Sharing Digital Content in the West Midlands Region

Sue Morón-García

University of Worcester s.moron-garcia@worc.ac.uk

ABSTRACT

This paper reports the findings of a short investigation into the potential use of repositories to support the sharing of digital content (teaching materials and learning objects) in the West Midlands region. It indicates some of the issues raised through interview with those institutional managers implementing and considering providing repository services and arising from questionnaire responses from the intended users of these services. It goes on to highlight the attitudes and issues explored in a further and more widely distributed iteration of the questionnaire, the findings from which will be discussed with symposium participants.

Keywords

Digital repositories, teaching materials, learning objects, lecturer and tutor attitudes.

INTRODUCTION

The wm-share project based at the University of Worcester was a one year project funded by the JISC Distributed E-Learning programme. The aim of the project was to work in partnership with other universities, colleges and organizations in the West Midlands (see Table 1) to promote the use of shared digital content in the region, facilitated by the use of repositories. We concentrated on the way in which digital content, in the form of teaching materials and learning objects, was created, stored and retrieved and the way this might be supported through repository use. In order to do this we attempted to identify networks and collaborations already in existence that might benefit from access to a shared content space and to identify barriers to sharing. We focused on identifying user needs in relation to the sharing of content and the use of repositories, our users were the teachers (lecturer and tutors) in the universities and colleges. This paper reports on issues raised by our investigation and describes the way in which we explored those issues.

University of Worcester
Birmingham College of Food, Tourism and Creative Studies
Technology Enhanced Enterprise Education (TE3), Birmingham University
Bournville College
City College Coventry
JISC Regional Support Centre
Josiah Mason College
Kidderminster College
Sandwell College
E-source regional repository, Coventry University
ARCHES repository, Warwick University
Worcester College of Technology

Table 1: Partner institutions and organisations involved with wm-share

BACKGROUND

Until recently repositories have been used by institutions to store items associated with research output that is journal articles, conference presentations, works in progress, rather than resources for teaching and learning. The latter were more commonly accessed via departmental Web pages and virtual learning environments (VLEs) such as Blackboard, WebCT and Moodle. However, with increasing emphasis on improving the student learning experience and teacher desire to make more effective use of the time available to them, the idea of a repository for teaching materials and learning objects has been gaining currency.

Institutions are encouraged (see Hayes, 2005) to capture and store in one place assets related to teaching and learning in order to provide examples of good practice and to facilitate sharing across and within disciplines. Repositories support the rationalisation of digital storage away from many independent and possibly individual "silos", that may become obsolete and that are difficult to access, to a common store with access for all authorised or licensed users.

DIGITAL CONTENT IN THE CONTEXT OF THIS PROJECT

When talking about digital content in the context of this project we meant anything that could be created and stored digitally and used to support teaching and learning, but typically items such as a useful URL (termed "resource stub" in one repository), a text document or presentation file and in some cases a package of content or structured set of course materials and tasks. In this we are closer to David Wiley's definition of a learning object as "any digital resource that can be used to support learning" (June 2000), reducing the burden on potential users in order to explore the repository tools on offer and lower the barriers to participation; not all teachers in are familiar with the use of content packaging and authoring tools such as RELOAD, E-CAT and CourseGenie. It was thought that the use of these tools may come later as teachers gained the confidence to contribute larger "learning objects". One of our roles was the promotion of shared content facilitated by repository use therefore we were interested in cultivating a willingness to contribute and retrieve materials and envisaged that one of the ways to do this was by using existing examples of digital teaching materials and assets such as video clips and images. We were also aware of the need to encourage the creation of good descriptors and teaching content information

EXPLORING ATTITUDES TO THE CREATION AND SHARING OF DIGITAL CONTENT

Contextualising the responses

In order to understand the situation within out partner institutions we conducted a preliminary review with our main institutional contacts to identify shared resources that were currently available to teachers, their access to ICT including VLE availability and use and any collaborative ventures or sharing networks that may already be in existence. This highlighted the differences in resources and equipment available within institutions and some of the immediate barriers that teachers may face, for example, in gaining access to a networked computer on which to prepare resources (something especially true in further education). This allows us to better understand, that is, contextualise, some of the responses obtained from the wider survey of teachers.

An opportunistic questionnaire

At the same time a deliberately opportunistic and exploratory questionnaire was conducted where and when we were given access to a group of teachers. This enabled us to explore perceived advantages of and barriers to sharing materials and to inform the development of the instrument for the wider survey. The majority of those participating were teachers (24 out of 37), as was our intention, although there were also responses form learning technologists and librarians. While teachers are the main target of any repository service, both as users and contributors, these other two groups of practitioners will be vital in providing a functioning repository service. They will support and train teachers in their use of the technology and facilitate the creation and checking of metadata, therefore it is useful to capture their observations and concerns and to involve them at an early stage in planning for the intended service.

