



# e-Assessment Practice at Russell Group Universities

*This report presents the findings of the survey conducted  
by Learning Technology and Innovation at LSE  
which aims to review the experience of Russell Group Universities*

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## Executive Summary

The Learning Technology & Innovation (LTI) at the London School of Economics & Political Science (LSE) undertook a study on e-assessment practice across Russell Group universities in an effort to better understand the current e-assessment landscape and the various institutional factors affecting the degree of engagement with e-assessment practice. This report details the results of the online survey relating to all Russell Group universities while providing a focused analysis on LSE from a comparative perspective.

The findings illustrate a wide degree of technology usage for e-assessment practice. While some universities make extensive use of technology throughout the assessment life-cycle from e-Submission to e-Return, others use it sparingly or have concentrated usage at a specific point in the life-cycle (e.g. early stage or mid-stage). Overall however, there is significant usage of basic platforms such as Moodle (or equivalent Virtual Learning Environments) and Turnitin. Furthermore, the study revealed the use of newer technologies such as tablet computing and student produced video for both formative and summative assessments, which may be seen to highlight an inclination toward innovative practice in e-assessment.

From an institutional perspective, the findings suggest institutional culture and time constraints prove to be critical factors to enabling e-assessment development. While technical feasibility constitutes an important component of driving e-assessment practice, the results affirm the necessary behavioral and organizational change management components of enabling new and innovative process reforms. Most interestingly in this regard, the study suggests non-financial incentives are under-exploited in motivating greater engagement with e-assessment.

LSE's experience and engagement with e-assessment is not uncommon in relation to other Russell Group universities, particularly with regards to the institutional factors that enable and constrain e-assessment development. However, significant improvements can be made with increasing the number of modules incorporating technology throughout the entire assessment life-cycle; while LSE uses technology throughout the entire assessment life-cycle for approximately 11% of all offered courses, the Russell Group average stands at 43.10%.

## Background

The diverse opportunities technology offers combined with the ubiquity of student-owned devices present educators with new tools and opportunities for assessment and feedback. As such, higher education institutions across the UK have been incorporating technology to support assessment and ameliorate educational outcomes.

Students cite time saved and the improved clarity and understanding of feedback as some of the benefits of technology enhanced learning while educators often cite the reduced administrative burden as a principal benefit (JISC, 2013). A clear understanding of the current way in which technology is used throughout the assessment life-cycle is an important precursor to furthering the role and impact of technology on learning. Relatedly, it is of interest and relevance to examine the institutional factors that enable and constrain the development of e-assessment across universities.

## Purpose of Study

Learning Technology & Innovation (LTI) at the London School of Economics & Political Science (LSE) undertook a study on the level and provision of “assessment and feedback with technology” – “e-assessment” – practice at Russell Group universities.

The purpose of the research was two-fold:

1. To understand the level of engagement with e-assessment practice at Russell Group universities;
2. To understand the factors that encourage participation and engagement with e-assessment as well as barriers involved in this regard.

This research relates to LTI’s ongoing work to improve assessment and feedback with technology practice at LSE that covers the entire assessment life-cycle (e-Submission, e-Marking, e-Feedback and e-Return).

The research focuses specifically on the Russell Group Universities as they provide the most accurate frame of reference for LSE with regards to institutional performance.

## Definitions

**Electronic Management of Assessment (EMA):** Describes the way technology is used across the assessment life-cycle, from electronic submissions to electronic marking, feedback and return of grades. Among other processes, EMA includes assessment scheduling, submission tracking, academic integrity, marks recording, moderation and external examining (JISC, 2013).

**E-assessment Life-Cycle:** An assessment life-cycle that includes electronic submission (e-Submission), electronic marking (e-Marking), electronic feedback (e-Feedback), and electronic return of grades (e-Return).

**Formative Assessment:** Characterized as a low-stakes process where the emphasis is on learning and feedback. The “goal of formative assessment is to gather feedback that can be used by the instructor and the students to guide improvements in the ongoing teaching and learning context” (Carnegie Mellon, 2015; JISC, 2007).

**Summative Assessment:** Characterized as a high-stakes process that is intended to be an indicator of student performance. The “goal of summative assessment is to measure the level of success or proficiency that has been obtained at the end of an instructional unit by comparing [results] against some standard or benchmark” (Carnegie Mellon, 2015; JISC, 2007).

**Virtual Learning Environment (VLE):** A “system for delivering learning materials to students via the web” (Oxford University Press). VLEs include platforms for assessment, collaboration, and communication between instructors and students and between peers.

**Bring Your Own Device (BYOD):** refers to the policy of allowing students to bring and use personally owned mobile devices (laptops, tablets, and smart phones) for their studies.

## Methodology & Limitations

An online survey was distributed to key informants within Learning and Technology teams at Russell Group universities. Of the 24 universities invited to participate, 20 submitted complete responses, yielding an 83% response rate. The survey consisted of a mix of multiple choice, short text entry, yes/no, and opinion scale questions. The complete survey can be found in Appendix A.

While this study benefits from a high response rate (83%) from within the sample of interest – Russell Group Universities – findings cannot be generalized to all UK higher education institutions.

Results are further subject to potential misreporting. To this end, a number of respondents stated they completed the survey to the ‘best of [their] knowledge’, thereby acknowledging the likelihood of errors in providing information. Nevertheless, it is unlikely such misreporting is systematic; respondents were made aware that no identifying information would be published. As such, responses would have no bearing on funding or university reputation but serve the sole purpose of research thereby neutralizing potential incentives to misreport.

Finally, a few respondents noted the survey responses reflected only part of the university’s provision (e.g. specific department(s) or division(s)). As such, while findings may be broadly representative of e-assessment practice at Russell Group universities, the limited granularity of the data warrants a degree of caution.

