

# Attitudes to the rights and rewards for author contributions to repositories for teaching and learning

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In the United Kingdom over the past few years there has been a dramatic growth of national and regional repositories to collect and disseminate resources related to teaching and learning. Most notable of these are the Joint Information Systems Committee's Online Repository for [Learning and Teaching] Materials as well as the Higher Education Academy's subject specific resource databases. Repositories in general can hold a range of materials not only related to teaching and learning, but more recently the term 'institutional repository' is being used to describe a repository that has been established to support open access to a university's research output. This paper reports on a survey conducted to gather the views of academics, support staff and managers on their past experiences and future expectations of the use of repositories for teaching and learning. The survey explored the rights and rewards associated with the deposit of materials into such repositories. The findings suggest what could be considered to be an 'ideal' repository from the contributors' perspective and also outlines many of the concerns expressed by respondents in the survey.

## Introduction

There are a number of different initiatives that promote the open use of learning and teaching materials. In 2002, the term 'Open Educational Resources' was adopted by the United Nations Educational Scientific and Cultural Organization 'to refer to the open provision of educational resources, enabled by information and communication technologies, for consultation, use and adaptation by a community of users for non-commercial purposes' (Albright, 2006). Some initiatives have developed, or are in the process of developing, systems that provide users with Open Educational Resources. Most notably, the Massachusetts Institute of Technology OpenCourseWare Initiative, which provides 'a free and open educational resource for faculty, students,

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and self-learners around the world' (Massachusetts Institute of Technology OpenCourseWare, 2006), and more recently, in the United Kingdom, the Open University announced their Open Content Initiative project. This £5.65 million project, jointly funded by the William and Flora Hewlett Foundation, aims to provide users with 'a selection of higher education learning resources and provides on-line tools to manage learning and support and the development of collaborative learning communities' (Open University, 2006, p. 3). Despite the growth of these international/national repositories, the growth and popularity of such repositories at institutional levels is unclear. Also, what barriers exist and what incentives are needed to motivate people to contribute to these types of repositories?

The Rights and Rewards in Blended Institutional Repositories project is funded under the Joint Information Systems Committee (JISC) Digital Repositories Programme. The programme, which funds over 20 projects, aims to cover a variety of topics in relation to repositories and to bring together a wide range of expertise. The JISC acknowledges that 'Digital repositories are, in many ways, an emerging area' and recognises that 'they are of considerable importance to institutions, staff and students in further and higher education' (Jacobs, 2005).

As part of the first phase of the project, a survey of academics, support staff and managers was carried out. This was undertaken to discover their views in relation to contributing teaching and learning materials to Institutional Repositories (IR). The survey aimed to identify motivational factors, as well as barriers that have discouraged people from contributing in the past and what types of rewards (both financial and non-financial) would encourage contribution. The survey also gathered information about intellectual property rights that contributors were prepared to assign or license, and about access rights to different communities. This paper reports on the key findings and concludes with some emerging issues arising from the study and identification of future areas of work.

## **Background**

### *Research versus teaching repositories*

Little has been written hitherto on teaching material repositories. This is in marked contrast to the volume of literature on research material repositories. For example, Swan and Brown (2005) and Gadd *et al.* (2003) describe in-depth research into attitudes towards depositing research output into institutional repositories and subject-based repositories. Genoni (2004, pp. 301–302) recognises the need for learning and teaching material repositories to 'broaden the content of institutional repositories where they include many types of texts that would fall outside those categories of material previously collected in libraries'. We therefore need to know which materials academics would like to contribute and find in repositories. This is particularly important because, as Foster and Gibbons (2005) state, 'in spite of the rapid pace at which organizations are establishing IR's, the quantity of content deposited into them remains quite modest'.

### *Different content, communities and repository types*

It is possible that some of the barriers to populating research repositories will be similar for teaching and learning material repositories; however, there is still a need to focus on the specific issues around depositing teaching and learning materials—such as understanding into which type of repository academics will be willing to place their materials. Drake (2004, p. 41) identified a range of repositories: ‘Repositories may be limited to one field, one department, one institution or a consortium of several institutions’. Another issue is whether or not academics are willing to grant access to their materials externally. JISC’s Online Repository for [Learning and Teaching] Materials (JORUM) is a relatively new national repository of teaching materials. They carried out a study in 2004 (JORUM, 2004) that showed 88.6% of participants were in favour of a national repository of teaching materials and that 91% said they would contribute. The JORUM study however, did not examine motivations, rewards or incentives.

