy for their School. E-Learning technologies help to facilitate the delivery of their distance learning courses and communicate/interact with students based outside of the UK, greater number of DL courses.
Driven by local strategies	New school given opportunity to review whole curriculum and build TEL into the heart of the delivery.
Staff skills	Two taught PG programmes for lecturers/education professionals, TEL related conferences and staff development, more local e-Learning support staff.
Subject driven	Use TEL extensively to deliver content, communication and collaboration activities and assessment. Due to the nature of the subject and the academic team being experts in the field of TEL. Business makes extensive use of social networking - e.g. LinkedIn and includes technology not only as the way we deliver courses, but teaches about the use of technology in the business environment. It fits their subject profile.
Use of specific technology	Mobile learning for course materials, lecture capture, quizzes.
Increase in collaborative and interactive learning	Content, plus interaction, e-assessment and communication.

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

Top seven responses	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Art, Music, Drama	37	70%	41%	92%	80%	70%	100%	20%	100%
Social Sciences	11	21%	9%	35%	0%	23%	0%	20%	0%
Humanities	9	17%	14%	23%	0%	16%	67%	0%	0%
Engineering	6	11%	9%	4%	0%	7%	0%	0%	0%
Management, Accountancy, Finance, Business etc.	6	11%	9%	0%	20%	7%	0%	0%	0%
History	5	9%	18%	8%	0%	14%	0%	0%	0%
Maths	5	9%	14%	4%	20%	11%	0%	0%	0%

Table 3.14 captures the leading responses for subject areas that make less extensive use of TEL tools. *Art, Music and Drama* is the most commonly cited subject area (70%), followed by *Social Sciences* (21%) and *Humanities* (17%). These subject areas were similarly identified by respondents in 2010 when they also topped the list for this question.

92% of Post-92 institutions identified the *Art, Music and Drama* category as a subject area making less extensive use of TEL tools; of the mission groups, 100% of the Million+ and GuildHE respondents and 92% of University Alliance respondents concurred with this view. For the full list of results, please view Table A3.14 and for results by mission group, please view Table B3.14.

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

Table 3.14a 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 reasons – i.e. that technology was not deemed to be appropriate for the discipline. Respondents frequently cited a lack of enthusiasm for TEL as a feature of the academic culture in Humanities disciplines.

Table 3.14a Reasons for less extensive use of TEL

Reason for less extensive use	Sample quotations
Traditional pedagogic approaches	Certain subject areas don't lend themselves easily to e-learning, for example jewellery making, dance... etc., still using chalk and chalk board. The nature of the discipline has not traditionally included use of technology to a great extent it is also challenging to use technology to mediate much of the practical and physical aspects of the pedagogic experience.
Cultural factors in the discipline area	Our conservatoire staff make little use of technology, their learning approaches are largely practice based. Nature of discipline plus reluctance to use any form of technology.
Focus on specific classroom based technologies or alternative technologies	Relatively little use made of VLE other than posting of admin materials and lecture notes (although engagement with technology is patchy). Music, especially instruments, but voice too is based on 1 to 1 tuition and private practice.
Lack of vision	Philosophical and political objection by academics to use of technology and poor infrastructure within building to support use of technology. PDFs only in VLE – reason – lack of interest/resource from lead academics.
Lack of Strategy/Support	A mixture of lack of familiarity with technologies among senior members of the department (i.e. the leaders and policy makers). Lack of local TEL champions. Lack of strategic direction in spite of strong external drivers. Late adoption of local support structure by learning technologists.

Reason for less extensive use	Sample quotations
Staff skills	Some staff are less confident with using technology and have low skills. Nature of discipline plus reluctance to use any form of technology. Very resistant staff who are reluctant to do the work themselves – only do it if admin staff support them.
Impact on students	Fear of trying something that may not work and so affect student experience. Very high ratio of staff to student and doesn't suit the way they teach.

Question 3.15: 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 practices?

Table 3.15: Approaches to raising awareness of staff regarding the benefits of using TEL tools

Top five responses	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Staff development programme	67	74%	72%	67%	57%	65%	67%	92%	100%
Establishment of TEL strategy groups and networks	56	62%	57%	67%	57%	59%	50%	75%	100%
Establishment of channels for the dissemination of TEL practices	54	60%	57%	53%	57%	58%	33%	50%	0%
Provision of TEL website and online training resources	37	41%	39%	36%	43%	35%	50%	50%	0%
Joined up central and departmental support provision	31	34%	30%	38%	0%	30%	17%	50%	0%

Question 3.15 was introduced for the first time in the 2012 Survey and invited respondents to identify the techniques and methods that they use to inform staff of the benefits of using TEL tools. This was an open question and a cluster analysis was employed to categorise the responses. Table 3.15 presents the leading responses with the full responses presented in Table A3.15.

Table 3.15a: Explanation of the leading categories for raising awareness of the benefits of using TEL tools

Approach Top five responses	Explanation	Sample quotations from responses
Staff development programme	One to one sessions, workshops, seminars	• Staff development programme running throughout the year • Scheduled and customised induction and advanced training sessions
Establishment of TEL strategy groups and networks	Central strategy group, cross departmental or cross institutional, TEL interest networks	• Centre for Learning Teaching and Assessment TEL Champions group • Cross university blended learning implementation group
Establishment of channels for the dissemination of TEL practices	Dissemination of TEL	• Disseminating interesting and successful practice • *Show and tell*
Provision of TEL website and online training resources	Online TEL resource for staff, online TEL training or materials	• Fully online staff development • Staff intranet
Joined up central and departmental support provision	TEL staff/strategy focus from both central and school/faculty perspectives	• Policy implementation (online feedback across the institution); regular webinars; speaking to department meetings • Departmental or faculty based learning technologists managed by central team

The results show that the most common way of raising awareness of the benefits of using TEL is to target staff through staff development sessions (74%). For this approach a number of methods were mentioned including group training sessions, workshops/seminars and one to one training. Strategy groups and strategic networks and alliances across the institution were also highlighted by respondents as an effective means of raising awareness (62%).

Interestingly, some of the institutions indicated their focus as either devolved, central or a combination of both. Table 3.15 does not indicate distinctive differences between institutions in terms of the methods they use; however the mission group data in Table B3.15 reveals that Russell Group institutions appear to have a stronger emphasis on local support than the other mission groups in promoting TEL. This finding resonates with the data for Question 3.8, in which Russell Group institutions cite their devolved management structures more frequently as the reason for local VLE provision being in place.

Question 3.16: Approximately, what proportion of courses within your institution use each of the following technology enhanced learning tools?

Table 3.16: Proportion of courses using TEL tools

	100%	75% – 99%	50% – 74%	25% – 49%	1% – 24%	0%	Don't know	NA
Summative e-assessment (e.g. defined response tests as part of course delivery)	0%	1%	4%	10%	62%	5%	9%	8%
Formative e-assessment (e.g. quizzes as part of course delivery)	1%	2%	11%	21%	46%	0%	10%	8%
e-portfolio/PDP/progress files	0%	0%	4%	10%	61%	6%	10%	8%
Peer assessment tools	0%	0%	0%	1%	59%	9%	20%	10%
Synchronous Collaborative tools (virtual classroom)	0%	0%	0%	8%	57%	13%	11%	10%
Asynchronous collaborative working tools (discussion forums, blogs, wikis)	0%	7%	13%	36%	26%	0%	9%	9%
Document sharing tools (e.g. Google documents)	0%	1%	0%	9%	44%	8%	30%	8%
Online student presentations (individual and group)	0%	2%	4%	5%	50%	7%	22%	9%
Assignment submission	3%	16%	31%	18%	11%	2%	7%	11%
Plagiarism detection software	2%	19%	25%	18%	17%	1%	9%	8%
Audio/video lecture recordings	1%	0%	3%	11%	63%	4%	9%	8%
Simulations and games	0%	0%	0%	2%	51%	13%	24%	10%
Voice based tools (e.g. voice emails, Skype)	0%	0%	0%	2%	59%	8%	21%	9%
Access to external web based resources or digital repositories	6%	24%	12%	17%	20%	0%	10%	10%
Podcasting	1%	0%	2%	4%	63%	6%	14%	9%
Other – please write in	1%	3%	1%	1%	5%	1%	6%	82%

This question was retained from previous Surveys with the aim of tracking TEL usage across institutions. Table 3.16 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.

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 2010 Survey, we do though see a similar picture emerging. For most TEL tools, the most common response for levels of use remains *less than 25%* across an institution's range of courses. Exceptions to this rule and the most popular tools in use are still asynchronous collaborative working tools such as forums, wikis and blogs (Table 3.12f), assignment submission (Table 3.12h), plagiarism detection software (Table 3.12l) and access to external web based resources or digital repositories (Table 3.16n).

For a full comparison of results for the 2012, 2010 and 2008 Surveys, please view Table C3.16.