This report details the findings in two parts corresponding to the two-fold purpose of the research: understanding the level of engagement and subsequently assessing the factors that enable institutional participation with e-assessment practice. The findings conclude with an examination of LSE in relation to the Russell Group universities while the report concludes with a discussion of general findings and details areas for further research.

## Findings

### Part 1: Level of engagement with e-assessment Practice

58% of respondents within Russell Group universities stated their role to be a mixture of educational and technical support<sup>1</sup>. 29% of the respondents stated their role to be educational support and 13% provide technical support. The data (Table 1 below) reflect the variety of team structures and roles within the Russell Group universities.

Role	Number of Respondents	Percentage of Total
Educational support	7	29%
Educational support AND technical support	14	58%
Technical support	3	13%

**Table 1: Role of respondents within Russell Group universities**

When asked for an approximation as to *how many modules used technology for all stages of the e-assessment life-cycle*, the average value across  $n=9$  of 20 respondents was 43.10%; the remaining 11 respondents stated they did not know. Table 2 below presents the summary statistics pertaining to technology enhanced assessment and course coverage. As illustrated by the wide interval between the minimum and maximum values stated, there is a wide range of variation across the universities.

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<sup>1</sup> Similar to LTI’s role at LSE

Sample Size (n)	Minimum Value	Maximum Value	Mean	Median	Variance	Standard Deviation (s)
9	10	90	43.10	40	940.11	30.66

Table 2: Modules using technology: summary statistics

Further in the survey, respondents were asked to *indicate the extent of technology usage for formative and summative assessment in courses (modules), ranging from 'none', 'a little', 'some', 'a lot' or 'all'*.

When disaggregating the use of technology across the e-assessment life-cycle and further differentiating between formative and summative assessments, the survey findings reveal technology is used 'a lot' during the initial submission element for both formative and summative assessments; 40% of respondents use technology 'a lot' for submission in formative assessments while 60% use technology 'a lot' in summative assessments (Figures 1 & 2 below).

Further with regards to technology use, 'some' and 'a little' were dominant responses in the formative assessment context while 'some' and 'a lot' were dominant responses in the summative assessment context.

Figures 1 and 2 below illustrate the breakdown of technology used throughout the e-assessment life-cycle; Appendix B details the corresponding absolute values.