### *Motivation and incentives*

We are aware of only one previous study on ways of rewarding academics for contributing to a repository. The Further Education Resources for Learning (FERL) is a repository aimed at further education academics. FERL (2005) carried out a survey and found that the main incentive for contributing was the opportunity for, and satisfaction of, sharing. However, higher education academics might have different reasons for contributing material to repositories. For example, they may want to be sure that the repository they are using has a clear purpose, such as making materials available to students pre and post lectures.

### *Potential barriers*

Gadd *et al.* (2003) found that 32% of the authors they surveyed were unaware of the copyright status of their journal articles. Campbell (2003, p. 43) found that ‘some educators may be wary of sharing their resources within and beyond their own communities of practice if there is a risk of IPR [Intellectual Property Rights] being violated’, and the JISC Digital Rights Management (DRM) study (Duncan *et al.*, 2004) found that the ‘lack of a suitable DRM approach has been seen as a genuine barrier to sharing and reuse of learning resources’.

It is generally agreed that the technical challenges and costs of installing the software needed to create an institutional repository are relatively minor compared with the time and effort required to persuade users to populate it (Genoni, 2004, p. 300; Horwood *et al.*, 2004, p. 170; Foster & Gibbons, 2005). We focus in this study on what motivates contributors, and explore what barriers there are to contributing materials. Furthermore, solutions to these barriers, which may be in the form of incentives, were also explored.

## Methods

Prior to the online survey, six pilot studies using a paper-based version were carried out with academic staff and information professionals at Loughborough University. Some of the introductory text, questions and layout were amended as a result of comments; in particular, the terminology used was carefully selected to minimise errors in comprehension.

The survey addressed two main research questions: What types of repositories related to teaching and learning are academics, teaching and learning support staff and managers currently accessing and what are their impressions of using these repositories? What are the main barriers and incentives in contributing to repositories for teaching and learning? The survey consisted of 16 questions, divided into six sections, with both open and closed questions. The Library and Information Statistics Unit confirmed that the survey was valid. Two issues should be noted. Firstly, that online questionnaires are likely to draw responses from those with strong views, either in favour or against, the topic in question. Secondly, although awareness of repositories is growing, they remain unfamiliar to many, which is likely to affect the survey response rate and results.

The target population, the UK higher education community, were approached in a number of ways but primarily by email invitation. Wider dissemination from this initial contact was requested in all communications sent. Advertising by email was considered a good way to reach a large number of academics with little cost involved; however, it did have a number of drawbacks. The primary one was that it made it impossible to give a figure for the sample size and therefore the response rate. This is because information about where the email had been forwarded to by the original recipient was not available.

A total of 755 emails were sent to 98 universities. The Times Top 100 Universities (Times Good University Guide, 2005) listing was used as a reference point. Some universities from this list were not contacted as email addresses were not available on their websites. The emails were sent to Pro Vice-Chancellors and Deans for teaching, Heads of Departments and to teaching and learning centres. Academics at Loughborough University all received a personal email requesting them to complete the questionnaire. This led to a greater response rate than at other institutions (58 responses, 13.5% of the total sample). Responses were not received from all universities contacted. In addition, 56 individuals at Higher Education Academy (HEA) Subject Centres were contacted. Many of the HEAs responded positively, stating that they would circulate the email, and/or include a mention of the questionnaire in an e-Bulletin and on their website. Fifteen JISCMAIL lists were also sent an email, followed by a reminder near the closing date for the questionnaire. The Higher Educational Funding Council for England-funded Centres for Excellence in Learning and Teaching were also invited to respond to the survey. These mailing lists were selected because of their audiences' interests and involvement with learning and teaching. The questionnaire was completed by 430 individuals. Responses from individuals outside the initial target group were also received as follows: institutions

Table 1. Top 10 universities

University	Total responses ( <i>n</i> )	%
Loughborough University	58	13.3
Manchester Metropolitan University	26	6.0
University of Edinburgh	18	4.1
University of Gloucestershire	15	3.4
University of Leeds	15	3.4
University of Plymouth	15	3.4
University of Ulster	10	2.3
University of Leicester	8	1.8
University of Liverpool	8	1.8
University of Strathclyde	8	1.8

outside the United Kingdom, three responses; UK further education, 42 responses; and other, 17 responses. Table 1 presents the top 10 universities by total number of responses to the questionnaire.