There are already well established means of accessing information and resources within both the higher and further education sectors, for example, through the HE Academy subject centres, the Resource Discovery Network, the Open College Network and the myriad of online databases, Web indexes and resource banks

facilitated by JISC and Eduserve among others. It is also clear that teachers are already sharing digital materials with colleagues and fellow subject experts through both formal and informal networks. When asked who online materials were shared with most people (just under half) indicated "colleagues on an ad hoc basis" and two-thirds of these said they shared with other Schools or departments in an institution; although it is notable that a third of overall respondents indicated that they did not share.

Perceived advantages of sharing revolved around saving time, seeing examples of good practice, taking advantage of other's expertise, sharing workload and improving the learning experience. While perceived barriers to sharing included concerns about finding time to convert or prepare resources and management recognition for time spent doing this, institutional attitudes to sharing materials with other institutions (copyright and intellectual property rights were also individual concerns), controlling access to certain materials and feeling that teaching materials are personal, that is, "unique to each person's style".

Reworking the questionnaire

Issues raised by the contextual interviews and the opportunistic questionnaire were used to rework the survey instrument with the intention of further exploring teacher attitudes to sharing teaching materials and potential repository use. We wanted to investigate emerging issues which seemed to revolve around trust, quality and recognition, as well as concerns about the loss of competitive advantage in relation to other institutions; although the latter may say more about general perceptions about the value of content and teacher ideas about what rather than how they teach.

The questionnaire was distributed to contacts in each institution, electronically, and they were asked to circulate it by e-mail or in paper format to as many teaching staff as possible (a target of 30 to 40 respondents was suggested). A number of areas were explored by the questionnaire, such as the use and creation of digital teaching and learning materials, including the types of content produced (e.g. documents, video, quizzes) and familiarity with content authoring and packaging software. Perceptions about the ownership of teaching and learning materials produced and whether or not teachers actually shared digital materials.

In order to explore teacher attitudes to issues relating to repository use, such as the creation of metadata and the ownership of materials, we took the unorthodox approach of using a four point Likert scale based on the premise that teachers would have to choose one way or another if presented with a repository service. * To enable materials to be found within a repository they have to be "tagged" or described in a way that categorizes them. This would be done by those submitting materials, using a standard online form, which is then checked by professional cataloguers, typically librarians; this is not a quality check.

Table 2 lists the statements teachers were asked to respond to and the attitudes that were explored.

I would be willing to upload my own teaching materials to a digital content repository

I would prefer to give my teaching materials to someone else to upload into a digital content repository

I would like to be able to search for teaching materials of interest in a digital content repository

I would like someone to let me know what is available or added to a digital content repository

I would be willing to check the copyright of teaching materials I upload to a digital content repository

I would prefer to be able to restrict access to certain materials that I upload

I want to know who created digital teaching materials I find

I want to be acknowledged as creator of any digital teaching materials I share.

I would only contribute to a digital content repository if I thought I could access useful materials

I would be willing to contribute examples of my teaching materials to initiate a repository service

I am concerned that digital teaching materials made available may not be of a high enough quality.

I am concerned that my digital teaching materials may not be of sufficient quality.

I am not concerned about quality as I would be looking for ideas.

I am concerned that there may be inaccuracies in the digital teaching materials available, i.e. they may not be up to date

I would like to read reviews of the digital teaching materials on offer, done by other teaching staff.

I would be willing to provide a review of digital teaching materials I have used.

I do not mind completing an online form* to describe my digital teaching materials e.g. title, keywords, short description.

I would like this form to be checked by a third party.

Understanding the intended use of digital teaching materials found is important to me.

Table 2: Statements teachers were asked to respond to

Preliminary findings

While the data from this questionnaire is still being analysed at the date of submission there are a number of preliminary findings that can be shared. There is still a good deal of confusion around the ownership of teaching and learning materials suggesting that institutions need to clarify, or work this out, with their staff. There is also an unwillingness to check copyright on materials used, which begs the question: if we expect students to correctly attribute sources, why not ourselves? A large proportion of teachers (almost one in five) claim they never share, of those who do three-quarters share with close colleagues, that is, those in their department or School, so how can we encourage wider sharing? Nearly everyone claims to source teaching materials from the World Wide Web, but it is not clear (from our limited data) how comprehensive these materials are, and while they are willing to take they are more circumspect about providing materials, to the extent of wanting to restrict access to some materials.

REFERENCES

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