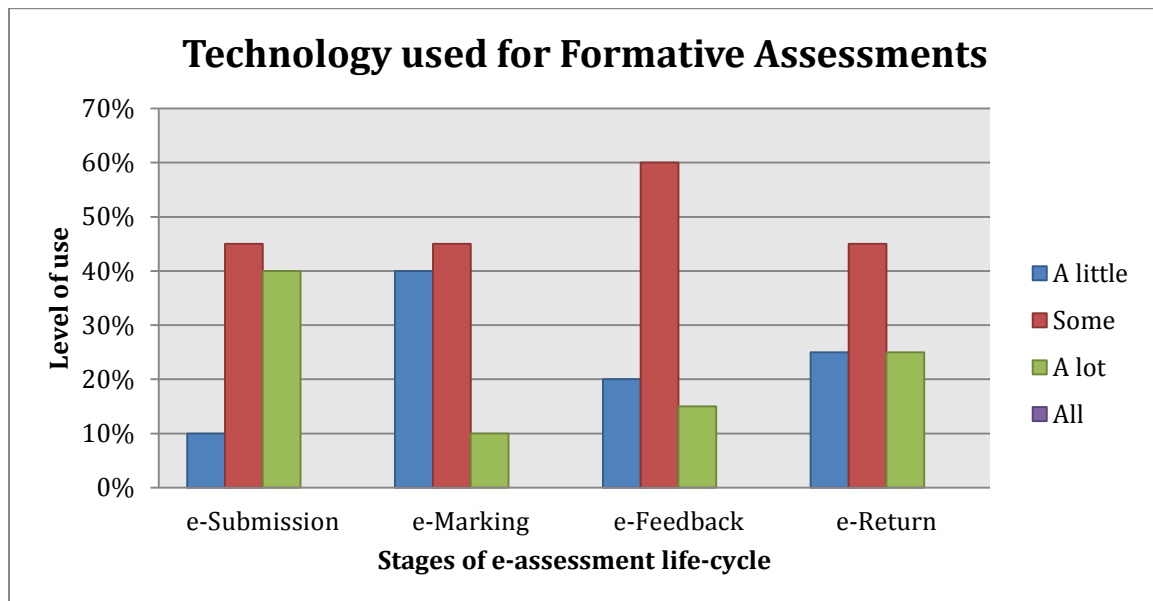


Figure 1: Technology used in formative e-assessment life-cycle



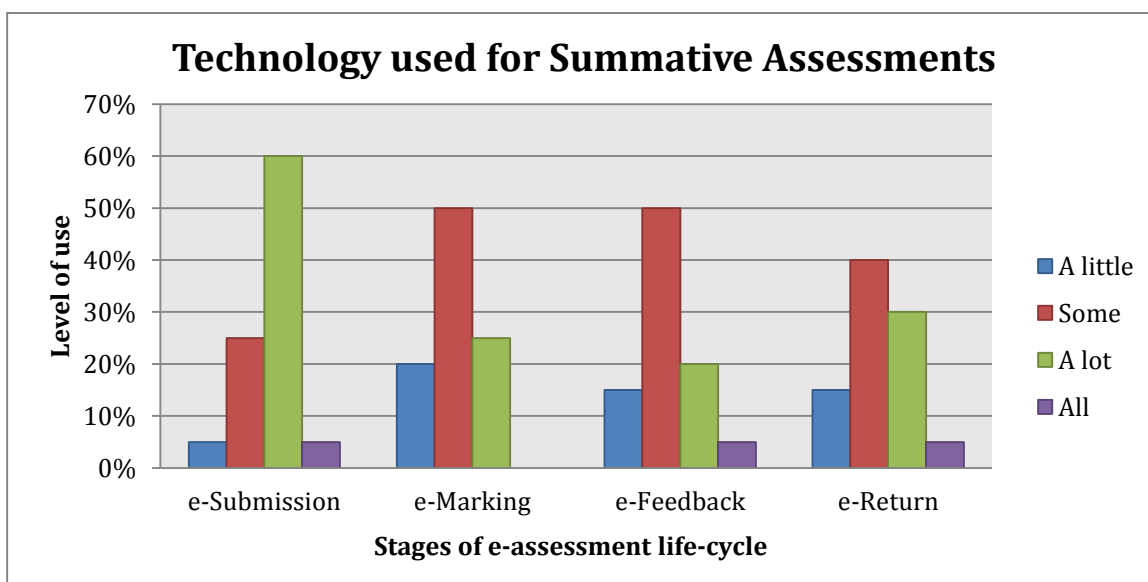


Figure 2: Technology used in summative e-assessment life-cycle

Moreover, respondents were asked to *provide details of platform usage for each stage of the assessment life-cycle.*

As Figures 3 and 4 below highlight, VLEs were the most frequently used platform throughout the e-assessment life-cycle for both formative and summative assessments.

The second most commonly used platform was Turnitin as an integrated component of the VLE in both summative and formative assessments.

Respondents noted *e-portfolios* and *Google-based document sharing* platforms under 'other' for both formative and summative assessments. As the two figures illustrate, a relatively similar distribution of platform usage is evident between both formative and summative assessments.