Table 3.16f: Proportion of courses using asynchronous collaborative working tools (discussion forums, blogs, wikis)

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
99 – 75%	7	7%	13%	0%	14%	8%	0%	8%	0%
74 – 50%	13	13%	11%	13%	29%	8%	67%	25%	0%
49 – 25%	35	36%	20%	51%	43%	38%	17%	33%	0%
24 – 1%	25	26%	35%	18%	14%	28%	17%	17%	0%

Table 3.16i: Proportion of courses using assignment submission

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	3	3%	2%	2%	14%	3%	0%	8%	0%
99 – 75%	16	16%	17%	18%	0%	14%	50%	17%	0%
74 – 50%	30	31%	39%	22%	29%	30%	33%	33%	0%
49 – 25%	18	18%	17%	20%	14%	19%	17%	17%	0%
24 – 1%	11	11%	4%	13%	43%	13%	0%	8%	0%
0%	2	2%	2%	2%	0%	3%	0%	0%	0%

Table 3.16j: Proportion of courses using plagiarism detection software

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	2	2%	2%	0%	14%	3%	0%	0%	0%
99 – 75%	19	19%	20%	22%	0%	16%	50%	25%	0%
74 – 50%	24	25%	28%	24%	0%	24%	33%	25%	0%
49 – 25%	18	18%	20%	18%	14%	18%	17%	25%	0%
24 – 1%	17	17%	11%	18%	57%	20%	0%	8%	0%
0%	1	1%	2%	0%	0%	1%	0%	0%	0%

Table 3.16n: Proportion of courses using access to external web based resources or digital repositories

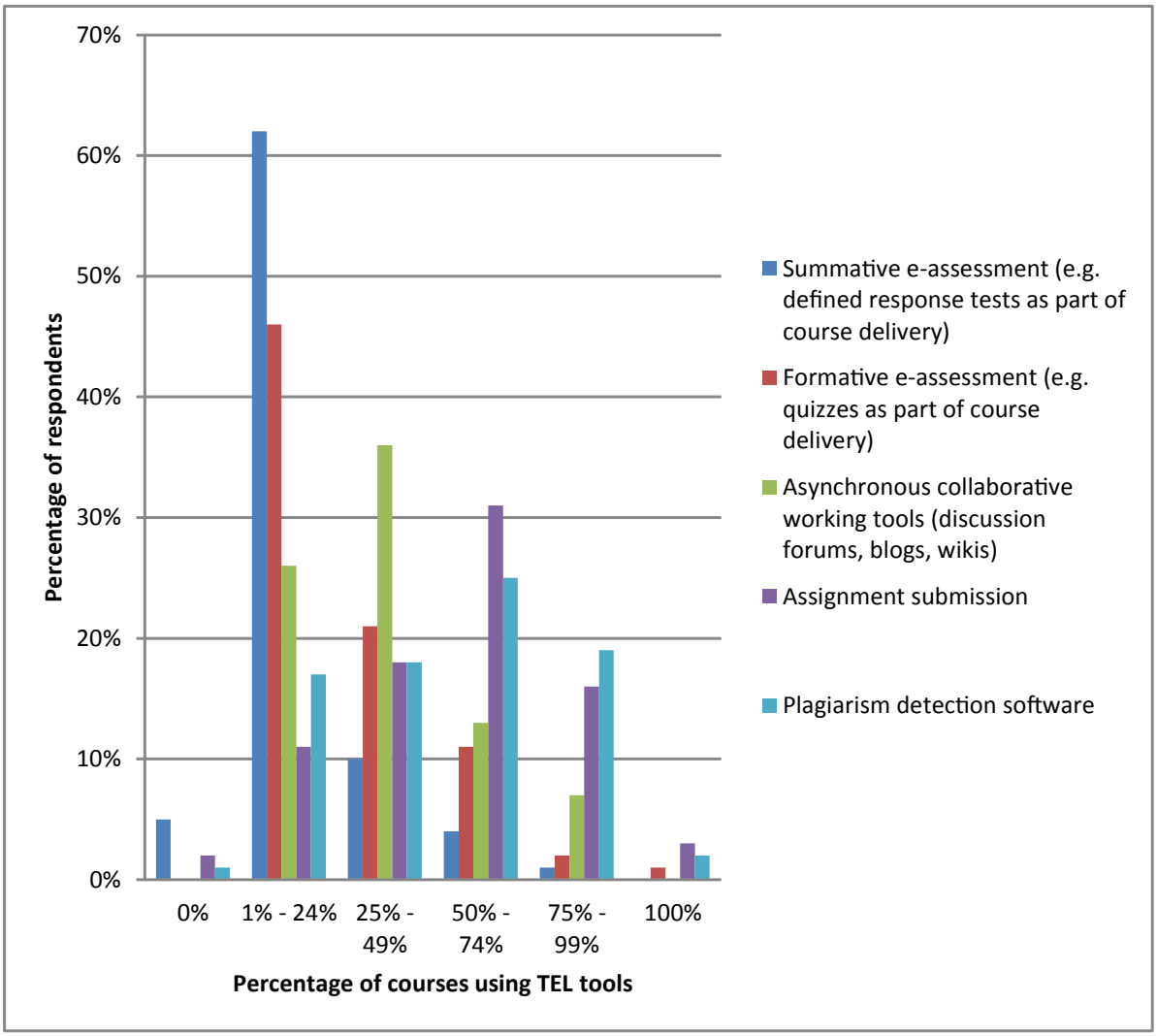
	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
100%	6	6%	7%	7%	0%	5%	17%	8%	0%
99 – 75%	23	24%	28%	18%	29%	22%	50%	25%	0%
74 – 50%	12	12%	9%	16%	14%	13%	0%	17%	0%
49 – 25%	17	17%	11%	24%	14%	18%	33%	8%	0%
24 – 1%	20	20%	22%	16%	43%	22%	0%	25%	0%
Don't know	10	10%	13%	9%	0%	11%	0%	8%	0%
Not Answered	10	10%	11%	11%	0%	10%	0%	8%	100%

One of the more striking developments since the last Survey is the increased usage of asynchronous collaborative working tools, which have moved from the 24%–1% band (37% in 2010, 26% in 2012) to the 25%–49% band (29% in 2010, 36% in 2012). Over half of respondents from GuildHE, Million+ and University Alliance institutions recorded the proportion of courses using asynchronous tools in the 25%–49% band or a higher one.

Assignment submission also appears to have increased in scale, with a notable rise in activity since 2010. The 2010 Survey reported that 36% of institutions were using assignment submission tools in over 50% of their courses, whereas in 2012 this has increased to 50% of respondents citing this activity in over 50% of their courses. This finding resonates with recent sector initiatives led by the Higher Education Academy and Heads of e-Learning Forum, which have highlighted the importance of electronic assignment submission and online marking and feedback to institutions, with both organisations recently delivering a joint workshop on this theme[17].

17 Higher Education Academy – Heads of E-Learning Forum workshop: Managing an institutional transition from paper-based to online submission, marking and feedback. Manchester Metropolitan University. Friday 8th June 2012.

Figure 3.16: Chart showing proportion of courses using (top five) TEL tools



Given that assignment submission tools are commonly deployed with plagiarism detection software, it is no surprise to see an increase in the proportion of courses using plagiarism detection software in the *greater than 50%* bands from 41% to 46%. Indeed, these findings complement the data for Question 3.10, which revealed that plagiarism detection and e-submission tools top the list of most commonly centrally supported TEL software. This is clearly visible in Figure 3.16, which depicts deployment patterns for the most commonly used tools. Note that formative e-assessment also appears as the only other tool used in all modules or units of study by at least one institution.

A breakdown of the data is available for mission groups in Tables B3.12a–p, 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.

For a full breakdown of usage per tool, see Tables A3.12a–p.

Question 3.17: 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?

Questions 3.17 – 3.19 were introduced as a combined set to the 2012 Survey with the aim of tracking the emergence of mobile services across the sector. The introduction of the questions was a response to the findings from the 2010 Survey, which had highlighted mobile technologies as representing the second most commonly cited development making demands on user support services.

Table 3.17: Services optimised for mobile devices

Service	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Access to library services	36	37%	43%	36%	0%	37%	17%	42%	100%
Access to email	34	35%	43%	31%	0%	35%	50%	25%	0%
Access to course announcements	30	31%	30%	33%	14%	30%	50%	17%	100%
Access to timetabling information	25	26%	28%	24%	14%	30%	17%	0%	0%
Access to course materials and learning resources	21	21%	22%	22%	14%	23%	17%	8%	100%
Access to personal calendars	21	21%	30%	16%	0%	24%	0%	17%	0%
Access to communication tools (e.g. discussion boards, blogs and wikis)	20	20%	20%	24%	0%	20%	17%	17%	100%
Services have not been optimised	19	19%	13%	18%	71%	16%	33%	33%	0%
Access to lecture recordings and videos	13	13%	17%	11%	0%	13%	0%	25%	0%
Access to grades	12	12%	11%	16%	0%	13%	17%	8%	0%
Other service	21	21%	28%	18%	0%	24%	0%	17%	0%
Not answered	12	12%	13%	11%	14%	13%	0%	17%	0%

Table 3.17 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 services optimised for mobile devices are *access to library services, access to email* and *access to course announcements*. This is not surprising given that the primary function of mobile devices is to communicate and it seems that the devices have been mainly exploited to communicate information to learners. Timetabling information, access to course materials and access to personal calendars are also popular mobile enabled services. All of the top six services can be viewed collectively as channels for pushing out information to learners. The more interactive tools in support of learning and teaching activities such as collaboration software (blogs, wikis and discussion boards) have not had as much investment, but we may anticipate further developments in support of interactive learning in the near future.

