Introducing a learning repository using a blended professional development approach

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This paper outlines the professional development program used to introduce a learning repository at Deakin University. Providing appropriate, timely and effective professional development programs to support academic and other staff is one of the objectives of the *Deakin University Teaching and Learning Functional Plan 2008*. Our blended program combines web-based and face-to-face training with a wide variety of resources to support staff. Issues noted in the literature relating to the introduction and use of learning repositories informed the planning and development of our program. Challenges and issues we experienced at Deakin are also outlined.

Keywords: professional development, blended learning, learning repository

Introduction

Blended learning environments and approaches are now part of the landscape of higher education. Research clearly identifies that one approach to learning does not suit everyone, especially when dealing with cross-cultural and multi-location audiences (Lanham, Augar & Zhou, 2005). Blended learning incorporates online, face-to-face and paper-based learning formats with the aim of creating a more flexible approach to learning. Deakin University is committed to flexible education and the need to engage staff effectively in teaching and learning in online and physical spaces.

Blended learning practices go beyond providing web-based resources or training modules. Collis, Bianco, Margaryan and Waring (2005) argue they should involve an application of learning to the learners' workplace and collaborative sharing of this application through social interactions and relations. They also emphasise the importance of experienced facilitators and interpersonal contact between the facilitators and cohorts of learners involved in the blending learning process.

This paper outlines the blended professional development approach used to introduce the learning repository at Deakin University.

Background

Several models of learning repository exist in Australia and internationally (Global Learning Objects Brokered Exchange, 2009). Their purpose is generally to meet the need to "acquire, adapt, and repurpose content" (Johnson, 2003, p. 7). Thus, they enable academics to store, classify, access and share teaching and learning materials, and have been widely adopted in higher education in Australia (Learning Edge International, 2006; AuseAccess, 2008). Deakin's learning repository is a secure collection of digital learning resources which are defined as "a set of lecture slides, a journal article … a case study, a single graph or image, a practice manual, a simulation or … any document used by academics in the delivery of their teaching strategies" (Balbo et al., 2009).

Using Equella software from The Learning Edge International, Deakin's learning repository provides separate collections for Deakin-created resources, third-party individual resources, and full third-party resource collections. Introduction of the repository is intended to improve staff access to high quality media assets and course materials, management of the University's intellectual property in course materials and copyright compliance (Balbo et al., 2009). Further documented advantages of a repository

include benefits to learning and encouragement of e-learning (Australian Flexible Learning Framework, 2007, p. 35), although Margaryan, Milligan, Douglas, Littlejohn & Nicol (2007, p. 6) argue that:

> LORs, as an educational technology tool, should be understood in the context of use, and the pedagogic, socio-cultural, and organisational variables should be paid greater attention to. Future developments in this are [sic] should be driven by pedagogy and user pull rather than technology push.

With four campuses across Victoria (Australia), Deakin University has 32 000 students, including a large number studying off-campus. The Institute of Teaching and Learning (ITL or the Institute) provides "leadership in teaching and high quality, responsive and valued services for all teaching staff" (Deakin University, 2009). The Institute aims to take these contextual characteristics into account in the delivery of its programs.

The Institute uses a blended approach to the professional development of teaching staff including face-to-face workshops, online self-taught modules using elements of the University of Tasmania's *Teaching Online Essentials* program (described in Jackson & D'Alessandro, 2004), self-help guides, online teaching strategies which address the pedagogical aspects of teaching online with the available software, and ongoing just-in-time support via the ITL Support Service. The design of the Institute's program is underpinned by cognitive apprenticeship theory (Collins, Brown & Newman, 1987) and Vygotsky's (1978) earlier learning theories, in that participants' learning is embedded in authentic activities and context, supported with coaching and other readily available forms of support. In closely integrating pedagogical and technical aspects of teaching online, the program is designed to provide slower adopters of technology with an invitation and justification for engaging with technology (Wilson & Stacey, 2004).

Challenges and issues

The literature identifies both operational and pedagogical issues relating to the use of learning repositories in higher education, and many of these reflect our own experience as we established the Deakin learning repository professional development program. These include:

- the need for the culture of specific repositories to reflect their community's requirements (Margaryan et al., 2007)
- the need to "[build] communities that support the repository, rather than just building the repository" (Philip et al., 2008, p. 4)
- the importance of having a high standard of metadata (Currier, Barton, O'Bierne & Ryan, 2004)
- quality assurance matters such as the need for detailed copyright information (Bates, Loddington, Manuel & Oppenheim, 2007)
- technology issues such as choice of software platform and interoperability (Henty, 2007)
- organisational constraints such as heavy academic workloads (Manuel & Oppenheim, 2006)
- cultural mindsets of academics in relation to sharing their resources (Venturi & Bessis, 2006)
- roles and responsibilities associated with open access material and research data (Henty, 2007).