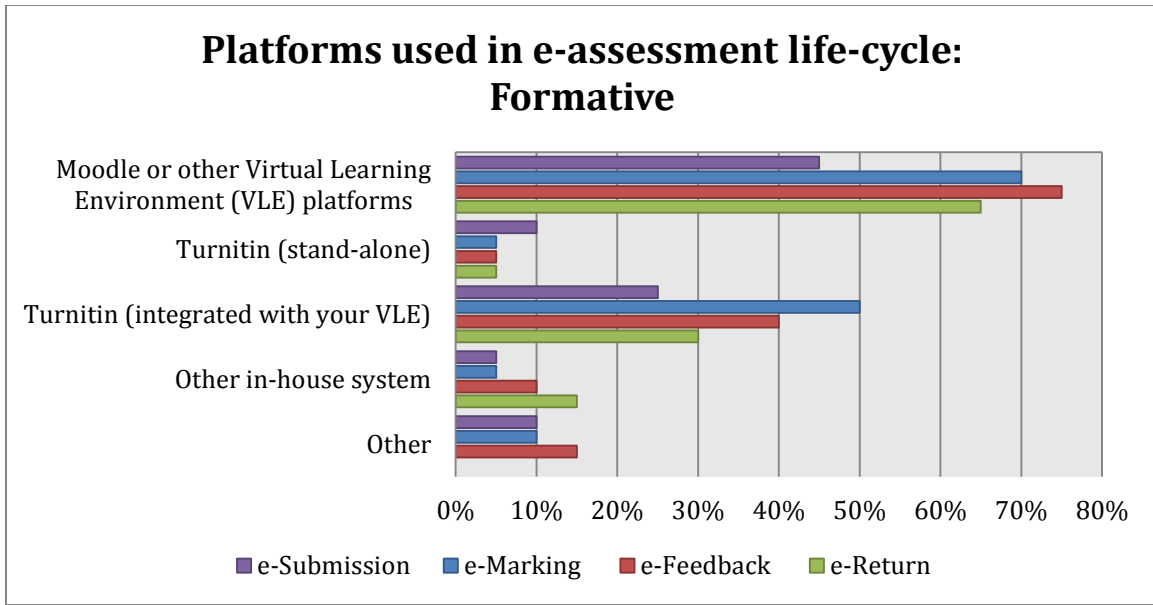


Figure 3: Platforms used in formative e-assessment life-cycle

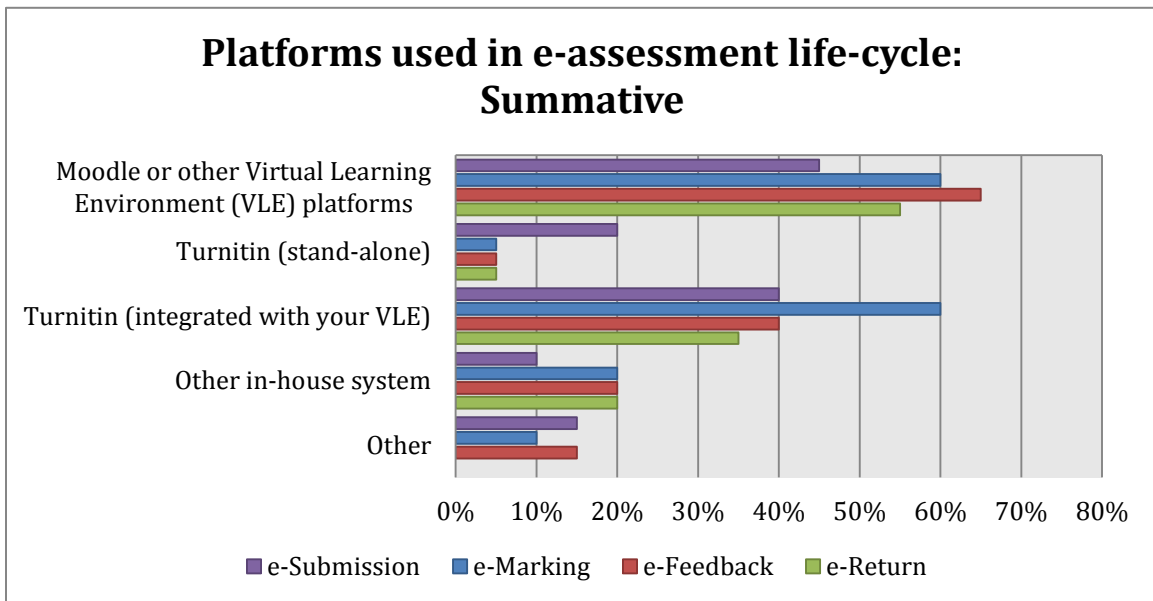


Figure 4: Platforms used in summative e-assessment life-cycle

Figures 5 and 6 below present in more detail the relationship between ‘VLE’ and ‘Turnitin as an integrated component of the VLE’ for both formative and summative assessments respectively.

The graphs highlight a variance in usage based on whether in a formative or summative assessment context. While ‘VLEs’ are consistently used in both formative and summative assessments, ‘VLE-TII’ as an integrated component of the VLE usage is increased in the summative context.

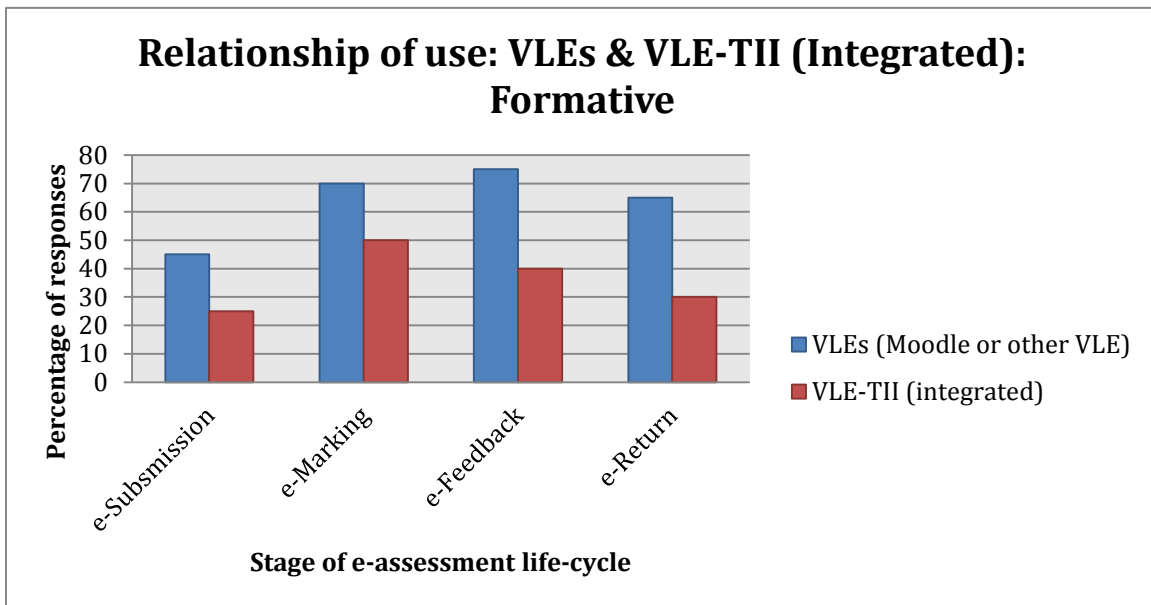


Figure 5: Relationship between 'VLE' and 'VLE-TII' (integrated). This graph illustrates the specified relationship for formative assessments.

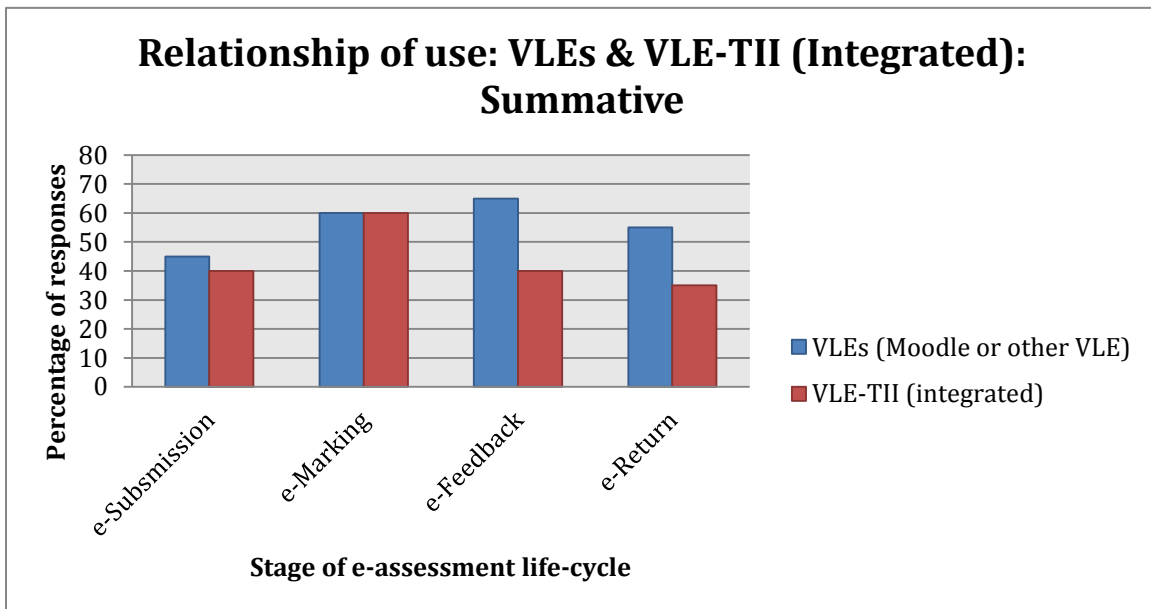


Figure 6: Relationship between 'VLE' and 'VLE-TII' (integrated). This graph illustrates the specified relationship for summative assessments.