Reviewing the data by mission groups, Russell Group universities have the highest proportion of members who have optimised services for the six leading categories, although in absolute numbers they are similar to the other mission groups. University Alliance institutions appear though to have made the most progress in optimising access to grades, with 39% of respondents reporting progress in this area. Table B3.17 provides a full breakdown of results by mission group.

Question 3.18: Are these services available to all students across the institution or restricted to a specific school or department?

Table 3.18 Availability of services optimised for mobile devices

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
All students	62	93%	19%	94%	100%	93%	75%	100%	100%
Restricted	2	3%	3%	3%	0%	4%	0%	0%	0%
Not answered	3	4%	6%	3%	0%	4%	25%	0%	0%

Note: n = 67 for Table 3.18

93% of respondents indicated that the services optimised for mobile devices are available to all students across the institution. This indicates that these developments are being implemented institution-wide as centrally supported services.

Question 3.19: For which types of devices does the institution provide active user (staff and student) support to connect to these services?

Table 3.19: Mobile devices which are supported by institutions to connect to optimised services

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
iPad and iPhone	49	73%	68%	78%	100%	73%	75%	67%	100%
Android devices	46	69%	68%	69%	100%	71%	50%	50%	100%
Blackberry devices	39	58%	53%	66%	0%	59%	75%	33%	100%
Other device	16	24%	24%	25%	0%	21%	25%	33%	100%
Don't know	8	12%	18%	6%	0%	13%	0%	17%	0%
Not answered	4	6%	3%	9%	0%	5%	25%	0%	0%

Table 3.19 outlines the range of devices that are supported by institutions. The data reveals that iPads and iPhones are most commonly supported by institutions (73%), with Android devices supported by 69% of institutions; Blackberry devices are supported by 58% of institution. Of the mission groups, Million+ institutions prove the exception to the rule with a higher proportion of members supporting Blackberry devices (75%) over iPad/iPhone and Android; the other groups conform to the global trend in more commonly supporting iPad/iPhone and Android devices.

Of the *Other devices* attracting support, three institutions mentioned Windows Mobile (versions 7 and below), and one Post-92 institution cited a middleware solution *CampusM* which has been deployed to expose university services to all types of mobile devices.

Question 3.20: Please use the grid below to indicate which systems are linked (i.e. some form of data flow is supported between the systems) within your institution.

Table 3.20: Systems that are *linked* (i.e. some form of data flow is supported between the systems)

	VLE	Online payments	HR	Registration and enrolment	Library	Student records	e-portfolio	E-assessment system*	Lecture capture system*	Contentm management system	Media server	Portal	Other
VLE													
Online payments	9%												
HR	30%	8%											
Registration and enrolment	**60%**	39%	14%										
Library	**50%**	23%	17%	36%									
Student records	**80%**	31%	17%	**54%**	**51%**								
e-portfolio	**51%**	1%	8%	12%	2%	19%							
E-assessment system*	**57%**	1%	3%	4%	2%	21%	10%						
Lecture capture system*	32%	1%	3%	4%	1%	2%	1%	1%					
Content management system	31%	2%	10%	7%	11%	9%	3%	3%	3%				
Media server	**41%**	1%	6%	4%	3%	2%	3%	2%	4%	7%			
Portal	**54%**	22%	20%	39%	36%	**47%**	10%	7%	1%	14%	7%		
Other	8%	8%	6%	4%	4%	7%	1%	1%	3%	2%	4%	3%	

Note: n = 90 for Table 3.20

This question was updated from the 2010 Survey to include e-assessment and lecture capture systems in the grid. Table 3.20 displays the results, highlighting the systems that institutions have managed to link up. Percentage scores *greater than 40%* have been highlighted in bold to identify common linkages that have been developed across the sector. In 2010, there were eight common linkages enabled in 40% or more institutions. In 2012, there are ten common linkages, which relate to the same set of system linkages as before, with the addition of *VLE and e-assessment system* (57%) and *portal and student records* (47%). The results show that the VLE remains the most common system to be linked to other institutional systems, far more so than the portal which is the second most commonly linked system.

A direct comparison with system linkage results for 2010 is set out in Table C3.20 and reflects a remarkably similar picture across the two Surveys. Of the most notable changes since 2010, the linkage between the *portal and student records system* has increased from 36% to 47%, whilst the linkage between *registration and enrolment and online payment* has increased from 27% to 39%. Reviewing the data as a whole, the results tend to suggest that universities have targeted system linkages at student facing rather than staff oriented systems.

Of the *Other* system linkages that were recorded for 2012, *student records with exam timetabling software* was noted by two institutions. Individual references were also made to the following system linkages:

- Finance *and* Research Information Management system (Pre-92 institution);
- Student module questionnaire evaluation system *and* Student Records systems (Post-92 institution);
- Online payments to printing *and* residential services (Pre-92 institution);
- Document management system *and* HR and Student Records systems (Post-92 institution).

Question 3.21: Have you evaluated the impact of technology enhanced learning tools and systems on the *student learning* experience?

Questions 3.21–3.25 were introduced as a combined set to the 2012 Survey to explore the extent and range of evaluation activity taking place across the sector in measuring the impact of TEL tools on the user experience. Questions 3.21 and 3.22 invited respondents to comment on whether the impact of TEL had been evaluated for the student learning experience.

Questions 3.23–3.25 focused on the impact of TEL on pedagogic practices and how the results have been used to inform TEL support provision across institutions.

Table 3.21 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	54	55%	56%	56%	43%	54%	67%	58%	0%
No	35	36%	35%	33%	57%	38%	17%	25%	100%
Not answered	9	9%	9%	11%	0%	8%	16%	17%	0%

Table 3.21 reveals that well over half of the institutions responding to the Survey had evaluated the impact of TEL on their students' learning experience, with a similar percentage score recorded for Pre-92 and Post-92 institutions. This high level of activity is not surprising, given the greater emphasis currently being placed on the student experience and the prominence of National Student Survey[18] (NSS) scores and their impact on university league tables, which underline the importance of student feedback on frontline services.

Of the mission groups, 1994 Group (63%) and University Alliance (61%) had the highest proportion of members which had evaluated the impact of TEL, although unclassified institutions had the highest frequency (63%) which had conducted an evaluation. Conversely 63% of GuildHE and 50% of Russell Group institutions reported that they had not done so. The full mission group data is available in Table B3.21.

18 National Student Survey (NSS): http://www.thestudentsurvey.com/

Question 3.22: Please write in details of how the impact has been measured, when and by whom

Figure 3.22: Details of how the impact of TEL tools on the *student learning experience* has been measured, when and by whom

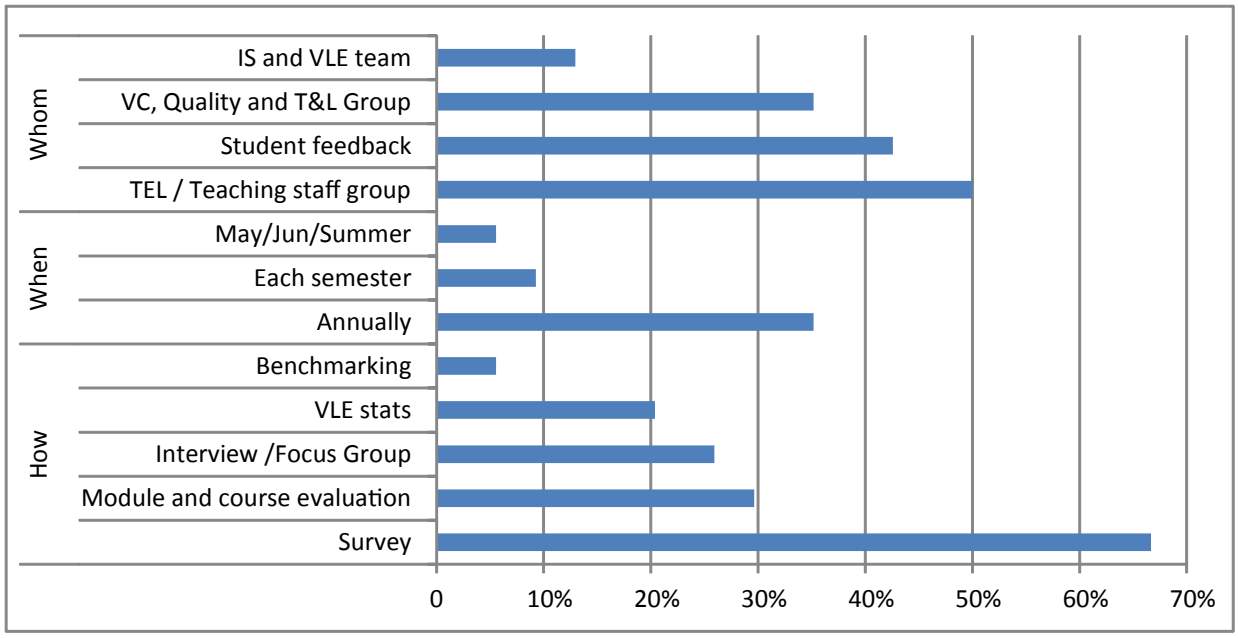


Figure 3.22 provides a breakdown of the categories detailing by whom, when and how the impact of TEL tools on the student experience has been measured. The categories for groups who have evaluated TEL are organised as follows:

- 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 A3.22.

