Who is learning? A preliminary study of an online elearning dissemination strategy

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Use of an online good practices site at the University of Sydney, the Health Sciences eLearning Resource Centre, was examined using WebCT visitor data. Results indicated continuing expansion of site awareness and demonstrated patterns of activity across the calendar year. Analysis of 2006 users made visible a substantial proportion categorised as providing online teaching support.

Keywords: elearning, diffusion of innovation, staff development, learning designs

Introduction

Dissemination of good practices in the elearning arena is a continuing call. Southwell et al (2005) reported a repository approach as useful but not sufficient, while McKenzie et al (2005) suggested a low use of web-based collections. This paper reports from a continuing study of a dissemination strategy of a staff support resource launched at the University of Sydney in response to staff requests for examples.

The central focus of the strategy is the Health Sciences eLearning Resource Centre (ERC). This is an online gallery of selected examples of learning designs using elearning approaches, with commentary by the designers and early adopters of strategies and materials. Learning designs are '... a deliberate set of learner activities and roles within a specific context whose completion is likely to bring about the development of particular forms of knowledge, skills and understanding' (Oliver & McLoughlin, 2003, p.96). The gallery presents examples in six categories: learning through professional practice, learning through using a scenario or case study, learning through interaction, learning through critical use of the literature, learning foundational knowledge, and learning to teach and learn online. An online resource, rather than a series of events, was the selected strategy to overcome the barriers of limited time and geographic location in a very large, multi-campus university. Most examples are by University of Sydney colleagues. In some technically more demanding cases specific instructions for constructing a similar site are provided. The site was launched to the target audience, academic staff with university teaching responsibilities, in December 2004; while designed for the health sciences faculties it is available to all academic staff and all existing WebCT users; other general staff must request access to the site. Active promotion of the site has primarily been within the University's five health sciences faculties using a range of strategies (Mahony & Wozniak, 2006a).

Roger's (2003) diffusion of innovation approach is used as the theoretical framework for the study. The core of Rogers' widely known work on the dissemination of innovation is encapsulated as: 'Diffusion is the process by which (1) an innovation (2) is communicated through certain channels (3) over time (4) among the members of a social system' (Rogers, 2003, p.11). In this paper the innovation is the ERC and the focus is on elements of the social system and time. Rogers (2003) describes a social system as 'a set of interrelated units that are engaged in joint problem solving to accomplish a common goal' (p.23). The research questions are:

- Who are the users of the ERC?
    - Who has visited at least once? (an indicator of awareness)
    - Who has made at least one substantial return visit? (a proxy indicator for at least considering use)
    - Who are multiple return users? (a proxy indicator for possible application of learning from the ERC)

- When do they use the ERC?

Method

WebCT provides site visit data. University staff were expected to use their unique university identifier (their 'UniKey') to access this resource. Penetration of UniKey use in late 2004, however, was unsatisfactory, and a guest login was also made widely available until March 2005 to facilitate access. Any return user who had initially used this guest login was therefore identified as a new user on their identifiable first visit. Each unique site user was coded (Table 1) using personal knowledge, the University's telephone directory and/or other advice. Only identified unique users are included in this study.

Table 1: Categorisation of site users

Category	Explanation
Faculty subject matter experts	Academic appointees with content specialisation, normally with some direct teaching responsibilities (17 faculties). These were the target group for the ERC.
Non faculty specialist unit personnel	e.g. University Library, Koori Centre, Institute for Teaching & Learning, NH&MRC Clinical Trials Centre
Online learning support staff	Comprising the University's central Flexible Online Learning Team, general staff in faculties providing online learning support activities, and academic staff in faculties appointed for the purpose of providing teaching and learning support and not contributing discipline expertise or holding direct teaching responsibilities
Not allocatable	Identified users not categorisable.