### Survey analysis

A broad range of subject disciplines and job titles were recorded (Table 2). Responses were received from 88 distinct UK higher education institutions; 17 individuals failed to provide full information or were involved in research, consultancy, health-related fields or support roles (Table 3). The remainder did not provide any information about their institution or department.

Fifty-seven per cent of respondents reported that they had 11 years or more experience of working in academia; 20.2% had been employed for less than five years. When questioned about where they usually deposited teaching materials, 53.5%

Table 2. Respondents' subject discipline

Subject collections	Total ( <i>n</i> )	%
C, D, F (Biological Sciences, Veterinary Sciences, Agriculture and related subjects)	87	20.0
L, M, N (Social Studies, Business and Administrative Studies)	81	18.6
X (Education)	66	15.1
G (Mathematical and Computing Sciences)	61	14.0
A, B (Medicine and subjects allied to Medicine)	43	9.9
H, J, K (Engineering, Technology, Architecture, Building and Planning)	39	8.9
P (Mass communications and Documentation including information services)	33	7.6
V, W (Historical and Philosophical studies, Creative Arts and Design)	28	6.4
Q, R, T (Linguistics, classics and related, Languages, Literature and related)	28	6.4
Total	466	

Table 3. Respondents' job title

Description	Total ( <i>n</i> )	%
Lecturer	118	27.1
Senior lecturer/subject leader	106	24.3
Professor/Chair	42	9.6
Centre Manager/Head of Department/Head of School	38	8.7
Research assistant/associate/fellow/reader	37	8.5
Teaching and learning support	29	6.7
Technical/computing/IT staff	15	3.4
Teaching fellow/university teacher/technical tutor	14	3.2
Library/Information Services	8	1.8
Project Officer/Project Coordinator/Consultants	8	1.8
Associate Dean/Deans	6	1.4
Other	3	0.7
Teachers in further education/colleges	2	0.5
Senior university management	2	0.5
Secretarial, clerical, ancillary	1	0.2
Student support services	1	0.2
Total	430	

stated that they used their institutions' VLE (Virtual Learning Environment). Personal websites and departmental stores were also cited (26.7%). Some evidence of lack of awareness of the nature of the systems being used was noted, particularly in relation to the use of VLEs. Although 230 respondents reported using a VLE, an additional 26 named proprietary systems, such as Blackboard and WebCT, or in-house systems. A number of bespoke or in-house repository systems were noted in the free-text comments, as well as personal storage and publicly available systems.

When asked about their experience of Learning Object Repositories, low levels of awareness of existing repositories were expressed. The best known were JORUM (UK) (25.1%) and Multimedia Educational Resource for Learning and Online Teaching (MERLOT) (International) (17.9%). However, being aware of a repository did not necessarily mean that they were downloading or using material (Table 4). Figures for contributing to repositories were even lower. However, there was a high level of interest expressed about repositories; for example, 27.7% of respondents stated that they would look at MERLOT.

Other cited repositories included subject-specific repositories, HEA repositories, multimedia collections and general repositories. The HEAs were referred to on 23 occasions, MIT Open Courseware four times, BizED four times, FERL four times, Scottish Cultural Resources Across the Network three times and Stòr Cùram (now known as the Learning Exchange) three times.

One hundred and eighty-seven individuals had prior experience of browsing and downloading teaching material from a repository. They gave favourable responses for the quality and ease of locating materials, with 69.5% strongly agreeing/agreeing that

Table 4. Experience of repositories (%)

Repository	Heard of	Downloaded material from it (% of those who had heard of it)	Contributed material to it (% of those who had heard of it)	Will use again (% of those who had heard of it)	Will look up
National/international general repositories					
JORUM	25.1	13.0	5.6	17.6	26.7
MERLOT	17.9	37.7	0.9	17.6	27.7
National subject based repositories					
EEVL: Internet Guide to Engineering, Maths and Computing	18.8	18.6	29.6	2.5	13.3
Higher Education Academy Engineering Subject Centre Resource database	16.3	16.1	37.1	10.0	12.8
UK Centre for Materials Education	9.1	8.9	25.6	7.7	17.0
Regional repositories					
Yorkshire and Humberside Learning Repository	4.4	10.5	21.1	10.5	19.8
Object Warehouse for Learning (North East)	3.0	0.0	7.7	0.0	19.5
Other repositories					
BUFVC—Moving Image Gateway	19.5	29.8	1.2	17.9	19.3
TRILT—Television and Radio Index for Learning and Teaching	15.1	29.2	1.5	13.8	23.3
BBC Motion Gallery	15.1	29.2	1.5	13.8	23.3
Other (please state)	7.0	93.3	43.3	43.3	3.3