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. These are rarely used as a standalone tool and are usually combined with focus group interviews and other methods such as course or module evaluations and, to a lesser degree, system data (VLE statistics). 22% of respondents stated that the most popular measurement exercises were conducted annually and 50% of respondents indicated that they conduct the impact measurement exercise at least once a year. Some institutions conducted the impact measurement exercises towards the end of the academic year.

The most common groups directing the impact measuring exercise which respondents cited were senior central units linked to the Vice Chancellor's office, Quality Assurance and Teaching and Learning centres or units of that type. Information Services divisions and VLE units based under the IS division conducted the measuring exercise for 22% of respondents and a further 13% of respondents indicated that the impact measurement exercise was conducted by the Learning Technology group (outside the IS division). 3% of respondents indicated that they carried out departmental evaluations as opposed to a wider institutional evaluation.

Question 3.23: Have you evaluated the impact of technology enhanced learning tools and systems on *pedagogic practices*?

Table 3.23 Evaluation of the impact of TEL tools and systems on pedagogic practices

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Yes	34	35%	41%	33%	0%	33%	33%	50%	0%
No	55	56%	50%	56%	100%	60%	50%	33%	100%
Not answered	9	9%	9%	11%	0%	7%	17%	17%	0%

Table 3.23 reveals that the evaluation of pedagogic practices is less well established across the sector than impact evaluation on the student experience, with only 35% of respondents confirming that they have conducted such studies. Scottish universities have the highest proportion of institutions which have done so (50%).

A further analysis by institution type reveals that Pre-92 institutions have been more active in completing these studies, although when looking at frequencies for this question, there is little difference between Pre-92 (n= 19) and Post-92 (n= 15) institutions. HE colleges have not been active at all in this respect.

Table B3.23 provides a breakdown of results per mission group. Of the mission groups, 1994 Group (44%) and University Alliance (39%) institutions have the highest proportion of members which have conducted studies on pedagogical impact. Conversely, Russell Group (29%) and GuildHE (0%) institutions report the lowest levels of evaluation activity for the impact of TEL on pedagogic practices. This echoes the results for Question 3.21 in terms of the respective engagement of mission groups with evaluation activities. Unfortunately, the data does not reveal why there is such a disparity between the mission groups in terms of their respective levels of engagement with evaluation activities – a topic perhaps for further research.

Question 3.24: Please write in details of how the impact has been measured, when and by whom.

Figure 3.24: Details of how the impact of TEL tools and systems on *pedagogic practices* has been measured, when and by whom

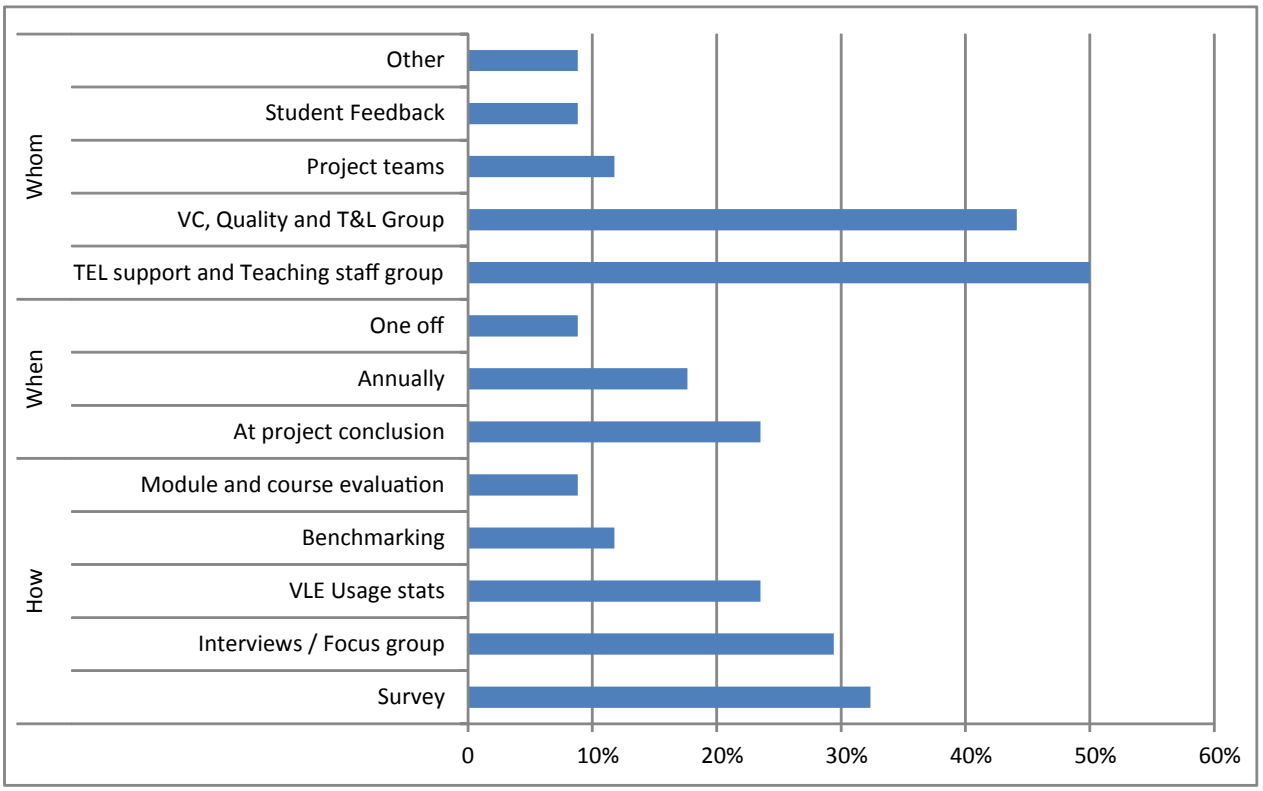


Figure 3.24 provides a breakdown of the categories detailing by whom, when and how the impact of TEL tools and systems on pedagogic practices has been measured. The full data for this question is available in Table 3.24.

TEL support and Teaching staff group represents the people who most frequently measure the impact of TEL on pedagogic practices. These staff are generally located in faculties, schools or departments, as opposed to the *central* units. 44% of respondents also noted that impact was measured by central units such as Quality Enhancement, Teaching and Learning or Educational Development units. This indicates that both the central and devolved units are equally involved in measuring impact, with only a 6% difference between these two groups. Similar to Question 3.22, the most popular methods for measuring the impact of TEL are surveys and interviews, followed by VLE statistics.

One of the main differences between the responses to Question 3.22 and Question 3.24 is the project approach that is used to track pedagogical interventions. Most of the respondents described the measurement of pedagogical impact as an integral part of a project.

Module and course evaluations were used to derive the impact of TEL in both Question 3.22 and Question 3.24. This method was more popular as a way of measuring the impact of TEL on the student experience, as opposed to measuring the impact on pedagogy, where the data is more likely to come from the teaching staff.

Question 3.25: 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 3.25 Broad conclusions from the evaluations undertaken

Leading conclusions	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
TEL valued as positive by students	24	43%	44%	42%	33%	42%	25%	57%	0%
Published works from TEL	22	39%	30%	54%	0%	36%	75%	43%	0%
Rethinking pedagogy, systems and workflows	19	34%	30%	42%	0%	33%	25%	43%	0%
Should be student centred	18	32%	30%	38%	0%	29%	50%	43%	0%
Positive impact on staff teaching practice	15	27%	26%	31%	0%	24%	25%	43%	0%

Note: n=56 for Table 3.25

The purpose of Question 3.25 was to identify the main conclusions arising from the evaluations of TEL tools and systems conducted by institutions. Table 3.25 captures the leading conclusions that were reported by respondents. The full data is available in Table A3.25. 43% of respondents reported that TEL was valued by end users. 60% of 1994 Group respondents cited this as a key conclusion arising from their evaluations (see Table B3.25).

As a general finding, staff, students and policy makers recognised the value and potential of TEL to support learning and teaching activities. 34% of respondents noted that this realisation had resulted in the rethinking of pedagogy, administrative systems and procedures on a large scale to incorporate the effective use of TEL across departments or institutions. Another theme arising from these evaluations is the importance of student perception and the student learning experience, reflected in recommendations for greater consistency and transparency in the way that courses are delivered.

39% of respondents had published work on technology enhanced learning, although only a small proportion of publications had been peer reviewed.

Table 3.25a provides a summary of some of the reasons behind the conclusions arising from these evaluation studies.

