

Keynote 1: OER and the Open Agenda

Malcolm Read, Executive Secretary, Joint Information Systems Committee (JISC)



From the earliest ideas around open source software and open access to research, the “open” agenda has been a major catalyst for change in UK and worldwide education. Although “openness” as a concept is highly compatible with the academic ideals of a collegiate community of scholars, adapting to “openness” has been an activity which has required the substantial rethinking of processes and business models within the contemporary institutional and educational ecosystem. Situating the Open Educational Resources agenda within wider aspects of openness, this talk will discuss the programme-level learning drawn from the UKOER pilot programme and offer an insight into future national priorities concerning OER. It will focus on the challenges offered to institutions and national bodies around achieving sustainable practice in this area, and around reaping the many benefits of open resource release. The challenges of exploiting the OER "infrastructure" for formal and informal learning are not yet fully surmounted. The open world can be seen as chaotic and difficult to navigate, as ideas of free-text search and discovery drawn from the mainstream world wide web compete with traditional academic structures based around a library model. The structure and discovery of electronic learning opportunities will be considered, with some thoughts on the need for (at least some) structures within openness and the practical realities of achieving this within an organic system.

Keynote 2: The power of the collective

Allison Littlejohn, Caledonian Academy, Glasgow Caledonian University



All of us learn as an inseparable part of the Many - the range of distinct groups, networks, communities or collectives that are part of our lives (Dron and Anderson, 2007). The Many is progressively more connected through pervasive social systems, unleashing opportunities for open access to human and non-human entities (people, knowledge, materials including OERs) that can act as resources for learning. Increasingly these resources are openly available, contributing to changes within the Many that open up opportunities for new conceptualisations of learning. Although learning has been viewed as either primarily individual, minimally influenced by others, or predominantly collaborative, more recent conceptualisations view learning as a process of creating networks that connect people, organisations and resources (Siemens, 2006). Social networks enable learners to connect with and tap into groups, networks, communities or collectives to consume, filter and create new knowledge. Collectives include the open formation of tag clouds, recommendations or navigation in social systems based on prior use, evaluation or other stigmergic indicators (Dron and Anderson, 2007). These collectives enable access to the unpredictable, and yield spontaneous and serendipitous learning and knowledge sharing (Sunstein, 2001). In this new concept of learning individuals can learn by both drawing on and at the same time contributing to the collective knowledge (Paavola et al, 2004, Littlejohn, Milligan & Margaryan, 2009). Learning could be enhanced through mechanisms that allow individuals to create and share knowledge by connecting with each other and the broader collective. Taking a broad perspective on learning, this keynote will explore the power of the collective. It will examine different ways individuals interact with collective knowledge for learning and will explore processes to enhance individuals’ capacity to learn from and contribute to the collective.

Dron, J. & Anderson, T. (2007). Collectives, networks and groups in social software for e-learning. In T. Bastiaens & S. Carliner (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2007* (pp. 2460-2467). Chesapeake, VA: AACE.

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Paavola, S., Lipponen, L., & Hakkarainen, K., (2004) Models of Innovative Knowledge Communities and Three metaphors of Learning. *Review of Educational Research* 74(4), 557-576.

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OER1001 Oral Presentation

Faculty sharing of scientific educational materials: drivers and barriers

Vivien Rolfe, De Montfort University

Conference Theme: Open Educational Content

Abstract: The philosophy of the HEFCE/JISC Open Educational Resources (OER) initiative is to promote the open release and sharing of high quality learning materials worldwide (1). The UK Centre for Bioscience is part of the pilot project comprising of a number of consortium partners to develop “An Interactive Laboratory and Fieldwork Manual for the Biosciences”(2), and includes the “Virtual Analytical Laboratory” or “VAL”(3) from the School of Allied Health Sciences at De Montfort University. VAL is an on-line laboratory skills resource consisting of video, animation, audio and screen-capture materials, and is freely available on the internet under the Creative Commons License 2.0. The resource is used widely across two science programmes – Biomedical Science (BSc Honours) and Medical Science (BMedSci Honours). Interestingly in the year since its launch, VAL has had over 3000 visits from 80 countries around the world, but it is not widely used across the faculty. The Faculty of Health and Life Sciences includes education in social sciences, laboratory sciences and health care professions, with around 400 members of academic staff and 5000 students. VAL would be relevant to a number of undergraduate and postgraduate programmes. This paper explores staff perceptions and attitudes at a faculty level in relation to using VAL to assist with laboratory skills teaching, and more widely in relation to sharing educational materials in general. The paper evaluates staff needs and requirements regarding the acquisition, use and sharing of educational materials. Questionnaires were circulated to staff both on-line and in a paper form. Questions were based on a 5-point Likert scale or were open ended. Results from the questionnaire are being used to improve strategies, infrastructure and resources to facilitate the sharing of resources at faculty level, and have wider relevance across university communities and in supporting the OER philosophy.