'The material I found was of good quality', compared with 11.2% who disagreed/strongly disagreed. A total of 64.2% strongly agreed/agreed that the repository was easy to use, compared with 22.5% who disagreed/strongly disagreed. A total of 56.5% strongly agreed/agreed that it did not take long to locate useful content, whereas 29.6% disagreed/strongly disagreed. However, the respondents were less clear on the timesaving and copyright potential benefits of repositories: time saving (44.3% disagreed/strongly disagreed that their workload was reduced due to the easy access of materials); and copyright (39.8% disagreed/strongly disagreed that it was clear how materials could be used or modified).

Eleven individuals (6.4%) agreed/strongly agreed that they did not want to use a repository, with 16.4% responding 'no opinion' or 'don't know'. The following issues arose: concerns about the quality or usefulness of the materials, a preference for creating their own, usability problems relating to the repository system itself and lack of awareness.

The quality and type of content emerged as an important factor. The survey asked which content users would find most useful in their ideal teaching repository. The responses demonstrate a high interest in the following types of content: images/multimedia (84.0%), text-based resources/lecture notes (71.2%), links to external websites (68.4%), case studies (68.1%), exemplars of innovative teaching and learning methods (64.9%), units of learning with learning outcomes (59.8%) and subject-based reading lists (55.6%). The least favoured content was exemplars in methods of learner management or administration (34.4%). Statistical analysis using the chi-squared test showed that text-based materials were significantly more likely to be requested by those who had been in academia for less than 10 years while Computer Assisted Learning resources were of greater interest to respondents with six years or more in academia. A number of other types were listed in the additional comments: embedded items (video lectures, interactive media, examination questions, student coursework assignments and audio clips), information items (pedagogic guides to hardware and software, context based use-cases of resources and module outlines), assessment items and comments on the expected file formats of items.

Over one-third (38.8%) of respondents had made a contribution to a repository, with 37.3% stating a preference for a departmental repository and 32.5% an institutional repository. The most frequently cited reasons for contributing were: to improve teaching (51.2%), to increase student motivation (48.2%) and that there was a link to the university's VLE (33.3%). These results confirm the main incentives for contributions to a repository are concerned with course management, student access to materials and alignment with traditional teaching methods. Statistical analysis shows that when a repository is linked to a university VLE, contributions are more likely to be made by individuals who have been in academia for more than 15 years. With less than 10 years' experience, contribution is more likely when a previous positive experience of repository use has been experienced.

Other reasons cited for contribution included: kudos (35.1%), link to research (31.0%), a positive experience of benefiting from existing materials (21.4%), that colleagues are contributing (17.3%), compulsory (13.1%), preservation of materials

(33.9%) and financial rewards (3.0%). Of those who had contributed to a repository, 23.1% added free-text comments to this question. A major theme of providing greater access to specific groups emerged. For example, one respondent commented that 'It can make it easier and/or cheaper for my students to access materials'. Another major theme was for reasons of professionalism or altruism; for example, 'to set an example' and it 'makes life easier for other staff'.

About two-thirds (286) of respondents were prevented or deterred from contributing for the following reasons: lack of awareness of repositories (43.0%), not having enough time to prepare materials for use outside of their institution (31.3%), materials are already in a VLE (28.0%) and lack of time to contribute (27.6%). Other reasons for non-contribution were given by 26.2% of respondents. Some respondents did not produce materials to contribute, others expressed the intention to contribute in the future, while others believed that these materials are available in other ways. Additional themes included personal factors (lack of knowledge or awareness of the issues, lack of time, lack of confidence in their own materials and not realising that others would want their materials), internal factors (no departmental policy, not being asked to contribute, lack of support, or the opportunity had not arisen), context of materials (materials are not relevant when taken out of the context), repositories issues (lack of awareness of suitable repositories, desire to have materials peer reviewed, desire to have download statistics available, lack of confidence in the maturity of the systems and concern over a potential increase in student plagiarism) and IPR/copyright issues (IPR and copyright might not be maintained and concerns over who owns the copyright).

The survey also set out to discover what respondents 'ideal' teaching material repository would be. This explored what conditions for access this repository would need to meet and what type of material respondents would be happy to contribute, as well as what review process they required. Reasons for contributing in the future were also suggested; respondents were asked to choose each option according to whether it would make them more or less likely to contribute. Some motivating factors, both financial and non-financial, were also investigated.