Table 3.25a: Reasons given for conclusions arising from TEL evaluations

Category	Sample comments
TEL valued as positive by students	Students value investment in technology to support learning and given the choice, prioritise this over other areas.
Rethinking pedagogy, systems and workflows	Growing awareness of the importance of sound learning design and a sound curriculum process involving TEL.
Should be student centred	Students like consistency and transparency, ease of use is important.
Positive impact on staff teaching practice	Academic staff are: increasingly using video in their everyday practice and often in innovative ways; see video as essential in some areas (real world scenarios, engagement with current events, illustrating practical, behavioural, social and/or experimental activity); appreciative of the added value of video in motivating and engaging students.
Increase in demand for TEL by staff	Staff are very interested in the pedagogic impact of media streaming technology and many feel that it has important implications for future teaching and learning strategies.
Staff development for TEL considered important	Academics require support and not all students know how to use technology effectively in their learning. The technical infrastructure must be in place.
Growth in collaborative/social tools	The use of basic communication media (announcements and calendar) and, to a lesser degree, discussion forums has increased, while the more collaborative, student centred tools such as blogs and wikis are less commonly used.
Demand for lecture capture	Interest in the potential of lecture capture from students. Individual interest in the potential of lecture capture from some staff.
TEL needs priority	However, issues identified in the 2010 Survey Report still remain unresolved, notably the consistency of online provision across taught programmes and the quality standards employed in the design of module sites. Improvements can also be made to technical support provision and training for students to ensure that students are able to use the VLE effectively.
Demand for mobile support	Mobile surveys have revealed the tools students most want integrated with mobile devices, with timetabling information coming top. Exploring the possibility of this, though biggest barrier is cost.

Category	Sample comments
Support for e-portfolio	Broad support for use of both e-portfolio and e-submission systems.
VLE used as repository	Broadly the VLE is used as a repository and information site.
Support for e-submission	Generally students appreciated receiving feedback electronically, and found that they are more engaged with it.

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. Additionally, this section enquired about more focused or specialised support provided for specific groups of students.

For the majority of questions, this section provides a follow up to questions introduced in the 2008 Survey and repeated in the 2010 Survey. Furthermore, it provides a longitudinal analysis of Question 4.6 from 2005 and Question 4.9 from 2001. Questions 4.4 and 4.5 are new questions looking at changes in staffing provision related to budgetary pressures. Questions 4.7 and 4.8 are new questions looking at changes in the promotion of training and development activities related to budgetary pressures.

It should be noted that there were some issues in exporting and interpreting the data for Questions 4.1–4.3 which meant that some returns appeared to be missing or incomplete. This data has, therefore, not been included in the analysis for these questions.

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	58	71%	81%	58%	86%	74%	67%	50%	100%
Educational Development Unit (EDU)	49	60%	62%	63%	29%	60%	67%	50%	100%
Learning Technology Support Unit (LTSU)	45	55%	49%	61%	57%	54%	83%	40%	100%
Local support (devolved to Faculty, School, Department)	44	54%	62%	53%	14%	57%	50%	30%	100%
Other	17	21%	27%	16%	14%	22%	17%	20%	0%
Outsourced support	4	5%	0%	8%	14%	6%	0%	0%	0%

Note: n=82 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. *IT support units* are once again the most common unit for providing TEL support, however, it should be noted that this is not the case in Wales where *Learning Technology Support Units* are in the majority. IT support units appear to be more prevalent in Pre-92 institutions and HE colleges, whereas Post-92 institutions show an even split amongst the first four types of unit. HE colleges record a much lower proportion of *Educational Development Units* and *Local* (devolved) support for TEL, compared with Pre- and Post-92 institutions, which might reflect differences in resourcing and organisational culture.

Where institutions indicated that there were *Other* support units, the majority referred to Library support. Other support units mentioned included Academic Policy Support, Media Production Unit, Staff Development and Research units. There was also mention of some units which could be categorised under one of the first three categories, e.g. Centre for Learning and Teaching, school based Learning and Teaching Advisers.

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	2.65	2.81	2.58	2.14	2.72	2.83	1.90	4.00

Note: n=82 for Table 4.1b

Table 4.1b summarises the returns for Question 4.1, focusing on the mean number of support units per institution. The data shows that institutions continue to provide TEL support via a range of units. The 2012 Survey reports a reduction of the mean from 3.00 to 2.65, indicating a consolidation of support units. HE colleges, institutions in Scotland and GuildHE institutions tend to have a smaller number of TEL support units with a mean of around two units, whilst Russell Group and 1994 Group have a larger mean of around three units.

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	Local support	Other	Outsourced/ Specialist
Mean number of learning technologists	2.11	4.52	2.97	4.88	2.94	0.00
Mean number of IT support staff	16.04	1.37	0.30	7.90	5.00	1.50
Mean number of administrative staff	1.79	1.11	1.21	10.00	0.63	0.00
Mean number of academic staff	0.00	1.22	2.97	3.70	2.25	0.00
Mean number of other staff	4.42	2.12	2.54	1.50	16.13	0.67

Note: n=83 for Table 4.2

Table 4.2 displays the mean number of staff by staff type for each type of support unit for the sector as a whole. Tables A4.2a to A4.2f provide a breakdown by sector and country. Tables B4.2a to B4.2f provide a breakdown by mission group. Based on feedback during the survey design phase it was agreed to change the category *Academic (Teaching) staff* to *Academic staff* to ensure that research staff were included in this grouping.

Comparing data with the 2010 Survey (Table C4.2), there is an overall increase in the mean number of staff supporting TEL, which appears to contradict the responses to Question 5.4b where 44% of institutions have reported an overall reduction in the number of staff supporting TEL.

There is an increase in the number of Learning Technology staff in both Information Technology support (from 0.3 to 2.11) and Educational Development units (EDUs) (from 0.9 to 2.97). The mean number of Learning Technology staff working in a Learning Technology Support Unit shows a decrease from 8.8 to 4.52. Interestingly, this is the reverse of what happened between 2008 and 2010 where we saw a shift of staff to Learning Technology Support Units from IT Support and EDUs. Whilst this could indicate a restructuring of TEL support structures, the figures could also be influenced by the difference in the respondents to each Survey. Additionally, it is possible that in 2010 one institution with a large number of Learning Technologists may have skewed the data.

The number of IT support staff has increased, in particular, the mean number of IT support staff in IT support units has doubled, which is again the reverse of what happened between 2010 and 2008. The mean number of IT support staff in Learning Technology Support units from has increased back to 1.3 (as in 2008) from 0.3 in 2010. There continues to be a general increase in the number of Administrative staff across the majority of support units. The number of Academic staff has increased in all support units with the exception of IT support units where this has decreased to 0.

There is an increase in the number of all types of support staff at a local level. Pre- and Post-92 institutions are more likely to have Learning Technologists and IT support staff available locally. HE colleges reported no local support for TEL.

In general, the number of staff supporting TEL in HE colleges remains low but there seems to be an increase in the number of Learning Technologists since 2010.

Looking at the different mission groups, Russell Group institutions report high numbers of local Learning Technologists and IT support staff, whereas GuildHE institutions report no local TEL support. Learning Technologists tend to be situated in Learning Technology Support units for all mission groups with the exception of Million+ institutions, where there is a slight preference for Learning Technologists to be situated in Educational Development Units.

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 responses.

- *Information Technology support*: IT support units typically provide technical support both in general and for TEL, in particular for the VLE. Activities include provision of an IT helpdesk, server/system administration, authentication, development, networking and support. A couple of institutions mentioned support for digital media and digitisation. General IT training is also provided, with one institution mentioning the ECDL. A small number of institutions mentioned pedagogy.
- *Learning Technology Support unit*: These units typically provide practical/technical and pedagogical support for staff using TEL, in particular for the VLE. This also includes staff development and training, advice and user support. A small number of units are responsible for curriculum design, content and multimedia development. Others mentioned a responsibility for VLE administration and management. In some cases, support extends to students as well as staff.
- *Educational Development units (EDUs)*: These units tend to have a more pedagogical focus and activities include staff development and training, advice, curriculum/course design, project management and consultancy. In addition, EDUs tend to provide academic programmes for learning and teaching such as the PG Certificate

courses for new lecturers. A small number are responsible for strategy and for technical support for TEL such as VLE administration and management.

- *Local support*: Where local support is provided it tends to be Learning Technologists providing TEL support and advice. In some cases, TEL support is provided by TEL champions or academics seconded to a TEL role. A small number of institutions reported locally based staff providing content/course development.
- *Other*: The main focus for other types of support seems to be from the Library such as digitisation services, online reading lists and digital literacy training.
- *Outsourced*: There were only a few responses to this option and they included hosted VLE and staff training.

In general, the type of support provided by the different units has not changed much from the 2008 and 2010 Surveys. The main difference is the presence of more local Learning Technologists. As in 2008 and 2010 there is a range of support provided by each unit. Whilst there seems to be an overlap in support between units, there continues to be some degree of specialisation, e.g. Educational Development units tend to be more pedagogically focussed, whilst IT Support units provide mainly technical support.