With regards to the technologies and tools used in e-assessment, 'audio feedback', 'e-portfolios for self-assessment', 'student produced audio', and 'student produced video' were among the most frequently used ones. These platforms were evenly utilized to support both formative and summative assessments (Figure 7).

'Audio feedback' was used relatively evenly between formative and summative assessments; of the total respondents using audio feedback, 65% used it for formative assessments while 60% used it to provide feedback in the summative assessment context. In contrast, of the total responses marked for 'video feedback', 45% of usage was in relation to formative assessments while 25% was for the purpose of providing feedback on summative assessments.

When examining the use of 'e-portfolios', the results reveal comparatively higher usage of e-portfolios for self-assessment as compared to peer-assessment.

With regards to tools, universities make use of 'students' owned devices' (Bring Your Own Device (BYOD)) for formative assessments and summative assessments but this practice is more prevalent in the formative context (40% in the formative versus 20% in the summative case). As additionally evident in Figure 7, 'tablet computing' was used with relatively high frequency but used to support formative assessments approximately 45% more than summative assessments. Open badges and QR codes were the least used technologies. Respondents noted WebPA for peer-assessment and Personal Response Systems (PRS) under 'Other'.

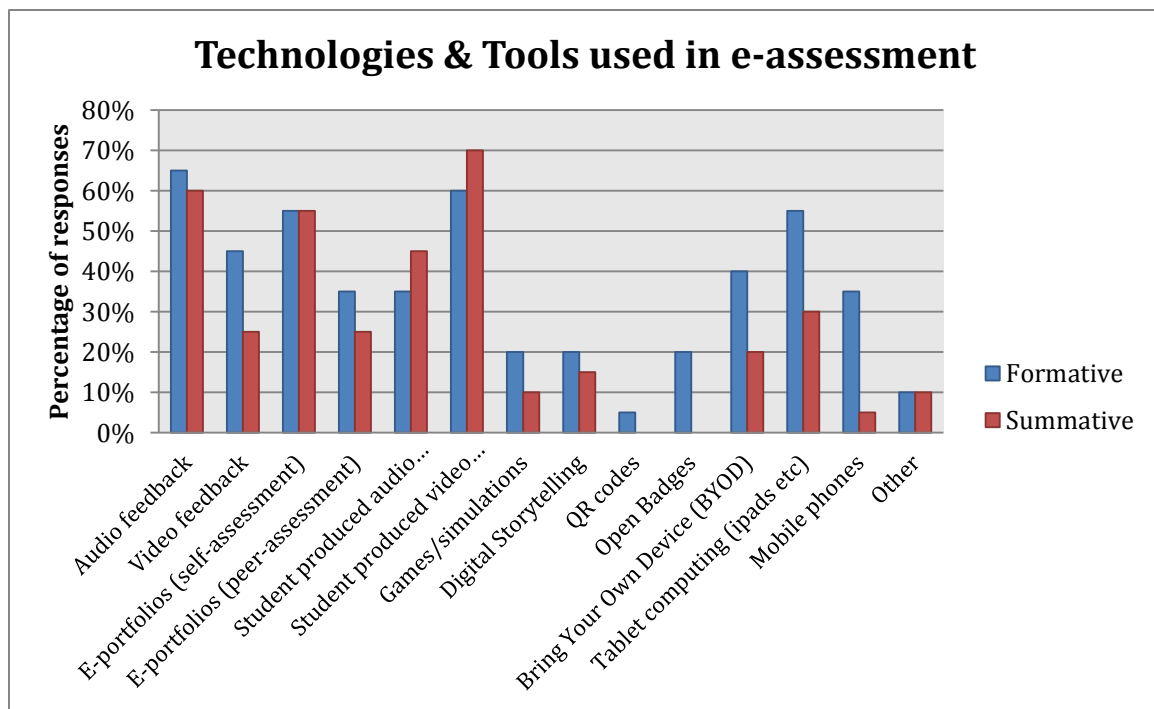


Figure 7: Technologies and tools used in e-assessment

## Part 2: Factors Conducive and Critical to E-assessment Engagement

The second part of the survey was concerned with examining the factors that enable participation and engagement with e-assessment practice.

Respondents were asked to provide a rating from 1 (unimportant) to 5 (critical) for eleven main factors that may have a role in increasing the level of e-assessment usage in institutions:

1. Enhancing quality of assessment in general
2. Meeting student expectations
3. Improving administrative processes and efficiency
4. Keeping up with educational standards and trends
5. NSS results and rankings
6. Institutional strategy/policy
7. Training
8. Financial incentives
9. Accessibility
10. Availability and access to tools
11. Reliability of available tools

The highlighted sections within Table 3 below present the factors for each of the categories from 1 (unimportant) to 5 (critical) with the highest frequency amongst responses.

Financial incentives were not seen as a significant factor with 30% of respondents highlighting it as an 'unimportant' factor (replying with '1') and 30% of respondents identifying it as a 'slightly important' factor (replying with '2').

Training was seen as an 'important' factor with 55% of respondents replying with '3'. 75% of respondents stated that Meeting student expectations was 'very important' (replying with '4').

NSS results and rankings as well as Institutional strategy/policy were additional factors cited as 'very important' by 65% and 60% of respondents respectively (replying with '4').

45% of respondents cited the Reliability of available tools as 'critical' (replying with '5') to increasing the level of e-assessment usage. No additional factors were stated by respondents under "other".