When asked to consider what type of repository they would be happiest to contribute to in terms of their ideal repository, a national subject-based repository was identified by 49.3%, national all subjects by 17.9% and an institutional repository was favoured by 16.0%; only 4.7% wanted a regional repository of any kind. Levels of access to this 'ideal' repository varied, but the majority wanted some form of access restriction on users. Password access to registered users was requested by 33.0%. Less than one-quarter (22.6%) wanted to give different access permissions on different types of their material. In defining their 'ideal' repository, 31.4% wanted it to have open access to anyone. Additional comments suggested taking payment for subscription, concerns over protection of copyright and requested feedback in the form of access statistics. Two individuals expressed the surprising view that students should not be allowed access.

With regards to materials that participants would be willing to submit to a repository of teaching materials, text-based resources (70.7%) were the most

favoured items to contribute. 'Reading lists' (49.3%) and 'photos, images, diagrams or movies' (47.4%) were also popular, and the lowest (apart from 'other') was exemplars in learner management (17.2%). This shows that participants were willing to contribute a variety of material, which shows that participants had a number of purposes in mind for their 'ideal' repository. Answers received for the free-text comments were split into two main themes; items to embed into teaching, and items to inform the teaching and learning process. This also highlights that participants were thinking differently about the purpose of their ideal repository.

To ensure the quality of materials, 58.8% wanted a system where users could add comments and ratings. A review of the content was requested by 57.0%, and a technical and legal review by 54.7%. The proportion not wanting any form of review was only 12.1%.

The highest reasons (or motivations) given for contributing to a repository in the future were if support was freely available (40.9%) and not needing to maintain the links to items contributed (38.5%). Also popular was having a departmental (34.2%) or institutional directive (33.7%) or receiving a pay award (32.1%). The reason that was most unpopular in relation to contribution being '*much less likely*' was having an institutional directive (8.6%).

The survey set out to gather views on what motivators, financial or non-financial, would encourage the greatest level of contribution. Things cited included nomination for a salary increment (44.9%) or lump sum (36.3%), obtaining money to spend on a teaching and learning project (29.5%) or simply the satisfaction of contributing (29.1%). An article in an internal publication (57.0%), the possibility of doing pedagogical research (39.8%) and a nomination for an internal teaching prize (37.9%) were regarded as rewards that would have no effect in relation to motivating the contribution of materials. Other motivators suggested by respondents were altruistic, to improve teaching and learning, the opportunity to collaborate and for feedback on materials.

When asked who owns the copyright on teaching materials, 54.9% responded that they were unsure. A further 26.0% believed that the institution owned the copyright, 12.8% responded that they owned the copyright and 6.3% did not answer.

When asked about what operations participants would permit others to carry out with their submitted material in a repository, participants were given a list of permissions and three choices to be chosen for each permission, which were '*freely*', '*with limits or conditions*' of '*not at all*' as shown in Figure 1.

A higher percentage of participants would allow users to display (81.5%), play (62.3%), print (60.4%) and save (54.3%) material freely than would allow users to freely modify (27.2%) or sell (13.3%) materials. As shown in Figure 1, the number of participants that wanted 'limits or conditions' placed on their work was mostly the same for each of the activities.

Over one-half (50.5%) of the participants would not allow their materials to be sold, but a smaller percentage would disallow modification (20.5%) or copying of materials (16.5%). All but one of the activities had a higher number of participants

