Changing practice: Does the LMS matter?

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What are the key drivers to change in teaching practice as they relate to the use of a learning management system? Is one system inherently better than another or is it teacher experience that matters most? Are we expecting academic staff to become 'experts in educational technology' and taking the focus away from developing their discipline expertise? What role do educational designers play in facilitating change in practice? What role does the institution play in supporting change in practice? This paper is meant to provoke discussion around these questions and asks you to consider how this might relate to your own experience and circumstance.

Keywords: LMS, teacher experience, educational design

Introduction

In Australian universities over the last couple of years there has been a noticeable change in the learning management system (LMS) landscape. Increasingly, universities are opting to utilise alternatives to proprietary learning management systems to instead use open source systems. This change is sometimes being coupled with a move to outsourcing the hosting and / or user support of these systems. What are some of the drivers behind these changes and is this making any difference to teaching in higher education?

At first glance this change in the LMS landscape might only seem significant in terms of university management and governance arrangements around how they work with open source systems and in some cases, outsourced hosting of such systems. Certainly these are both issues that need to be considered but does the choice of LMS matter in terms of the approach to teaching? Is there a difference in how teaching staff go about using an open source system and particularly those who have moved from a more constrained proprietary learning system environment?

Open source systems are perceived to be easier to use, not only at the user level but also at the system level; should we be examining the intrinsic affordances that developing a unit of study in an open source system might facilitate, compared to being developed in what might now be seen as a more traditional, proprietary system? This paper seeks to highlight some of the key questions to ask about the role of the software, teacher,

educational designer and the organisation – and the relationships between each of these – when examining the impact of the LMS on teaching practice in higher education.

Does the LMS matter?

"…we shape our tools and our tools shape us" (Boettcher, 2007)

The recent change in the learning management system landscape in Australia suggests dissatisfaction with the extant proprietary learning management systems. Bersin (in Aberdour 2008) lists low satisfaction with proprietary learning management systems due to lack of: out of the box functionality; management reporting; ease of customisation; flexible data models and architectures; and vendor service and support. A number of open source systems have emerged as viable alternatives allowing greater customisation and different support models ostensibly facilitated by less up front costs.

Some attributes of an LMS may help or hinder with change in teaching practice, such as basic architecture and 'mood', or emphasis, of supplied functions, and what these suggest. Some of our university teaching staff have just managed to get their head around web design guidelines:having at least the first screen of content (landing page) kept to a single screen of information; of using icons to represent areas of logical organisation, such as lecture content in one spot, assessment items in another, discussion forums in another, and so on; and the importance of white space and uncluttered sites, consistency of naming and layout. There are now many teaching staff who have spent several hours crafting their sites in an effort to achieve these ideals and there is a certain clean logic to dividing a unit of study into these components. Indeed, many proprietary LMS work on the basis of a set of tools that a teacher can use, so consequently sites get developed on this basis. A typical site is established with 5 or 6 icons in the main menu, representing: lecture topics; readings; assessment activities; quizzes; forums and links to resources. Although this might seem the logical way to develop a curriculum for a unit, the focus tends to be on content delivery and one-way communication through seemingly disconnected content and forums. Certainly the design of learning activities have generally not been the prime drivers for the development of such sites.

Other attributes which may help or hinder with change in teaching practice as they relate to the use of a learning management system are its ease of use, predictability, approachability, help materials supplied and any special features. Educational designers would not generally consider themselves to be educational technology experts but they certainly need to understand the possibilities and limitations that might be associated with any particular LMS. Table 1 below provides a potential matrix of factors for consideration in the acceptance of an LMS from the perspectives of teacher, educational designer and the organisation.

Table 1: LMS Acceptance Factors (adapted from Al-Busaidi and Al-Shihi, 2010)

Teacher factors	• Self-assessment of ability to complete tasks using technology • Attitude towards e-learning • Experience / exposure to use of the technology • Teacher Style, from teacher-led to student-led • Personal innovativeness or tendency to experiment with and adopt new technology
Educational Designer considerations	• Purposes for use • Expertise to draw on • Support to learn the mechanics • Support around creative use • Institutional motivation/policy • Institutional guidance/attitude • Time on task for learning, conceptualising and building • Both personal and institutional workload management

Organisational factors	• Organisational support by senior executive • Technology alignment with goals of the organisation • Technical and professional support • Training, using varying formats and approaches • Motivators or incentives provided to support change

The role of the teacher

"When faculty feel that they have greater control over the learning environment, there appears to be increased acceptance of the LMS." (Sclater 2008)

A paper by Oliver and Moore (2008) discusses a number of studies which look at academic use of learning management systems and conclude that as usage of LMSs has continued to increase over time, so too the breadth of tools that are used by academic staff in their teaching has increased. Although initial development of teaching sites will focus on dissemination of information, as confidence grows so too does the use of interaction and communication tools by the teacher. These trends are influenced by the level of study and also the nature of the delivery but does an open source system necessarily afford a different design of learning or is it teacher experience that counts?