Table 3 below provides details of all the responses for each individual factor, with highlighted areas representing the factor noted with the highest frequency under each of the categories from 'unimportant' to 'critical'.

*“How important, in your opinion, are each of the following factors for increasing the level of e-assessment usage in your institution?” Please rate the importance on a scale of 1 to 5.*

	<b>1= Unimportant</b>	<b>2= Slightly Important</b>	<b>3= Important</b>	<b>4= Very Important</b>	<b>5= Critical</b>
Enhancing quality of assessment in general	0%	5%	20%	45%	30%
Meeting student expectations	0%	0%	10%	75%	15%
Improving administrative processes and efficiency	0%	5%	15%	45%	35%
Keeping up with educational standards and trends	0%	10%	40%	45%	5%
NSS results and rankings	0%	10%	10%	65%	15%
Institutional strategy/policy	0%	5%	25%	60%	10%
Training	0%	5%	55%	25%	15%
Financial incentives	30%	30%	20%	0%	0%
Accessibility	0%	20%	40%	25%	15%
Availability and access to tools	0%	15%	30%	30%	25%
Reliability of available tools	0%	0%	15%	40%	45%

**Table 3: Highest % of responses on factors for increasing the level of e-assessment practice in each of the categories (1-5)**

However, looking at the average of responses rated from ‘important’ to ‘critical’, the *Reliability of available tools* and *Meeting student expectations* were the two most significant factors, each with an average response of 33% (Table 4 below).

*Enhancing the quality of assessment in general, Improving administrative processes and efficiency, Institutional strategy/policy* and *Training* were the subsequent factors that had an average of 32% across the ‘important’ to ‘critical’ categories.

*“How important, in your opinion, are each of the following factors for increasing the level of e-assessment usage in your institution?” Please rate the importance on a scale of 1 to 5.*

	<b>3= Important</b>	<b>4= Very Important</b>	<b>5= Critical</b>	<b>Average responses ‘3’ to ‘5’</b>
Enhancing quality of assessment in general	20%	45%	30%	32%
Meeting student expectations	10%	75%	15%	33%
Improving administrative processes and efficiency	15%	45%	35%	32%
Keeping up with educational standards and trends	40%	45%	5%	30%
NSS results and rankings	10%	65%	15%	30%
Institutional strategy/policy	25%	60%	10%	32%
Training	55%	25%	15%	32%
Financial incentives	20%	0%	0%	6%
Accessibility	40%	25%	15%	27%
Availability and access to tools	30%	30%	25%	28%
Reliability of available tools	15%	40%	45%	33%

**Table 4: Factors relevant to increasing the level of e-assessment practice, including average values across the ‘important’ to ‘critical’ categories.**

Respondents were asked to provide a rating from 1 (unimportant) to 5 (critical) for five main factors that can be barriers to the development of e-assessment in institutions:

1. Lack of time
2. Lack of technical knowledge amongst academic staff
3. Lack of funding
4. Institutional culture
5. Lack of incentives

The highlighted sections within Table 5 below present the factors for each of the categories from 1 (unimportant) to 5 (critical) with the highest frequency amongst responses.

Lack of funding was not seen as a significant factor with 20% of respondents highlighting it as an ‘unimportant’ factor (replying with ‘1’) and 25% of respondents identifying it as a ‘slightly important’ factor (replying with ‘2’).

Even though in the previous question Financial incentives were not seen as a significant factor with only 30% of respondents highlighting it as a ‘slightly important’ and 30% highlighting it as an ‘unimportant’ factor in increasing the level of e-assessment usage in their institutions (see Table 3 above), when asked as to the barriers to the development of e-assessment, Lack of incentives was the most frequently cited ‘important’ factor with 55% of respondents affirming its significance replying with ‘3’ (Table 5 below).

Relatedly, 45% of respondents cited both Lack of technical knowledge amongst academic staff and the Institutional culture as being ‘very important’ (replying with ‘4’) constraints on e-assessment development.

Lack of time and Institutional culture were highlighted as ‘critical’ barriers to the development of e-assessment by 15% of respondents respectively. To note, respondents stated Lack of compulsion, academic skepticism, variable business processes, and inadequate platforms under ‘Other’.

<i>How important, in your opinion, are the following barriers to the development of e-assessment in your institution? Please rate the importance on a scale of 1 to 5.</i>					
	<b>1= Unimportant</b>	<b>2= Slightly Important</b>	<b>3= Important</b>	<b>4= Very Important</b>	<b>5= Critical</b>
Lack of time	10%	10%	35%	30%	15%
Lack of technical knowledge amongst academic staff	10%	10%	25%	45%	10%
Lack of funding	20%	25%	20%	20%	5%
Institutional culture	0%	5%	35%	45%	15%
Lack of incentives	0%	15%	55%	10%	5%

**Table 5: Highest % of responses on barriers to e-assessment development in each of the categories (1-5)**

Looking at the average of responses rated from ‘important’ to ‘critical’ in terms of the barriers to e-assessment (Table 6 below), Institutional culture was on average, the most significant factor across the ‘important’ to ‘critical’ categories (32%), while Lack of time



and *Lack of knowledge amongst academic staff* were the two factors following (27% each).

<i>How important, in your opinion, are the following barriers to the development of e-assessment in your institution? Please rate the importance on a scale of 1 to 5.</i>				
	<b>3= Important</b>	<b>4= Very Important</b>	<b>5= Critical</b>	<b>Average responses '3' to '5'</b>
Lack of time	35%	30%	15%	27%
Lack of technical knowledge amongst academic staff	25%	45%	10%	27%
Lack of funding	20%	20%	5%	15%
Institutional culture	35%	45%	15%	32%
Lack of incentives	55%	10%	5%	23%

**Table 6: Barriers to e-Assessment development, including average values across the 'important' to 'critical' categories**

### Part 3: Assessment and feedback with technology at LSE

LSE's responses to this survey have been extracted and compared with the results of the study as a whole. The purpose of the latter is to identify areas of difference in order to better associate assessment and feedback with technology at LSE while providing some context within which to relate and attribute LSE's experience to Russell Group practices.