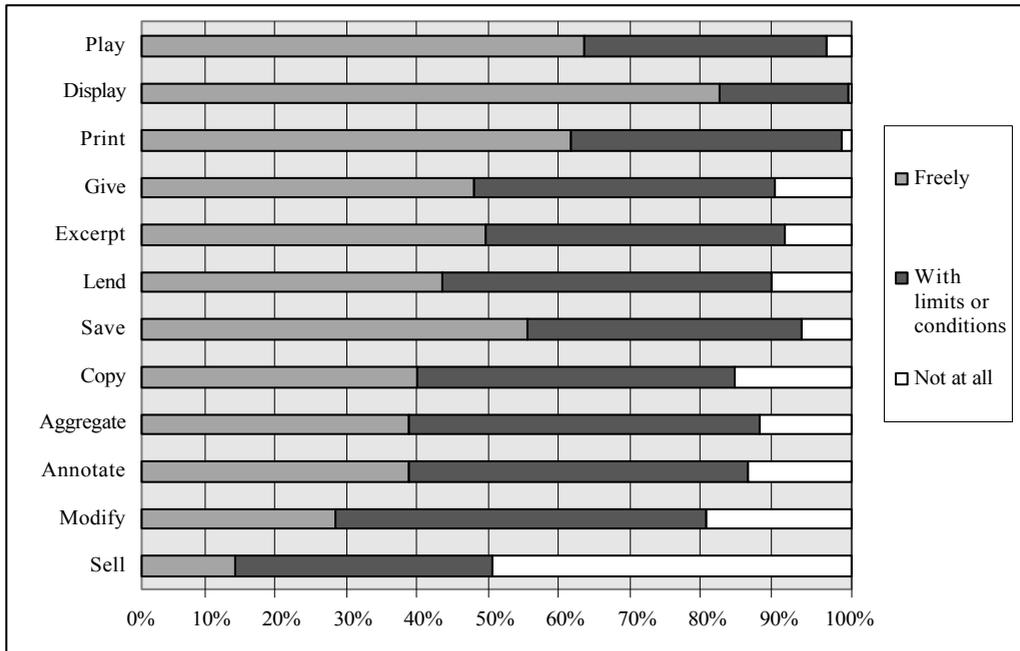


Figure 1. Question 14: what would you permit others to do with any teaching materials in a repository?

that would freely permit them than those that would not allow them at all, and in many cases the percentage of participants that would disallow an activity was small.

In the penultimate question, participants were asked which conditions and/or restrictions, if any, they would like. A total of 22.6% of participants stated that they would not like any restrictions and 6.3% stated that they would not like any conditions placing on their work. However, 75.1% of participants wanted their name attributed to the material and 51.2% wanted their institution associated with it. However, there was less of a preference for limits to geographical regions (13.3%) and limited to the number of times the material could be used (10.7%).

In all, 18.1% of participants made additional comments, which in most cases were lengthy. There were many positive altruistic reasons such as the desire to share for the collective good of the subject area. One participant stated that ‘it is really nice to find other people use the materials. I like to hear about it and get feedback from my colleagues. Teaching materials evolve and it is through this that they improve’. There were, however, some concerns about the time and support needed to make materials available, and there was a lack of awareness of a number of issues including technological difficulties and copyright awareness. The latter was a common concern; many respondents commented that they were unaware of the implications of copyright and what could happen in the event of misuse of their work by students who plagiarise and external peers who could aggregate materials and pass them off as their own, without proper acknowledgement. One participant mentioned that ‘The main thing that stops

me sharing teaching material currently is that I am unclear about IP'. Another commonly raised concern was that of obtaining and delivering content, which was accurate and of minimum quality to and from repositories. It is clear that the survey prompted strong and sometimes emotive responses to a range of issues emerging regarding repositories. Some participants stated that they were against repositories and gave reasons such as not seeing the benefits of repositories and that repositories may be harmful to teaching rather than helpful. One participant stated 'it allows lazy lecturers to skimp on teaching and contributes to the de-skilling of lecturing', and another stated 'that too much use of online repositories might result in homogenised teaching at least within subject areas, and loss of individual creativity in the development of teaching materials'.

## **Discussion**

### *Current practice and opinions*

The survey identified that most of the current sharing of teaching material is through VLEs and departmental stores, which shows that this current participation is related to the purpose of course management and for facilitating the activity of teaching within an institution. The purpose of international, national and regional repositories lie outside the direct link to academics' own teaching, and therefore the purpose of these repositories is not clear to many people. Lack of participation in these repositories can be attributed to personal factors such as not being able to find the time and effort to contribute. A VLE is the most popular type of repository because most have a purpose. Therefore, emerging repositories such as JORUM need to present a clear image if they wish to encourage participation.

### *Barriers*

It is obvious that the lack of awareness of repositories is a barrier to recruiting teaching materials from academics and support staff. With just over one-quarter of respondents having heard of JORUM and only 17.9% of MERLOT, it is not surprising that a high proportion of academics are not contributing to these. It is understood that JORUM relies on an institution to be a recognised 'contributor' that has signed the agreement, and that it is a new teaching material repository and that awareness within institutions is still on the increase. MERLOT has more of an international presence and has been in existence since 1997, yet there seems to be a lack of awareness and participation. Our results support the claim by Foster and Gibbons (2005) that content recruitment remains modest at present because of the low number of participants that have previously contributed material to a repository.