Keywords: Open Educational Resources; Virtual Analytical Laboratory; Reusability; Staff Perceptions

References: (1) Open educational resources programme (2009). Available at: <http://www.jisc.ac.uk/oer> [Accessed 14th October 2009]. (2) UK Centre for Bioscience OER Project (2009). Available at: http://www.heacademy.ac.uk/projects/detail/OER_SUB_Bioscience [Accessed 14th October 2009].

(3) Virtual Analytical Laboratory (2009). Available at: <http://hlsweb.dmu.ac.uk/ahs/elearning/RITA/Index.html> [Accessed 14th October 2009].

OER1002 Oral Presentation

Designing for innovation around OER

Andy Lane, The Open University

Conference Theme: OER Design

Abstract: This paper argues that designing collections of ‘closed’ educational resources for use by specific student cohorts and collections of open educational resources for use by any ‘learner’ require different design approaches. Learning design for formal courses has been a research topic for over 10 years as the ever growing range of digital content and technologies has potentially offered new opportunities for constructing effective learning experiences, primarily through greater sharing and re-use of such content and technologies (Brittan, 2004; Conole et al 2008)). While progress in adopting learning design by teaching practitioners has appeared slow so far the advent of open educational resources (OER) has provided a substantive boost to such sharing activity and a subsequent need for employing learning design in practice. Nevertheless there appears to be a paradox in that learning design assumes a reasonably well known and well defined student audience with presumed learning needs while OER are exposed to a multitude of potential learners, both formal and informal, with unknown learning needs. It can be argued that innovative designs for formal courses involve creating structured pathways through a mixture of existing and new content and activities using a mixture of media and technologies in the process. This type of configurational design that blends together given items to meet a particular need rather than designing something fully de novo is typical in many areas of work and not just teaching. Such designs work very well when there is a small set of users of the innovation or their use of the innovation is narrow. However many innovations in information, communication and computing technologies often have multiple types of users and many more layers of complexity (Stewart and Williams, 2005). In these cases, rather than heavily pre-define an innovative solution just to meet certain user requirements, it is necessary to design for greater flexibility so as to allow the users to adapt their use of the innovative solution for their own requirements once it has been deployed. The use of such an ‘innofusion’ approach for OER will be highlighted using the case study of OpenLearn (McAndrew et al, 2009).

Keywords: Innovation, diffusion, learning design, user requirements, OER

References: Brittan (2004) a review of Learning Design: Concept, Specifications and Tools. A report for JISC E-learning Pedagogy Programme, 27 pp.

Conole et al (2008) Learning design methodology to foster and support creativity in design, *Journal of Educational Media International*

McAndrew et al (2009) OpenLearn Research Report

Stewart and Williams (2005) the Wrong Trousers? Beyond the Design Fallacy: Social Learning and the User. In Ed Rohracher, ‘User involvement in innovation processes. Strategies and limitations from a socio-technical perspective’. Profil-Verlag.

OER1003 Oral Presentation

Exploring institutional attitudes to open learning, the BERLiN experience

Andy Beggan, University of Nottingham

Conference Theme: Open education communities

Abstract: BERLiN (Building Exchanges for Research and Learning in Nottingham), is a 12-month JISC-funded project to enhance and expand Nottingham’s existing Open Educational Repository (OER), u-Now , one of the first OERs in the UK and a member of the international Open Courseware Consortium. The aim of the project is to progress the vision of sustainable OERs by making 360 credits of existing learning resources freely available online. Over the last 12 months, the BERLiN project team has increased the amount of open learning material available on u-Now. This has led us to re-examine u-Now and to explore the broader benefits of publishing learning materials openly for Nottingham academics and hence how they can be encouraged to participate. The benefits for contributing OER are varied and bring with them their own challenges. Mechanisms to encourage adoption and re-use within individual contexts are required to realize many of the benefits offered by OER. It is not always appropriate or desirable to make materials created for delivery within a blended context available openly without support mechanisms for use and re-use. To that end, it continues to be a careful balancing act to ensure the needs of both the content providers and end-users are met. At Nottingham, three principal reasons for publishing OER materials have been identified: social responsibility, promotional opportunities and cost efficiencies/time management. During 2009, the BERLiN project team explored the barriers preventing the adoption of OER through a series of academic and student focus groups, organized to explore how the