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

Table 4.4a: 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	37	38%	39%	38%	29%	37%	67%	25%	100%
Changes made	46	47%	43%	47%	71%	47%	33%	58%	0%
Not answered	15	15%	18%	15%	20%	16%	0%	17%	0%

This was a new question for 2012 prompted by the challenging economic climate. Table 4.4a reveals that just under half of the responding institutions have been required to make changes in staffing provision in response to budgetary pressures. We see a split between the countries with the majority of institutions in Wales and Northern Ireland reporting no changes, whilst those in England and Scotland report changes. With the exception of the Russell Group and GuildHE, the majority of institutions in all other mission groups have been affected.

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

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco
Reduction in number of staff	20	44%	53%	43%	20%	43%	100%	43%
Restructure of department(s)	10	22%	21%	29%	0%	23%	0%	29%
Existing roles converted or incorporated other duties	6	13%	5%	19%	20%	14%	0%	14%
Increase in number of staff	5	11%	0%	14%	40%	14%	0%	0%
Delay/freeze in recruitment	3	7%	11%	5%	0%	9%	0%	0%

Note: n=45 for Table 4.4

Table 4.4b summarises the returns for the institutions that have made changes to their staffing provision, showing the top 5 responses for all the data. The full list of responses is available in Table A4.4b. The data was obtained using a cluster analysis of the responses. Note that some institutions gave multiple responses for changes made in staffing provision.

The main change was the *Reduction in the number of staff* supporting TEL and was, typically, the loss of one or two members of staff, but in some cases this reduction was associated with a restructuring or closure of a department. Interestingly, five institutions reported an increase in the number of staff, indicating that budgetary pressures are not necessarily affecting every institution in a negative way. No Pre-92 institutions reported an increase in staff.

Looking at differences between the different mission groups, for Russell Group institutions which had made changes, they report a greater reduction in the number of staff compared with the other institutions; 50% of GuildHE institutions reported an increase in staff.

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 4.5a: 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	33	34%	28%	36%	57%	30%	33%	58%	0%
Changes foreseen	52	53%	57%	51%	43%	56%	67%	25%	100%
Not answered	13	13%	15%	13%	0%	14%	0%	17%	0%

This was a new question for 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 over half of the respondents do foresee changes in staffing provision and this proportion is evenly spread across all groups with the exception of HE colleges and Scottish institutions. Of the mission groups, only University Alliance institutions do not conform to this picture, with half of respondents from this group not foreseeing any changes.

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

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Increase in number of staff	24	46%	54%	39%	33%	50%	50%	0%	0%
Anticipate change but unsure as to what this might be	11	21%	12%	35%	0%	18%	25%	67%	0%
Restructure of department(s)/TEL provision	6	12%	15%	9%	0%	11%	25%	0%	0%
Currently reviewing/intend to review situation	4	8%	12%	4%	0%	7%	0%	0%	100%
Reduction in number of staff	3	6%	8%	0%	33%	7%	0%	0%	0%

Note: n=52 for Table 4.5b

Table 4.5b 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, ordering them by percentage. Table A4.5b provides the full list. The data was obtained using a cluster analysis of the responses experienced in the last two years.

In contrast to the reduction of staff identified in Question 4.4, 46% of responding institutions anticipate an increase in the number of staff supporting TEL in the near future, with some institutions expecting to recover the posts they have lost. Pre-92 institutions appear to anticipate these increases more than Post-92 institutions and HE colleges. Only 6% anticipate a reduction in staff and these institutions did not report any loss of staff in response to Question 4.4.

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

Table 4.6: Training and development activities promoted to support staff

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
National conferences/seminars	82	84%	83%	82%	100%	85%	83%	75%	100%
Internal staff development	81	83%	83%	82%	86%	84%	100%	67%	100%
Association for Learning Technology (ALT) events	77	79%	87%	73%	57%	78%	100%	67%	100%
Regional seminars	69	70%	78%	62%	71%	68%	83%	75%	100%
Higher Education Academy (HEA) events	67	68%	74%	67%	43%	68%	100%	50%	100%

Table 4.6 summarises the returns for Question 4.6 showing the top five results for all the data, ordering them by percentage. Full data for this question is provided in Table A4.6. Comparing results with the 2010 Survey (Table C4.6), the top two sources of training and development activities have switched places with *National conferences/seminars* more commonly cited than *Internal staff development*, which has dropped from 96% to 83%.

Association for Learning Technology (ALT) events maintains third place in the list. HE colleges are much less likely to promote ALT events (57%) compared to Pre-92 institutions (87%) where ALT events are first. HE colleges would appear to prefer Regional Support Centre (RSC) events (86%), which are a much lower priority for Pre- and Post-92 institutions. In terms of national trends in training and development activities, *regional seminars* appear to be more commonly promoted in Wales, Scotland and Northern Ireland than in England.

Comparing results with the 2010 Survey, this year has seen a marked increase in the popularity of accreditation with *HEA professional accreditation* rising from 43% in 2010 to 53% in 2012 and *CMALT accreditation* rising from 23% in 2010 to 41% in 2012.

Overall, the adoption of training and development activities has decreased slightly for the majority of activities, with the exception of accreditation which has increased. However, there is a noticeable reduction (over 10% per activity) in the use of HEA subject centre events, internal staff development and other forms of training and development.

Question 4.7: What changes in provision for training and development activities, if any, have been made over the last two years due to budgetary pressures?

Table 4.7a: 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	37	38%	48%	24%	57%	38%	17%	42%	100%
Changes made in staff training or development	44	45%	37%	53%	43%	44%	67%	42%	0%
Not answered	17	17%	15%	22%	0%	18%	17%	16%	0%

This was a new question for 2012 and aimed to identify how the provision of staff development for support staff has changed as a result of budgetary pressures. Table 4.7a reveals that just under half of the responding institutions have been obliged to make changes to their provision due to budgetary pressures, although this appears to have affected a greater proportion of Post-92 institutions than Pre-92 universities and HE colleges. Of the mission groups, University Alliance and Million+ institutions have the highest proportion of members which have made changes to their training and development provision.

Table 4.7b: Changes in provision for training and development activities promoted to support staff due to budgetary pressures

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Reduced attendance at conferences and external events	13	33%	41%	21%	33%	29%	50%	21%	0%
Reduced budget for training and development	10	25%	29%	21%	0%	26%	0%	20%	0%
Increased virtual attendance	8	20%	12%	21%	33%	17%	25%	20%	0%
Staff have less time to attend events	4	10%	12%	4%	33%	11%	0%	0%	0%
Requirement to justify attendance	3	8%	6%	8%	0%	9%	0%	0%	0%
Restriction on types of events/more selective	3	8%	12%	4%	0%	6%	0%	20%	0%
Reduction in number of people attending	3	8%	18%	0%	0%	3%	50%	0%	0%
Reduction in international travel	3	8%	6%	8%	0%	6%	0%	20%	0%
Attendance at regional events	2	5%	6%	4%	0%	3%	0%	20%	0%

Note: n=40 for Table 4.7b

Table 4.7b summarises the returns for 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 40 institutions that responded to this question.

For most institutions, the training budget still appears to exist, albeit at reduced levels; however, there has been a reduction in attendance at conferences and external events, particularly those which incur a cost. Staff are being encouraged to attend conferences virtually, and this indicates a requirement to support remote participation at training events. It was noted that as a result of other pressures, staff no longer have as much time to attend conferences and, in some cases, the number of people who can attend the same event has been limited. International travel is also an area that has seen a reduction in activity.

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 4.8a: 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	35	36%	44%	27%	43%	38%	50%	17%	0%
Changes foreseen	45	46%	44%	47%	57%	43%	33%	67%	100%
Not answered	18	18%	13%	27%	0%	19%	17%	17%	0%

This was a new question for 2012 and aimed to identify whether institutions foresee any 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 4.8b therefore shows the responses that clearly related to changes in provision of staff development for support staff.

Table 4.8a reveals that just under half of respondents anticipate changes in staff training provision in the future and this is most clearly articulated by Post-92 institutions, which as a group has the largest proportion of institutions anticipating change.

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

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Increased virtual attendance	5	24%	38%	10%	33%	19%	0%	50%	0%
Reduced budget for training and development	5	24%	25%	30%	0%	19%	0%	50%	0%
General increase in CPD/training activities	4	19%	13%	20%	33%	19%	100%	0%	0%
Attend internal/regional events	3	14%	13%	10%	33%	13%	0%	25%	0%
Reduced attendance at conferences and external events	3	14%	13%	20%	0%	19%	0%	0%	0%

Note: n=21 for Table 4.8

Table 4.8b summarises the returns for institutions which do foresee changes in training provision for support staff, showing the top five foreseen changes. Percentage scores are based on the total population of 21 institutions which responded to this part of Question 4.8. Table A4.8 provides the full list. The data was obtained using a cluster analysis of the responses.

The majority still anticipate a reduction in the training and development activities promoted overall and a greater shift towards attending events virtually or more regional or internal events. Four institutions indicated that they thought there would be an increase in training activities in the near future.

The responses which articulated TEL support and training provided by the institution are summarised as:

- Move to more online provision and self-help resources;
- Increase in staff training due to new tools/change of VLE;
- Move to either centralised or faculty based support models;
- Changing the roles of existing staff to provide TEL support and training.