The primary paradigm for teaching in Universities has been the delivery of information to students often via the lecture. A lecture may be good for inspiring, motivating and perhaps passing on information through listening but not necessarily good for active engagement. For many years now there has been a move to redefine the role of the teacher as a facilitator of learning and there are more recent moves to put the emphasis once and for all on the learner and learning environment as central by situating the role of the teacher as that of a designer of tasks. These tasks become activities that students undertake in ways that make sense to them. Goodyear (2009) suggests that thinking up good tasks – ones that align with intended learning outcomes – is not easy.

There are a number of ways of encouraging the teacher as the designer which requires acknowledging and supporting the teacher as a professional. This approach is not always easy to pursue, especially with pressures on staff time and energy and resources but this is essential to effectively support change in practice. There also needs to be the backing and understanding of the University executive that teacher development takes time. If units of study are assigned a workload, which is described in terms of lectures and tutorials, then changing practice will be difficult. Enabling staff to change is not just about providing educational design support but also about giving them permission to change. How can we transfer light bulb moments into academic development? (Johnson, 2010) Developing and resourcing appropriate support models to work with staff is important, as attitudes and agreement on what works and what doesn't are many and varied.

The role of the educational designer

"It is now too much to expect academics to be subject experts and experts in education technology. It is too sophisticated. It is unfair, if your field is mathematics then there is another specialist who can take your stuff and put it on the online environment." interview with vice-chancellor Jim Barber in reference to outsourcing of online course delivery to Pearson (Blackwell, 2011).

Many teachers have found ways to bypass or limit their involvement with the 'tools of trade' (as Oliver, 2010 puts it); often investing time and energy into improved learning in the classroom is simply a low priority for busy staff. Even good teachers can assume technology is enough. Technology will not change teaching as we know but designing courses for learning might. Educational designers will ask what blend of pedagogical strategies and technological affordances are most effective for learners?

Educational designers come from a variety of backgrounds and disciplines and there is no formal course of

training that can prepare you to be one. In the modern university they have become a staple edition to supporting teaching staff when developing teaching curricula and associated approaches and materials, particularly when coupled with the introduction of a new LMS. They often have to consider quite a broad range of factors, when working with staff, such as: purposes for use; expertise to draw on; support to learn the mechanics; support around creative use; institutional motivation/policy; institutional guidance/attitude; time on task for learning, conceptualising and building; and both personal and institutional workload management.

Does the specific LMS platform matter to a teacher or to an educational designer? How much? What else influences the way they proceed in their work?

The role of the organisation

> "... there is something so seductive about (an) LMS that, despite their complexities and risks, almost every university seems compelled to have one." (Wise and Quealy, 2006)

Expectations of the role and value of learning management systems can be significant from the governing bodies of universities. With the removals of caps on student places in 2012 and greater focus on equity in tertiary education in Australia, the practices of teaching and learning are under continued pressure to change. These pressures to change may or may not reverberate throughout the institution depending how well they are seen to be supported by the senior executive and how well they align with the technological goals of an organisation. Institutionally-run programs that support staff to change their teaching practices and practical incentives to motivate change, demonstrate to staff the value of investing time and effort in changing their practice. How well is this explicated in organisational plans, particularly those relating to learning and teaching and quality improvement frameworks? How well understood is the role of the LMS in supporting change in teaching practice?

Conclusion

The change to any new LMS provides an opportunity to think differently, both from a systems approach, such as using external hosting as a way to creating opportunities, and from a professional development standpoint, by supporting staff to try something different. Anecdotally, staff who have adopted an open source system in their teaching, report changing their approaches but is this just about the tools that an open source system provides that makes the difference? Is it something about a mindset change – a *'just try it'* attitude – but why hadn't teachers done this previously? Some proprietary systems have imputed an attitude of *"here's what you've got – deal with it"* but does this inflate expectations with open source systems that are purportedly able to be extensively / endlessly customised? Does this also mean having to take extra care about how to manage expectations with open source software?

Is it unfair to expect teaching staff to be able to effectively use technology such as a learning management system and should we instead be employing educational technology experts to manage it for them? Should we expend more effort on models of staff development (Zhou & Xu, 2007) that better support our staff needs? Can changing learning management systems really make that much difference to how we teach in universities? There are many issues to consider with the choice of an LMS and considerable time and effort is often expended in making this decision; are we even asking the right questions? There is a need for further research and examination of these questions, particularly in the early stages of LMS transition projects, or applying approaches to existing LMS.

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