Data presented in Figure 1 were drawn from user first access dates falling in 2005 or 2006 (excluding guest login users). Table 2 'Categories of site users 2006' is drawn from analysis of unique users with latest visit date in 2006 (the 35 weeks from 1 January to 3 September).
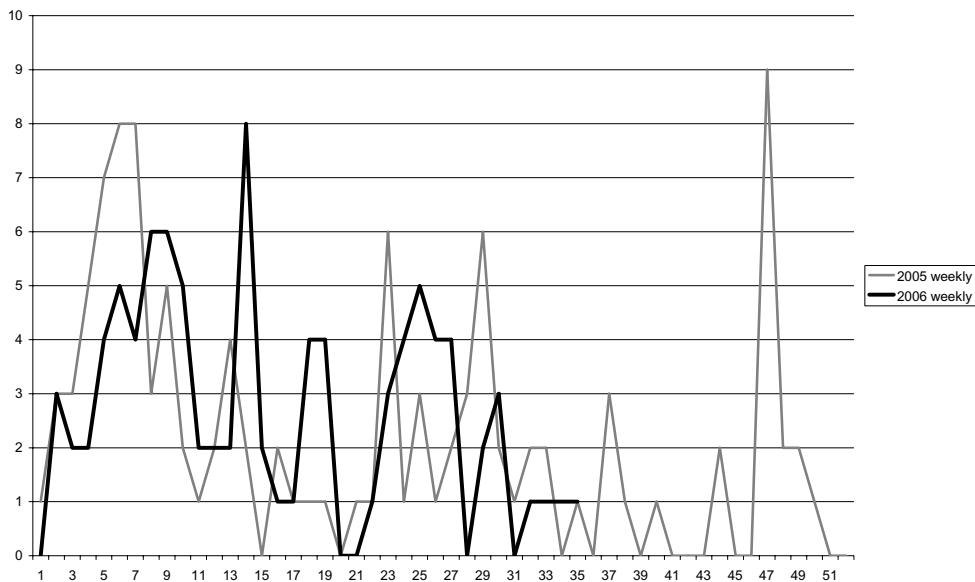
Patterns of use

Figure 1: Pattern of first time use

Semester dates were not congruent across the university in 2005; this changed in 2006. Semester 1 is representative, however, with roughly weeks 10–23 timetabled teaching and weeks 23–27 student study vacation and examination period. Figure 1 demonstrates the continuing stream of new ERC visitors over 21 months and displays the patterns of initial visits. The early months of the calendar year (the Australian

academic year is March–November) and the mid-year semester break period so far represent a more likely period for a first time visitor.

Overall, the ongoing visits by new visitors indicate continuing dissemination of ERC awareness. Purposeful return visits (at least one return more than one week after the initial) implies a bank of visitors using what the site has to offer. Multiple returns may be a proxy indicator for application and further inquiry on the nature of visit use with these staff is planned. These findings indicate the continuing apparent usefulness of the ERC and illustrate the value of examining dissemination of an innovation over time.

Table 2 presents the categories of visitors in 2006. The substantial proportion of users in the Online Teaching Support category was unexpected (both in quantity and in institutional location). Analysis of visitor identity exposed a broad range of faculty-based staff with full- or part-time commitment to this activity.

Table 2: Site visitor categories 2006

Category	Number	%
Faculty subject matter experts	56	50%
Specialist units staff	13	12%
Online teaching support	37	33%
Not allocatable	5	5%
Total	**111**	**100%**

Examination of the multiple return data emerging from the 2006 detailed usage project also indicates that many multiple returnees are in the Online Teaching Support category. These findings have exposed less visible elements of the University's elearning 'social system', providing a basis for further inquiry about the ERC's impact on practice.

Limitations to the study

While WebCT is the University's centrally provided learning management system (LMS), some faculties use an alternative LMS. This posed an ERC use barrier (e.g. staff using Blackboard would not log in to a different LMS for the purpose of looking at good practice examples, M. Freeman, personal communication 2006).

As in all LMSs, WebCT visit data only indicate that a site has been clicked on; the nature of site use must be explored using other means and will be the focus of further study later in the year. (As the ERC is password-protected, however, even initial site visits must be somewhat purposeful.) Limitations in the design of the resource also prevents tracking visits to individual ERC sections.

Initial availability and visitor data collection (December 2004 to at least April 2005) were affected by the guest log-in and by glitches in access provision. The latter highlighted an unfortunate institutional barrier when access to such a professional development resource cannot be automated through direct links to the human resource management systems. This has been an ongoing difficulty.

The ERC is a living resource, with additions made regularly as other elearning strategic projects are completed and/or good practice examples identified. Users more aware of this aspect may visit regularly merely to check whether something new has been added.

Finally, promotion of the ERC has been uneven. The only systematic campaign known to be conducted has been in the Faculty of Health Sciences, and this has been impacted by changes to faculty-wide communication strategies during the period of the study (e.g. introduction of limitations to use of all staff emails).

Conclusions

WebCT site visit data enabled usage patterns of a learning design gallery to be revealed. Site utility over time is confirmed by the visit patterns reported. Made visible in this exploratory study is the substantial use by 'online learning support staff' of a resource provided as a response to expressed needs of academic staff. Patterns emerging from the visitor data may better inform in-person professional development and support activities. Further research is necessary to explore the factors triggering initial visits, the reasons for returning or not, and the use made of what is learned by visitors to such a galley.

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Bionotes

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