Question 4.9: Which, if any, of the following groups of students receive more focused or specialised support and training in the use of technology enhanced learning tools?

Table 4.9: Groups of students receiving more focused or specialised support

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Students with special needs	48	49%	54%	49%	14%	48%	33%	58%	100%
Distance learners	38	39%	48%	27%	57%	38%	33%	42%	100%
Off campus learners	28	29%	26%	27%	57%	30%	0%	33%	0%
None receive more focussed training	24	24%	17%	29%	43%	24%	50%	17%	0%
Part time learners	11	11%	9%	16%	0%	10%	17%	17%	0%
Don't know/not answered	11	11%	13%	11%	0%	11%	0%	17%	0%
Other group	9	9%	13%	7%	0%	8%	0%	25%	0%

Table 4.9 summarises the returns for Question 4.9 showing the groups of students who receive more focused or specialised support. It lists all the response options available, ordering them by percentage scores.

Students with special needs remains the main group of students who are provided with more focused or specialised support, however, this number has decreased from 66% to 49%. Both Pre-92 and Post-92 institutions are equally likely to provide support to *students with special needs*, but there would appear to be much less support available within HE colleges, which has decreased from 54% to 14%. Support for *distance learners* and *off campus learners* has increased since 2010. Other groups cited as receiving more focused or specialised support included work based learners and students studying for the ECDL.

Question 4.10: Who provides the more focused or specialised support?

Table 4.10: Providers of more focused or specialised support

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Local provision (schools/course teams)	20	34%	40%	32%	0%	30%	67%	38%	100%
Disability Advisors/unit	19	32%	33%	32%	25%	36%	0%	25%	0%
Learning Technology Support/E-learning units	12	20%	17%	20%	50%	21%	33%	13%	0%
Library/LIS	11	19%	23%	12%	25%	21%	0%	13%	0%
Other	8	14%	20%	4%	25%	13%	33%	13%	0%

Note: n=59 for Table 4.10

Table 4.10 summarises the returns for Question 4.10 showing the top five responses for all the data, ordering them by percentage. Table A4.10 provides the full list. The data was obtained using a cluster analysis of the responses. The categories used in the analysis have been matched to those used in the 2008 and 2010 Surveys where possible (see Table C4.10).

There are a variety of units providing more focused or specialised support, such as Disability units, local provision (e.g. support from course tutors) and Learning Technology Units. A number of institutions provide this support through multiple units, with a mean average of 1.6 units. When compared with 2010 (Table C4.10), *Local provision* has returned to the top spot. This provision would tend to be for distance learners, with the majority of support for students with special needs coming from *Disability Advisors/units*. Support from both *IT Services* and from *Student Services/Student Support centres* has decreased by 9%.

Question 4.11: Is this support centrally or locally provided?

Table 4.11: Location of more focused or specialised support provided (central vs. local)

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Centrally provided	35	56%	41%	67%	100%	59%	33%	38%	100%
Locally provided	9	14%	22%	7%	0%	10%	33%	38%	0%
Centrally and locally provided	17	27%	34%	22%	0%	27%	33%	25%	0%

Note: n=51 for Table 4.11

Table 4.11 summarises the returns for Question 4.11 showing the location of more focused or specialised support. It lists all the answer options available, ordering them by percentage.

Where this support is provided, in 56% of cases it is a centrally provided service, a reduction from 90% in 2010. There has been an increase in support being both centrally and locally provided. Support in Post-92 institutions tends to be centrally provided.

Question 4.12: To what extent is this help and support available across the institution?

Table 4.12: Availability of more focused or specialised support across the institution

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Available institution wide	48	81%	77%	84%	100%	81%	67%	88%	100%
Available across most, but not all of institution	3	5%	7%	4%	0%	6%	0%	0%	0%
Available across large parts of the institution	1	2%	0%	4%	0%	2%	0%	0%	0%
Available across some parts of the institution	3	5%	10%	0%	0%	6%	0%	0%	0%
Only available in very localised parts of institution	4	7%	7%	8%	0%	4%	33%	13%	0%

Note: n=59 for Table 4.12

Table 4.12 summarises the returns for Question 4.12 showing availability of more focussed or specialised support within the institution. It lists all the answer options available in the order given in the question, starting at institution wide and narrowing the availability to very localised.

In the majority of cases (81%) more focused or specialised support is available across the institution and is comparable with the results from the 2010 Survey. The notable exception remains institutions in Wales where only 67% of support is available institution wide and 33% of support is only available locally. All institutions in Northern Ireland and all HE colleges who responded provide this type of support institution wide.

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. Picking up on the key themes emerging from the 2010 case studies, this section was expanded in focus to address outsourcing for services and provision both within and outside normal office hours, with a re-writing of Question 5.2 and the addition of Question 5.3. Also in the light of the financial climate and guidance originating from HEFCE's *Collaborate to Compete* report,[19] Question 5.4 was introduced to identify collaboration initiatives across institutions for the delivery of TEL services or resources.

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 five	Rank	Mean	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Lack of time	1	3.38	3.33	3.45	3.29	3.45	2.83	3.40	1.00
Lack of money	2	3.03	2.81	3.30	2.86	2.97	3.33	3.30	3.00
Departmental/school culture*	3	2.94	2.98	3.05	2.14	2.97	2.83	3.00	1.00
Lack of recognition for career development	4	2.90	3.12	2.70	2.71	2.85	3.00	3.30	2.00
Lack of academic staff knowledge	5	2.86	2.72	3.00	2.86	2.88	2.83	2.90	3.00

Note: n=90 for Table 5.1

Table 5.1 summarises the responses for Question 5.1 and shows the top five ranked barriers. The full data are in Table A5.1 and B5.1. Longitudinal analysis is given in Table C5.1. As in 2010, the top two barriers remain *lack of* time and *lack of* money. *Lack of time* has continued as the highest ranked barrier since the 2005 survey. The new response item for 2012, *departmental/school culture*, appears in third place which highlights this as a key barrier. *Lack of academic staff knowledge* has dropped from third to fifth place, which could be related to the continuing fall in the rankings of *lack of academic staff development opportunities* (in 2012 from 9th to 14th). This is also reflected in Question 2.6 where *providing support and training to academic staff* is given as the primary enabler for the adoption and use of TEL. There are no other changes of note as the majority of items have been displaced by one rank due to the addition of the new response item.

For Pre-92 universities lack of money is ranked fourth, with *lack of recognition for career development* and *departmental/school culture* ranked higher. For both Post-92 and HE colleges, *lack of academic staff knowledge* is still a key barrier as it appears joint second with *lack of money*.

Looking at regional differences, *lack of money* is the key barrier in Wales, however, it is interesting to note that *lack of incentives* is ranked 14th out of 15, compared with 7th in the overall list of mean scores. Both Scotland and Wales have ranked *lack of recognition for career development* higher than the mean. For Northern Ireland the top ranked barriers are *lack of money*, *lack of academic staff knowledge* and *lack of support staff*.

19 *Report to HEFCE by the Online Learning Task Force – Collaborate to compete: Seizing the opportunity of online learning for UK higher education – http://www.hefce.ac.uk/pubs/year/2011/201101/*

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	9	60%	22	67%
VLE	3	20%	12	36%
Staff email	2	13%	11	33%
Other	4	27%	10	30%
Digital repositories	0	0%	3	9%
e-portfolio	0	0%	2	6%
Open education resources*	0	0%	0	0%
	n=15		*n=19*	

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	5	42%	8	42%
Staff email	2	17%	5	26%
Student email	2	17%	4	21%
Other	2	17%	4	21%
e-portfolio	1	8%	4	21%
Digital repositories	1	8%	3	16%
Open education resources*	0	0%	1	5%
Don't know	4	33%	5	26%
	n=12		*n=19*	

The questions on outsourcing (Questions 5.2 and 5.3) have been updated since the 2010 survey to identify which services institutions currently outsource and which are under consideration for outsourcing. In addition, the questions now seek to explore when outsourcing is used (during office hours and outside of office hours). *Open education resources* was added as a new response option. To make the questionnaire manageable, the areas of support and provision have been split into two separate questions.

Tables 5.2a and 5.2b summarise the responses for Question 5.2. For a full breakdown by country, institution type and mission group see tables A5.2a–d and B5.2a–d.

Of those who **currently outsource support**, *student email* is ranked first for both normal hours and out of hours, followed by the *VLE* and *staff email*. Support for *digital repositories* and *e-portfolio* is only outsourced 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 the *VLE* and *staff email*, which would 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[20] where multiple services would be covered, and for specific tools such as Blackboard Collaborate.

Pre-92 institutions are more likely to currently outsource support for their VLE (40% during normal hours and 57% out of hours) compared with Post-92 institutions and HE colleges; however, it should be noted that around 60% of Post-92 institutions are considering outsourcing support for the VLE. Post-92 institutions and HE Colleges are more likely to currently outsource support for *student email*, compared with Pre-92 institutions. No institutions are currently outsourcing support for *open educational resources*.

Institutions in Wales did not report any outsourcing of support during normal hours and only outsourcing support for *Student email* out of hours.