Awareness can be a barrier in a number of ways other than knowing that repositories exist. It is clear from this survey that academics are unsure about the purpose of repositories, how they work and the benefits that they bring to an institution or a

subject area. Many academics were getting confused between a VLE and a repository. Although they are similar, a VLE can be less formal than a repository, whereas a repository is more structured and materials can be reviewed to maintain a certain level of quality. This all links back to the intended purpose of a repository, and if the purpose lacks clarity then this is a potential barrier to increase contribution to repositories.

In the RoMEO (Gadd *et al.*, 2003) survey, 32% of respondents did not know who owned the copyright in their research output, compared with 54.9% in this survey. Curiously enough, the copyright situation for teaching materials is actually clearer than for research output. Teaching output normally belongs to the employer, unless a contract of employment varies this. The survey also found that there is a general lack of awareness on IPR issues. This in itself creates a barrier to contributing material to repositories. The results suggest that academics want to retain control over their teaching materials by placing restrictions and conditions on their materials. This backs up the JISC DRM Study findings and those of Campbell (2003). With regards to teaching materials, if an institution sets up a repository it should not have problems accessing this as it owns the material and has the right to place it into the IR's. This is in contrast to research output, where in most cases the IPR has been assigned to a publisher.

### *Rewards and incentives*

Rewards are a potential way of motivating academics to contribute to a repository. Our results indicate that a variety of financial and non-financial rewards would encourage academics to contribute or consider contributing to a repository of teaching materials, with financial rewards being more popular than non-financial ones. The general feeling among respondents was that if others were making money out of teaching materials, then they would also like a share. The idea of royalties was mentioned in some of the free-text comments as being a good idea, yet it was recognised that this may be difficult to implement.

One of the most preferred incentives cited (which backed up the FERL survey in 2005) was the satisfaction of contributing, which indicates that some academics have an altruistic approach when it comes to sharing materials. Other incentives were that participants would share materials to improve staff development.

### **Conclusions**

This was the first major survey to question academics and learning support staff in UK higher education institutions on their views of contributing learning and teaching items to a repository. It is clear from the survey that many academics feel strongly about repositories and teaching materials, and there are obvious concerns regarding the misuse and manipulation of their materials. The results showed that respondents were making use of a range of repositories (international, national, regional, institutional and departmental). The repositories respondents had encountered were

reported to be easy to use (64.2%), and the material located was of good quality (69.5%) and relevant to their teaching (50.5%). Repository use did not lead to a reduction in workload for 44.3% but for 26.5% of respondents it did. On the whole, it did not prove to be a good way to find colleagues in other institutions active within a given subject area.

Concerns were expressed about the quality of the content contained in repositories. This was demonstrated in the form of doubts about the quality of respondents' own materials; whether such materials were suitable, in terms of content or presentation, for sharing with others; the quality of others' materials and whether others could make use of these items. Having enough time to devote to familiarising themselves with repositories, and to prepare teaching materials, both proved to be a common concern. Protecting copyright was seen as a key issue for some. Further investigations into the real situation with copyright ownership of teaching materials would provide useful information for a range of stakeholders within academic institutions. Others stressed the importance of individuality and the personal nature of the creation of course materials, claiming that sharing teaching resources would make for bland content. The view that it would be easier for students to cheat and plagiarise materials was also noticed. It was also felt that some individuals might make use of others' materials without contributing their own in return. Some individuals regarded the concept of a repository with a degree of scepticism and would not be willing to contribute to a repository.

On the other hand, many potential benefits to both academics and students were expressed. Many were willing to share their resources with others and would view a repository as a valuable resource to assist in the preparation of teaching materials. The value of feedback from others on how their material had been used, outlining how it had been amended, was perceived to be a good way to improve the quality of the materials. Potential benefits to students were seen as improving access to these resources, enhancing their learning and improved teaching standards.

The 'ideal' repository depends on the needs of the individual, but 58.2% expressed a preference for a subject-based repository. The survey has highlighted the view that depositors' needs vary according to the content of the materials they are likely to be depositing and restrictions they would want to place on access to their items to protect copyright. The need for support in creating materials in a suitable format was also clear. Table 5 summarises how our results may assist those in the process of setting up a repository as it provides indicators to the requirements that contributors are likely to have when using a teaching material repository.

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Table 5. Preferences related to those setting up a repository

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**About you**

Over one-half of respondents deposit materials to their institution's VLE

**Use of repositories**

Over 80% of respondents would like to find photographs, images and diagrams in a repository of teaching materials; therefore, usage may increase if this content is available in the repository.

