Refocusing institutional TEL provision on the learner: drivers for change in UK higher education

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UK higher education institutions have invested significantly in technology-enhanced learning (TEL) services over the last 15 years. The UCISA TEL surveys have shown how this investment has focused on establishing core infrastructure and services to students to satisfy consumer expectations, supporting greater efficiencies in the management and control of learning processes. However, new developments in UK government policy may encourage UK Higher Education Institutions (HEIs) to refocus their attention on the impact of TEL on student learning, with a greater emphasis on evidence-based practice in the use of TEL tools. This paper discusses the prospects for change in the use of TEL tools and services to support this new agenda.

Keywords: technology-enhanced learning, UK Higher Education

Introduction

The UK Government’s Higher Education White Paper (Department of Business, Innovation and Skills, 2016) proposes the introduction of the Teaching Excellence Framework (TEF) which will introduce major changes to the ways in which the quality of higher education is measured and assessed. The TEF (see THE, 2016 for more information) will provide a series of metrics to monitor the quality of teaching in English universities, with a successful outcome enabling institutions to charge premium tuition fees. The TEF is also viewed as a means of promoting teaching, redressing the balance with research and providing a greater degree of openness to students in terms of the release of information on their learning progress.

This promises major changes to the ways in which TEL services are leveraged by universities to support student learning. Investment in TEL provision has been directed to the provision of institution-wide services such as lecture capture and learning management systems, which complement campus-based learning and satisfy consumer expectations - a significant concern given the more competitive marketplace for student recruitment that has emerged across the sector. Institutions have also focused on the efficiencies that enterprise-wide systems can offer in managing and controlling learning processes, with limited attention paid to evidence-based practice for the use of TEL tools in supporting learning outcomes (Walker, Voce & Jenkins, 2013).

Drawing on the data from the Universities and Colleges Information Systems Association (UCISA) TEL biennial surveys, this paper considers the progress that institutions have made to date in establishing TEL services and the prospects for change in directing these services to support a learner-centred agenda.

The UCISA Surveys

The UCISA TEL surveys have been monitoring the management and implementation of technology-enhanced learning across the UK HE sector since 2001. The surveys have been completed by institutional heads of e-learning with responsibility for the delivery of learning and teaching services and have served a dual purpose in tracking longitudinal perspective of technology-enhanced learning (TEL) developments across the sector, whilst capturing new trends and developments through an evolving question-set. The most recent survey report (Walker et al., 2016) represents the eighth survey in the series.
Overview: the 2016 story

The 2016 TEL Survey presents the current picture of institutional TEL investment across the sector, showing that universities have made considerable progress in embedding the use of core technologies within their course delivery. Table 1 reveals that learning management and e-assessment systems are most commonly deployed across institutions, forming components of a digitally-enabled baseline provision to students, encompassing learning resources and support for course administration activities. In contrast, student-focused tools enabling active learning and interactive study approaches have attracted much less usage across institutions and do not feature in the list of leading tools.

Table 1: Percentage of institutional courses using TEL tools within the UK HE sector

<table>
<thead>
<tr>
<th>Top 5 Tools</th>
<th>100%</th>
<th>75%-99%</th>
<th>50%-74%</th>
<th>25%-49%</th>
<th>5%-24%</th>
<th>1%-4%</th>
<th>0%</th>
<th>Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Management System (LMS)</td>
<td>42%</td>
<td>50%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>5%</td>
</tr>
<tr>
<td>e-Submission tools (assignments)</td>
<td>20%</td>
<td>38%</td>
<td>20%</td>
<td>8%</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Text matching tools (e.g. SafeAssign, Turnitin, Urkund)</td>
<td>16%</td>
<td>42%</td>
<td>19%</td>
<td>8%</td>
<td>5%</td>
<td>0%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>Content management systems</td>
<td>11%</td>
<td>9%</td>
<td>2%</td>
<td>8%</td>
<td>12%</td>
<td>15%</td>
<td>14%</td>
<td>29%</td>
</tr>
<tr>
<td>Reading list management software</td>
<td>9%</td>
<td>21%</td>
<td>12%</td>
<td>13%</td>
<td>7%</td>
<td>7%</td>
<td>11%</td>
<td>20%</td>
</tr>
</tbody>
</table>


The emphasis on baseline provision of digital services to students – the standardisation of student learning and consistency in the learner experience across study programmes – has gained traction across the sector with TEL services now commonly used to supplement traditional course delivery (Reed & Watmough, 2015). Indeed, the provision of supplementary learning resources remains the most common use of TEL, with active learning design in the use of TEL tools representing more a feature of departmental teaching approaches, rather than an institution-wide practice. Figure 1 presents an overview of TEL use across UK HE based on the 2016 survey data (Walker, et al, 2016) based on the following course delivery modes and their adoption within institutions:

1. **Blended learning**: lecture notes and supplementary resources for courses studied in class are available;
2. **Blended learning**: parts of the course are studied in class and other parts require students to engage in active learning online (e.g. engaging in collaborative or assessed tasks);
3. **Fully online courses**;
4. **Open online learning courses for all students at your institution**: internal access only;
5. **Open online boundary courses**: free external access to the course materials for the public, but assessment restricted to students registered at your institution only;
6. **Open online learning courses for public**: free external access.
Meeting expectations

Arguably the scope and nature of institutional TEL investment over recent years has been strongly aligned to student expectations. Figure 2 below shows the top ranked drivers for institutional TEL investment and how they have changed over the period of the surveys; the data reveals the enduring influence of learning and teaching concerns as the primary driver for institutional investment in TEL services.

The data also reveals that feedback from students is one of the leading factors encouraging the development of TEL services. Feedback has been captured through instruments such as the National Student Survey (NSS) to measure levels of student satisfaction with teaching and learning delivery. Indeed, students have campaigned to exercise a greater influence over the development of TEL services that support learning and teaching activities and be seen as partners in educational design and delivery (Wenstone, 2013).
Show me the learning

And yet when reviewing UCISA data on institutional activity in evaluating the impact of TEL tools on student learning, we may observe a different picture of engagement with learning and pedagogic concerns. Figure 3 shows the level of institution-wide evaluation activity on the impact of TEL, focusing on the student learning experience and on pedagogic practices.

Studies on the impact of TEL on the student learning experience have tended to focus on ‘hygiene’ factors such as levels of student satisfaction and take-up of core TEL services, as opposed to studies of effective course design methods with technology. Commonly the focus of evaluations has been on studies of core systems such as the LMS or e-assessment provision, rather than on the impact of tools and applications on active student learning and the learning outcomes arising through the use of learning technologies in study activities. The focus on standardisation and consistency in the learner experience comes through strongly in the evaluations that have been conducted, indicating that consistency of provision and creating a common user experience are key concerns for UK institutions.

![Graph showing percentage of institutions undertaking evaluation of the impact of TEL](image)

**Fig 3: Percentage of institutions undertaking evaluation of the impact of TEL**

On the impact on pedagogic practices, determining take-up of TEL tools and usage across an institution (adoption) was the most widely reported purpose for the evaluation. Surprisingly the 2016 survey findings revealed a reduction in the percentage of institutions (from 44% in 2014 to 17% in 2016) selecting Assess value of TEL tools in relation to student performance (learning analytics) as the purpose of their evaluation activity. Learner analytics was a new focus for the 2016 survey, with additional questions added in response to interest in the sector (Newland, Martin & Ringan, 2015). Yet the UCISA survey indicates that learning analytics appears not to be well established across the sector, with only 19% of universities currently supporting an institutional service. Over 40% of institutions do expect to review these services over the next two years. (See Walker, 2016, for further discussion on these findings.)

The growing interest by HE providers in metrics for tracking the quality of learning no doubt is partly connected to discussions around the Teaching Excellence Framework (TEF) and its impending introduction to the English HE sector. The TEF will provide a quality assessment of teaching and learning based on a range of metrics, a good rating being linked to an institution’s ability to raise the threshold of their tuition fees. This may offer the greatest driver to investigating the impact of TEL tools on student learning and the achievement of learning outcomes.
Conclusions

The use of TEL is widely recognised as an important factor in UK HE and features strongly in institutional strategies. However, the UCISA surveys indicate that investment in TEL has been driven by a ‘student as consumer’ focus, rather than being widely based on evidence informed practice. UK HE is now facing two significant changes which will place greater emphasis on using big data; the TEF and growing interest in learning analytics. Jisc is currently working with more than 50 UK universities and colleges to support the development of a sector-wide learning analytics service, with the project due to be completed by the end of July 2017. Early indications are that the TEF is already making institutions consider how they will gather the metrics required and learning technologies will play an important part in this endeavour (ALT, 2016). Higher education institutions are therefore likely to have to consider how their existing infrastructure can evidence their teaching and learning practice and its impact on student achievement - in this way creating an opportunity for those engaged in supporting the use of TEL to help 'show them the learning'.

References

ALT (2016) ALT responds to inquiry into assessing quality in Higher Education


http://tinyurl.com/HeLF-learning-analytics


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