20 *NorMAN out of hours helpline – http://www.outofhourshelp.ac.uk/*

Of those who are **considering outsourcing support**, the *VLE* is the main contender, followed by *staff email*, *student email* and *e-portfolio*. There is also a noticeable difference between the consideration of support during normal hours and out of hours support. Only institutions in England reported that they are considering outsourcing support during normal hours. Institutions in Wales and Scotland reported consideration of support for only one item out of hours. Institutions tend to be considering outsourcing more support out of hours, than within normal hours.

Due to the change in question format to include specific time frames, it is not possible to undertake a formal longitudinal comparison with 2010. However, there is a general trend to outsource more support. *Student email* has now overtaken *VLE* as most frequently outsourced item and *staff email* has also moved up to third place.

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	36	69%	35	66%
VLE	16	31%	15	28%
Staff email	10	19%	10	19%
Digital repositories	5	10%	4	8%
e-portfolio	16	31%	16	30%
Open education resources*	1	2%	1	2%
Other	5	10%	6	11%
Don't know	1	2%	1	2%
	n=52		*n=53*	

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	20	57%	20	56%
Student email	13	37%	13	36%
Staff email	13	37%	12	33%
e-portfolio	7	20%	7	19%
Other	5	14%	5	14%
Digital repositories	4	11%	4	11%
Open education resources*	0	0%	0	0%
Don't know	1	3%	2	6%
	n=35		*n=36*	

Tables 5.3a and 5.3b summarise the responses for Question 5.3. For a full breakdown by country, institution type and mission group see Tables A5.2a–d and B5.2a–d.

Of those who **currently outsource provision**, *Student email* is the most outsourced service in terms of provision, followed by the *VLE* and *e-portfolio* both within normal hours and out of hours. There seems to be little difference in terms of the hours for the outsourcing of provision, which would indicate the majority of respondents outsource their provision on a 24/7 basis. Where respondents indicated that provision was outsourced for *Other* services, these included web conferencing and collaboration tools such as Blackboard Collaborate, lecture recording systems, reading lists and Second Life.

Pre-92 institutions differ from the overall rankings with outsourcing provision for the VLE ranked fourth. HE colleges reported the *VLE* and *digital repositories* as the top ranked item. There is minimal difference between countries compared with the overall rankings, although it should be noted that institutions in Wales do not currently outsource provision for *staff email* and the institution located in Northern Ireland only currently outsources provision for *student email*.

Over 55% of respondents are **considering outsourcing provision** for the *VLE*, followed by *student email* and *staff email*. Both Pre-92 and Post-92 institutions follow this general trend, however, HE colleges are not considering outsourcing provision for the VLE. No institutions reported considering outsourcing provision for *open educational resources*.

The countries reflect different priorities over the most considered item for outsourcing with institutions in England and Scotland ranking the *VLE* first, whilst for institutions in Wales and Northern Ireland provision for *student email* is the top ranked item. It is interesting to note that 80% of institutions in Scotland are currently considering outsourcing provision for the VLE.

Due to the change in question format to include specific time frames, it is not possible to undertake a formal longitudinal comparison with 2010. However, there is a general trend to outsource more provision. *Student email* has remains top ranked item with the *VLE* in second place. *Staff email* has also moved up to third place, overtaking *e-portfolio* and *digital repositories*.

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	33	37%	44%	29%	43%	33%	67%	50%	0%
No, not considered	56	63%	56%	71%	57%	67%	33%	50%	100%

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 group see tables A5.4 and B5.4.

The majority of institutions have not considered or are not currently collaborating with other HE institutions. Pre-92 institutions and HE colleges would appear to be more likely to collaborate than Post-92 institutions. Institutions in Wales and Scotland are also more likely to collaborate, which was explained by one respondent as being part of their national culture.

Of those that do collaborate with others, the majority mentioned shared services such as the VLE and lecture capture systems. Other examples included joint online programmes, shared TEL resources and shared staff development in the form of courses and joint events.

Question 5.5: What if any, recent and prospective developments in technology are starting to make new demands upon you in terms of the support required by users?

Figure 5.5: Word cloud showing the developments making new demands

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

Top five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Mobile technologies/Bring your own device (support, access to systems/content)	49	59%	61%	56%	71%	61%	40%	60%	100%
Assessment (e-submission, e-marking, e-feedback)	26	31%	25%	38%	29%	35%	20%	20%	0%
Lecture capture	18	22%	33%	13%	14%	20%	40%	30%	0%
VLE – new/change, embed	11	13%	14%	15%	0%	14%	0%	20%	0%
Multimedia (use, provision, management, support)	10	12%	11%	10%	29%	11%	20%	20%	0%

Note: n=82 for Table 5.5

As in 2008 and 2010, this was an open question and respondents were invited to give up to three responses and 82 respondents did so. The responses, many of which were multipart were then categorised. The top five demands are given in Table 5.5. For a full breakdown by country, institution type and mission group see Tables A5.5 and B5.5.

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.

In 2012, *mobile technologies* move from second to the top of the list as the item making the most demand on support with an increase from 23% to 59%. *E-assessment* and *lecture capture* remain in the top five demands, but move up to second and third place respectively, *Web 2.0*, which was first in 2010, is now seen as much less demanding with a reduction from 30% to 8%.

The *VLE*, in terms of changing to a new system or embedding use of the VLE, moves into the top five. Question 3.3 reported that 62% of respondents had reviewed their VLE in the past two years and we are now seeing the outcomes of these reviews putting support demands on institutions as they either move to new VLEs or upgrade their existing VLE.

Podcasting was a key concern in 2008 and has now disappeared from the list of items making demands on support. This could be related to the data given in Table C3.10 which shows the decline of centrally supported podcasting solutions and the addition of lecture capture solutions which are becoming embedded in institutions.

Question 5.6: What challenges do you see these developments posing over the next two to three years in terms of support that will be required for staff and students?

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

Table 5.6 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 five	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Mobile technologies/learning (support, creating content and compatibility with systems)	23	29%	24%	32%	33%	29%	20%	33%	0%
Staff development	19	24%	22%	22%	50%	25%	20%	22%	0%
Legal/policy issues (inc. IPR, copyright, data security)	14	18%	22%	16%	0%	17%	20%	22%	0%
E-assessment (submission, marking)	12	15%	16%	14%	17%	17%	0%	11%	0%
Lack of support staff/necessary skills	10	13%	16%	11%	0%	11%	40%	11%	0%

Note: n=80 for Table 5.6

Table 5.6 gives the five most commonly cited challenges. For a full breakdown by country, institution type and mission group see Tables A5.6 and B5.6. Totals and percentages are based upon 80 respondents. As in 2008 and 2010, 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.

The 2012 Survey sees a change in four of the top five challenges, with *mobile technologies/learning* as a new challenge which ousts *staff development* from the top spot into second place. *E-assessment* and *legal/policy issues* have also become more of a challenge in 2012. *Interaction with non-institutional tools* and *technical infrastructure* are now less of a challenge with a change from 22% and 18% respectively in 2010 to 6% and 9% in 2012.

Staff development is seen as a greater challenge in HE colleges with 50% of respondents mentioning this. *Legal/policy issues* are felt to be a greater challenge in Pre-92 institutions and less so in HE colleges where no respondents highlighted this as a challenge.

Question 5.7: In general, how do you see these challenges being overcome?

Figure 5.7: Word cloud showing most commonly mentioned words for overcoming the challenges reported in Question 5.6

Table 5.7 How the challenges are being overcome

	No.	Total	Pre-92	Post-92	Coll	Eng	Wal	Sco	NI
Staff development	24	32%	24%	39%	33%	33%	20%	25%	0%
Investment of time, resources and support staff	19	25%	35%	19%	0%	25%	20%	25%	0%
Strategies/policies	14	18%	12%	25%	17%	21%	0%	13%	0%
Self service support materials (PDF, video)	10	13%	6%	19%	17%	11%	40%	13%	0%
Sharing good practice, success stories and case studies	9	12%	12%	14%	0%	14%	0%	0%	0%

Note: n=76 for Table 5.7

Table 5.7 lists the most commonly cited solutions to the challenges identified in Question 5.6. For a full breakdown by country, institution type and mission group see tables A5.7 and B5.7. Totals and percentages are based upon 76 respondents. As in 2008 and 2010, 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.

Once again *Staff development* is identified as the primary means by which the challenges identified in Question 5.6 can be overcome. *Strategies/policies* is once again in the top three solutions. *Investment of time, resources and support staff* combines a number of previous categories and finds itself in second place. Of greater importance in 2012 is the provision of *self service support materials* which is now in fourth place and was of negligible importance in 2010. *Sharing good practice, success stories and case studies* might equate to the *communities of practice* solution in 2010, and thus remains in the top five. *Technical/pedagogical relationship*, which was in fifth place in 2010, has now dropped to the bottom of the list (a change of 13%).

Staff development is cited less frequently by Pre-92 institutions as a solution, with *investment of time, resources and support staff* representing the most commonly mentioned solution. This preference is also shared by the majority of 1994 Group and Russell Group institutions.

Appendices will be added to the Report shortly