Issues noted in the literature relating to *professional development programs* for learning repositories include that:

- professional development facilitators must have a good knowledge of the technology, and must also understand how to use the technology to support teaching and learning (Hanson & Carlson, 2005)
- designing training and support material focussing on 'how it works' and 'what is possible' may reduce the concerns expressed by lecturers when adopting new learning technology (Torrisi-Steele & Davis, 2000)
- lecturers can benefit from collegial support in the sharing of experiences and ideas as part of the program (Ellis & Phelps, 2000).

In addition, local challenges we faced when planning our program included a focus on the technical and compliance aspects of the system in the division overseeing the implementation of the repository, a lack of funding to resource the professional development program, and ongoing changes to the interface even while support resources were being prepared.

In an effort to meet these challenges, our professional development program was structured to integrate a teaching and learning focus with helping users learn the technical and practical aspects of using the system. Resource development and session facilitation were shared amongst a number of staff to avoid

impacting too much on existing commitments and to upskill as many support staff as possible. Regular meetings were held with the division overseeing the implementation, and access to all testing environments was arranged so that we could be kept up to date with the latest interface changes. ITL staff were also involved in user testing, to provide an assessment of how the system might impact on teaching and learning.

The professional development program

In order to move away from the technical focus of the implementation, to "represent the end user, in particular academic staff, experience" and to "facilitate the incorporation of learning repository use into everyday practice" (Monahan, 2008), an expert group was formed in May 2008. The group comprised faculty-based academic development staff; copyright, learning systems and project management staff from Knowledge Media Division; Institute staff; and Library staff associated with e-readings. Members of the group were invited to test the system at every stage of development and advise the steering committee on possible uses of the repository, implementation strategies, staff support and development, issues with the system itself and required business processes. Feedback was then used to revise the system before the next round of release.

To facilitate effective communication between stakeholders, a communication and training plan was developed by the division overseeing the implementation, in consultation with the expert group. It included the goals, responsibilities and channels for communication with stakeholders, a release schedule, plans for train-the-trainer sessions for support staff and the proposed professional development program. The Institute was handed responsibility for the professional development program for academic staff to coincide with the launch of the learning repository in July 2009.

The Institute's program of professional development was informed by our literature review and advice from the expert group and project team. During August, we conducted multiple hands-on face-to-face workshops on three campuses, with good attendances at each. These sessions included discussion of the benefits of using the learning repository in enhancing teaching and learning; an overview of available collections; the presentation of examples of good use; step-by-step demonstrations and authentic practice activities; and tips for effective use of the repository. Guest presenters, including staff who had already contributed to learning repository collections and librarians supporting the third-party e-readings process, were a particularly successful feature. During the sessions, we also found that it was useful to have two facilitators as one could continue to lead the workshop whilst the other could be roaming and offering more individualised support.

In line with our normal blended approach, staff also had access to tailored sessions and more individualised one-on-one consultations, if they were unable to attend the scheduled workshops or required more detailed assistance. An informative website has also been developed which includes strategies on how to use the learning repository to support teaching and learning, self-help guides, and information on where to obtain further support.

The Institute continues to provide just-in-time advice to help users master the technology and learn to use it to support teaching and learning, via the ITL Support Service. A decentralised model to provide ongoing support for the learning repository involves a partnership between the Institute the Information Technology Services Division and learning systems staff from Knowledge Media Division who provide technical support; faculty-based academic development staff who provide local contextual knowledge; library staff who advise on e-readings procedures; and copyright staff who help with queries about third-party collections. The implementation team developed a support procedure in consultation with each of these groups to clearly outline responsibilities, to support work flows and to streamline the referral process.

Feedback from the workshops indicated that they were well-received and enhanced the skills of those attending. However, based on comments from participants and facilitators, changes were made to the structure of the workshop and the self-help guides to better reflect the ways users were actually using the system. Future directions include developing a self-help online professional development module, establishing and supporting communities of practice with the purpose of encouraging members to share resources and innovative pedagogical ideas and practice, collecting further good practice exemplars and creating a frequently asked question section on the Teaching and learning online wiki.

Conclusion

This paper has outlined the challenges and issues we have faced recently in the Institute in planning and implementing our professional development program to support the University's introduction of its learning repository. In seeking to meet the practical needs of academics, we developed a blended approach including running initial hands-on, face-to-face workshops with a teaching and learning focus and emphasis on peer and expert support, building comprehensive self-help resources that users can access via our website, and providing ongoing just-in-time support via the ITL Support Service.

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