publication and re-use of open learning materials is perceived at Nottingham. The detailed results were illuminating though they did confirm our suspicions that anxieties lay in areas such as the fear of loss of control, legal or moral restrictions, time and effort required, quality controls and the extent to which the numerous forms of teaching can be represented in OER. The results of the focus group investigations, and the strategies developed to enhance OER submission and reuse will be discussed during this presentation. The presentation will also include a demonstration of the U-Now OER, facilitating continued participation with audience members.

Keywords: OERUK, JISC-BERLiN, Nottingham, U-Now

OER1004 Demonstration

Xerte Online Toolkits and the Xpert Repository

Julian Tenney, University of Nottingham

Conference Themes: Open Educational Content, Open Educational Communities

Intended audience: Content Developers, OER Repository developers, elearning managers, interactive designers

Abstract: Web 2.0 is creating new opportunities for creating, reusing and managing content, and has led to the development of Xerte Online Toolkits at the University of Nottingham. Xerte Online Toolkits is open-source software and is in use all over the world. The University of Nottingham is working to progress the vision of a distributed architecture for the development of interactive learning content and the submission of that content into open access repositories. The demonstration will show how recent developments to the Xerte suite of tools are allowing several partner institutions to jointly produce content for publication in the open-access Xpert repository, and show how many of the issues involved in the creation, distribution and re-use of open access resources are being identified and addressed. Xerte Online Toolkits is a suite of open-source browser-based tools that allow content developers to develop rich, interactive and highly accessible content quickly and easily and to seamlessly publish that content online. Collaboration with other content developers is supported and it is easy to share and re-use content with other users. The system is extensible by developers and provides a proven, flexible and powerful solution. Recent developments add to this by making it easy to add metadata to the learning resources and to expose learning resources for harvesting by open-access repositories using RSS carrying Dublin Core metadata. Crucially, resources remain with the institution that developed them, removing many of the barriers to repository use that other initiatives have encountered when requiring that the content itself be submitted. The demonstration will highlight the benefits of a distributed repository over more traditional models and demonstrate how Web 2.0 techniques are adding value. We will also show how we enable content to be easily adapted, re-purposed and re-used and discuss some of the issues we have encountered. Building on the work done with a number of partner institutions, we will explore a range of cultural, technological and organisational issues associated with developing open-access content in general and the adoption of such a system in particular.

References/URL: <http://www.nottingham.ac.uk/xerte>

OER1005 Poster

Forging meaningful, equal partnerships in OER between the UK and Africa

Steven Stapleton, University of Nottingham

Conference Theme: Open Educational Communities

Abstract: The University of Nottingham is one of 7 Higher Education Institutions that received funding as part of the JISC UK OER Programme to investigate Open Educational Resources. A key component of Nottingham's 'BERLiN' project is to build and become part of open educational communities. To this end The University of Nottingham is facilitating a meeting in November 2009 being chaired by OER Africa and the UK Commission for UNESCO with the working title of 'Forging meaningful, equal partnerships in OER between the UK and Africa'. One of the key aims of this initiative is to build a community of UK open resource providers that are willing to work with OER Africa and respond to requests for specific open resources from them. At the heart of the long term success of this initiative is the ability to engage an Open Educational Community. The poster will present the outcomes of the meeting including:

- o The agreements decided upon and the process by which they were achieved
- o The strategies that were implemented for moving forward
- o What was achieved by the community
- o What the challenges were for the community
- o What was learnt as part of the process

Keywords: OER, BERLiN Project, OER Africa, UK Commission for UNESCO, Open Educational Communities

OER1006 Oral Presentation

I am what I am: Self-identity, communities and reviewing in the humanities HumBox project.