The comparison indicates that LSE uses technology for all elements of the assessment life-cycle for approximately 11% of all offered courses – a figure falling well below the Russell Group average of 43.10%.

Technology is used 'a little' throughout the assessment life-cycle in formative assessments. Furthermore, technology is used 'a little' for the stages of 'e-Submission' and 'e-Marking' in summative assessments, while not used at all for the latter stages of the assessment life-cycle, consisting of 'e-Feedback' and 'e-Return'.

Consistent with the general findings, LSE uses the institutional VLE (Moodle) throughout the assessment life-cycle in the formative assessment context. However, the survey responses indicated Moodle as only used for 'e-Submission' in the summative context<sup>2</sup>. Turnitin is used both as a stand-alone and as an integrated feature of Moodle for 'e-Submission' in both assessment structures. The latter is however used in a pilot phase and is limited only to those courses participating in LSE's pilots of Moodle-TII integration.

<sup>2</sup> However, it is to the knowledge of the author that Moodle is used for other stages in the summative assessment context although this usage is not widespread.

With regards to technologies and tools used for e-assessment, LSE makes use of the most frequently cited technologies, including audio and video feedback, e-portfolios, and tablet computing.

The findings further highlight LSE's experience as closely related to that of Russell Group universities with respect to the enabling and constraining factors affecting the level of e-assessment practice. Enhancing the general effectiveness of assessment was cited as a critical factor while meeting student expectations, NSS results and institutional policy/strategy, and the accessibility and reliability of tools, were marked as 'very important' factors.

Institutional culture and lack of funding were cited as the two barriers with critical significance in constraining e-assessment development at the university.

## Discussion

The findings of this survey illustrate a wide variance in e-assessment practice and engagement among Russell Group universities. While a basic degree of engagement and a general trend towards EMA practice is evident, it is clear an extensive application of technology throughout the assessment life-cycle has yet to be reached<sup>3</sup>. However, given student produced audio and video is a relatively new trend, the high rates of usage of these technologies suggests an inclination towards innovative practice in assessment. It is of further interest to note that these technologies are used not just for the formative assessments but also additionally, for summative assessments. In fact, the survey data broadly suggests a greater degree of technology use throughout the summative assessment life-cycle (e.g. Figures 1 and 2).

The findings suggest institutional culture and time constraints prove to be critical factors to enabling e-assessment development. While technical feasibility constitutes an important component of driving e-assessment practice, the results affirm the necessary behavioral and organizational change management components of enabling new and innovative process reforms.

To this end, paying due attention to 'role clarity' in designing EMA workflows, ensuring the visibility of EMA benefits, and providing repeated opportunities to interact with EMA processes are cited as important change management tactics (JISC, 2013).

The significance of this transitional support cannot be understated; much existing work on education with technology acknowledges the divergence in perspectives that often

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<sup>3</sup> The JISC Assessment and Feedback project running from September 2011 to November 2014 tracks a series of blog posts, reports, and case studies highlighting shifts in the assessment landscape and the associated opportunities and challenges. The program's final report, "Supporting assessment feedback practice with technology: from tinkering to transformation" was published in 2013 and is available on [http://repository.jisc.ac.uk/5450/4/Jisc\\_AF\\_Final\\_Synthesis\\_Report\\_Oct\\_2013\\_v2.pdf](http://repository.jisc.ac.uk/5450/4/Jisc_AF_Final_Synthesis_Report_Oct_2013_v2.pdf) (accessed 8/9/2015).

exists between academic staff and departmental administrators, which ultimately inhibits e-assessment innovation. At the University of Exeter for example,

*“Almost all professional staff saw clear benefits, while only half of the academic staff saw any benefit. Academic staff felt that administrators would be the main beneficiaries with students seeing some benefit. Professional staff, however, saw students as the main beneficiaries.”*

JISC (2013)

Building clear consensus as to the goals, objectives, and merit of e-assessment to all entities involved in the process is thus of clear importance.

Financial incentives were stated to be ‘slightly important’ by approximately 30% of respondents but 50% of respondents cited lack of incentives as an ‘important’ barrier. The latter suggests non-financial incentives may currently be unexploited in motivating greater engagement with e-assessment across Russell Group universities. Thus, while any change management process proves complex and often contentious, the findings reveal an interesting and potentially new area for exploration with regards to non-financial incentives.

## **Assessment and feedback with technology at LSE**

The findings suggest LSE is below average with regards to its use of technology throughout the e-assessment life-cycle. As cited, institutional culture and lack of funding may be two factors that help explain LSE’s comparatively lower performance. While the university does not make extensive use of a diversity of tools and technologies, the findings reveal LSE on par with other universities with regards to the adoption of popularly used tools such as tablet computing and audio/video feedback.

## **Further Research**

This study has focused on understanding the current level of engagement with e-assessment practice across Russell Group universities while further providing a preliminary analysis regarding the factors that encourage or constrain e-assessment practice. The findings complement existing work on the pedagogical and administrative benefits of electronically managed assessment processes. Nevertheless, while the benefits of electronically managed assessment processes may be shared between students, educators, and administrative staff, considerably more can be done to examine how the design and implementation of e-assessment is in congruence with the characteristics of good assessment – for example, reliable, valid and fair – and to what extent it facilitates the latter. The latter proves an area of further research that may significantly aid a more holistic and comprehensive understanding of the e-assessment landscape.