There are a wide range of reasons as to why people use repositories. Many reasons should be highlighted to attract a large and varied audience of users and contributors

**Current contributions to repositories**

Departmental and insitutional repositories were most popular in terms of current contribution

Many currently contribute to improve their teaching and to improve student motivation, and these are therefore good non-financial rewards to highlight. Reasons for not contributing were because their materials are on the VLE or not in a suitable format to share outside their institution

**Future contributions to repositories**

Over one-half of participants wanted the subject content reviewed in terms of quality. This would give the repository prestige. Contribution was more likely if support was easily and freely available, therefore, such assistance may increase content recruitment. Over one-half of respondents would like users to be able to add comments to materials. This facility could be used to encourage greater usage in the future

**Rights associated with your material**

Ensure the ownership situation and copyright implications are easily understandable and accessible due to general lack of awareness in this area. Reassure contributors that their materials will be used in accordance to their rights, to create a level of trust with them

**Other**

There were many positive and altruistic motives for contributing and therefore it is important to encourage others to contribute for the collective good of the community

In a future paper we will explore some of the rights and rewards issues further, including an exploration of the possible role of Creative Commons licenses in such repositories.

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**References**

- Albright, P. (2006) *Open educational resources: forum report*. Available online at: [http://www.unesco.org/iiep/virtualuniversity/forumsfiche.php?queryforumspages\\_id=23](http://www.unesco.org/iiep/virtualuniversity/forumsfiche.php?queryforumspages_id=23) (accessed 4 May 2006).
- Campbell, L. (2003) Engaging with the learning object economy, in: A. Littlejohn (Ed.) *Reusing online resources: a sustainable approach to e-learning* (London, Kogan Page), 35–45.
- Drake, M. (2004) Institutional repositories: hidden treasures, *Searcher*, 12(5), 41–45.
- Duncan, C., Barker, E., Douglas, P., Morrey, M. & Waelde, C. (2004) *Digital rights management: final report* (Linlithgow, Intrallect). Available online at: <http://www.intrallect.com/drm-study/DRMFinalReportv2.pdf> (accessed 15 November 2005).
- FERL (2005) *Contributing to FERLS survey: final report*. Available online at: <http://ferl.becta.org.uk/display.cfm?page=727> (e-mail team to receive report).
- Foster, N. F. & Gibbons, S. (2005) Understanding faculty to improve content recruitment for institutional repositories, *D-Lib Magazine*. Available online at: <http://dlib.org/dlib/january05/foster/01foster.html> (accessed 15 November 2005).
- Gadd, E., Oppenheim, C. & Proberts, S. (2003a) RoMEO Studies 1: the impact of copyright ownership on academic author self-archiving, *Journal of Documentation*, 59(3), 243–277.

- Genoni, P. (2004) Content in institutional repositories: a collection management issue, *Library Management*, 25(6–7), 300–306.
- Horwood, L., Sullivan, S., Young, E. & Garner, J. (2004) OAI compliant institutional repositories and the role of library staff, *Library Management*, 24(4/5), 170–176. Available online at: <http://iris.emeraldinsight.com/vl=6333825/cl=130/nw=1/fm=docpdf/rpsv/cw/mcb/01435124/v25n4/s1/p170> (accessed 15 November 2005).
- Jacobs, N. (2005) *JISC digital repositories programme*. Available online at: [http://www.jisc.ac.uk/index.cfm?name=programme\\_digital\\_repositories](http://www.jisc.ac.uk/index.cfm?name=programme_digital_repositories) (accessed 15 November 2005).
- JORUM (2004) *JORUM scoping and technical appraisal study volume III*. Available online at: [http://www.jorum.ac.uk/research/archive/docs/vol3\\_Fin.pdf](http://www.jorum.ac.uk/research/archive/docs/vol3_Fin.pdf) (accessed 15 November 2005).
- Massachusetts Institute of Technology OpenCourseWare (2006) Available online at: <http://ocw.mit.edu/index.html> (accessed 4 May 2006).
- Open University (2006) *Open content initiative: application to the William and Flora Hewlett Foundation*. Available online at: <http://oci.open.ac.uk/pdf/OU-OCI.pdf> (accessed 4 May 2006).
- Swan, A. & Brown, S. (2005) *Open access self-archiving: an author study*. Technical report, external collaborators, JISC, HEFCE. Available online at: <http://eprints.ecs.soton.ac.uk/10999/> (accessed 15 December 2005).
- Times Good University Guide (2005) *Times top 100 universities*. Available online at: <http://www.timesonline.co.uk/pdfs/finalunitable2.pdf> (accessed 22 November 2005).