## References

Carnegie Mellon. (2015). "Whys and Hows of Assessments." Accessed on June 25, 2015 from <http://www.cmu.edu/teaching/assessment/howto/basics/formative-summative.html>

HeLF. "Electronic Management of Assessment Survey Report 2013." Accessed on June 19, 2015 from [https://drive.google.com/file/d/0B8aF5QN3s\\_UDUHhyaGFPZWVDZDg/edit](https://drive.google.com/file/d/0B8aF5QN3s_UDUHhyaGFPZWVDZDg/edit)

Joint Information Systems Committee (JISC). (2013). "Electronic Management of Assessment." Accessed on June 25, 2015 from <https://www.jisc.ac.uk/guides/electronic-assessment-management>

Joint Information Systems Committee (JISC). (2007). "Effective Practice with e-Assessment." Accessed on June 26, 2015 from <http://www.webarchive.org.uk/wayback/archive/20140615085433/http://www.jisc.ac.uk/media/documents/themes/elearning/effpraceassess.pdf>

Joint Information Systems Committee (JISC). (2006). "Effective use of VLEs: e-Assessment." Accessed on June 29, 2015 from <http://tools.jiscinfonet.ac.uk/downloads/vle/eassessment-printable.pdf>

Joint Information Systems Committee (JISC). (2012). A view of the Assessment and Feedback Landscape: baseline analysis of policy and practice from the JISC Assessment & Feedback programme. Accessed on June 19, 2015 from <http://www.jisc.ac.uk/media/documents/programmes/elearning/Assessment/JISCAFBaselineReportMay2012.pdf>

Oxford University Press. (2015). "Learn about Virtual Learning Environment/Course Management System content." Accessed on August 3, 2015 from <http://global.oup.com/uk/orc/learnvle/>

## Appendix A: Survey questions

### E-Assessment Practice and Engagement at Your Institution

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1. Name of your institution/department (e.g. London School of Economics/Learning Technology and Innovation)

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2. What is the role of your team in supporting 'assessment with technology' (e-assessment)?

- Educational support
- Educational support AND technical support
- Technical support

3. Does your institution use electronic submission (e-submission), electronic marking (e-marking), electronic feedback (e-feedback) or electronic return of grades (e-return) of assessment?

- Yes
- No

**If 'No', please skip to question 10 highlighted below**

4. How many modules (courses) use technology for all elements of the assessment cycle (e-submission, e-marking, e-feedback and e-return) in your institution? Please answer in terms of percentages (%).

	None										All
	0	10	20	30	40	50	60	70	80	90	100
Modules (courses) in your institution											

I am not sure

5. To what extent is technology used for formative and summative assessments in modules (courses)?

	Formative					Summative				
	None	A little	Some	A lot	All	None	A little	Some	A lot	All
E-submission	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-marking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-feedback	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-return	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Which of the following platforms are used in your institution to support which stage of the assessment life-cycle? Please check all that apply and include not listed ones in "other".

	Formative				Summative			
	E-Submission	E-Marking	E-Feedback	E-Return	E-Submission	E-Marking	E-Feedback	E-Return
Moodle or other Virtual Learning Environment (VLE) platforms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnitin (stand-alone)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Turnitin (integrated with your VLE)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other in-house system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Which of the following technologies, tools and/or policies are used in your institution to support assessment? Please check all that apply and include not listed ones in "other".

	Formative	Summative
	Tick (✓) those used	Tick (✓) those used
Audio feedback		
Video feedback		
E-portfolios (for self-assessment)		
E-portfolios (for peer-assessment)		
Student produced audio presentations		
Student produced video presentations		
Games/simulations		
Digital Storytelling		
QR codes		
Open Badges		
Bring Your Own Device (BYOD)		
Tablet computing (ipads etc)		
Mobile phones		
Other		

8. How important, in your opinion, are each of the following factors for increasing the level of e-assessment usage in your institution? Please rate the importance on a scale of 1 to 5.

	1 = Unimportant	2 = Slightly important	3 = Important	4 = Very important	5 = Critical	N/A
Enhancing quality of assessment in general						
Meeting student expectations						
Improving administrative processes and efficiency						
Keeping up with educational standards and trends						
NSS results and rankings						
Institutional strategy/policy						
Training						
Financial incentives						
Accessibility						
Availability and access to tools						
Reliability of available tools						
Other						



9. How important, in your opinion, are the following barriers to the development of e-assessment in your institution? Please rate the importance on a scale of 1 to 5.

	1 = Unimportant	2 = Slightly important	3 = Important	4 = Very important	5 = Critical	N/A
Lack of time						
Lack of technical knowledge amongst academic staff						
Lack of funding						
Institutional culture						
Lack of incentives						
Other						

Is there anything else you would like to tell us about e-assessment in your institution not covered in the survey?

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**Answer question 10 only if you replied 'No' to Question 3 above**

10. Which of the following are reasons as to why technology is currently **not** being used for e-submission, e-marking, e-feedback or e-return of assessments in your institution?

	Select all that apply
Lack of time	
Lack of technical knowledge amongst academic staff	
Lack of funding	
Institutional culture	
Lack of incentives	
Other	

Is there anything else you would like to tell us about e-assessment in your institution not covered in the survey?

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## Appendix B: Technology used in Assessment life-cycle

The tables below present the absolute values corresponding to Figures 1 and 2 referenced in the findings.

### Technology used for Formative Assessments

	A little	Some	A lot	All
E-submission	2	9	8	0
E-marking	8	9	2	0
E-feedback	4	12	3	0
E-return	5	9	5	0
<b>Total Responses</b>				20

### Technology used for Summative Assessments

	A little	Some	A lot	All
E-submission	1	5	12	1
E-marking	4	10	5	0
E-feedback	3	10	4	1
E-return	3	8	6	1
<b>Total Responses</b>				20