David J Mossley, Subject Centre for PRS, HumBox

Conference Theme: Open Education Communities

Abstract: The JISC/HEA OER Humbox project has brought together departmental partners from across the humanities to share, review and develop teaching resources. The success of the project is founded on its strong basis as discipline and community focused. This presentation outlines how this was achieved from the outset in the project's design, philosophy, methodology, technological innovation through adaptation of existing techniques, disciplinary focus and dissemination. Aspects of review, collection and categorisation were tailored to match the approaches familiar to academics in humanities; contested and constructed areas of knowledge were not prejudged allowing bottom-up disciplinary and interdisciplinary community engagement. With some exceptions in language teaching and research, matching collaborative teaching resource development to recognised practices and community identities in research is the exception rather than the rule in the humanities; a central part of the HumBox project was to explore and evaluate how well this could be extended. The presentation shares insights from the process and stresses the need for future OER development to be owned by self-identifying communities of academic practice. Finally, there is a short assessment of the future of OER in the humanities and how Web 2 technologies present challenges and opportunities for further nurturing the approach taken by HumBox.

Keywords: open educational resources, communities, academic practice, humanities, identity, bottom-up, teaching, learning, methodology, technology

References: Becher, T. and Trowler, P.R. (2001) Academic Tribes and Territories Buckingham: Open University Press

OER1007 Oral Presentation

Opening resources, opening minds

David J Mossley, Subject Centre for PRS, HumBox

Conference Theme: Open education communities

Abstract: The JISC/HEA OER Humbox project has brought together departmental partners from across the humanities to share, review and develop teaching resources. The HumBox development was informed by and for the humanities community. The project has been very successful in collecting and reviewing a wide range of humanities teaching materials. This demonstration shows how this was achieved from the outset in the project's development of existing technologies from a repository used by the languages teaching community. The project drew on bottom-up development, review and cataloguing processes that were identified as appropriate to the humanities and this is reflected in the HumBox itself. The demonstration will show how flexibility and conceptual diversity are handled by the HumBox in order to be a recognizable and usable resource by academics in the humanities. How new resources are added, reviewed and collected into larger groupings will be a key aspect of the demonstration.

Keywords: open educational resources, communities, academic practice, humanities, identity, bottom-up, teaching, learning, methodology, technology

References/URL <http://humbox.ac.uk> (This URL is currently under application; please see: <http://humbox.eprints.org>)

OER1008 Oral Presentation

OER and Marketing Opportunities

Russell Stannard, University of Westminster

Conference Theme: Open Educational Content

Abstract: It is no secret that releasing OER can result in better marketing of courses and institutions. Recent statistics from the Open University have large increases in numbers as outlined in the Open Learn report and UNESCO have alluded to the same point. The presentation demonstrates how releasing screen cast training videos related to the MSC in Interactive Multimedia at the University of Westminster has led to a 50% increase in student numbers. These numbers are even more encouraging when viewed in the light of the falling numbers of computer science students. Students not only decided to apply to the University because of the content, which is held on www.multimediatrainingvideos.com but also found that the content informed them about the course and helped them to make a decision to study at the University. This can be demonstrated through the results of 2 surveys undertaken at the start of the 2008 and 2009 academic years. It demonstrated that the OER resources on MMTV played a key role in their choice of course. The author will also reveal how he used a variety of techniques to promote the site and build up the number of users. The screen casts were loaded onto YouTube, Vimeo, work was done on Google to push the search ranking of the host site and Tweeter was also used to build up contacts and promote the content. Results from this aspect of the project are still to be fully understood but early indications are that SEO and Twitter can both play a key role in dissemination. What is also clear is the importance of both the quality and quantity of the material that is released. It is vital to have enough content to encourage users back to the site and quality plays a key role in convincing students that the courses related to the materials may be worth pursuing. The study won funding from the JISC/HEA OER project and is one of 8 individual projects to be funded. It offers a possible direction for the sustainability of OER projects in the long run and useful insights into the ways that the dissemination of OER content can be achieved.

Keywords: OER, Marketing, Sustainability, Social Networking, JISC/HEA

References: Open Learn Research Report 2006-2008

http://oerwiki.iiep-unesco.org/index.php?title=Main_Page

<http://www.multimediatrainingvideos.com> <http://www.timeshighereducation.co.uk/story.asp?sectioncode=26&storycode=407984&c=1>

<http://www.youtube.com/multimediatraining>

OER1009 Oral Presentation

Towards OER: designing repository architecture and processes to support educational resource sharing

Angela Trikić & Vicki McGarvey, Nottingham Trent University

Conference Theme: Open educational content

Abstract: This presentation highlights some technical, policy and business processes and how these have been addressed in the design and implementation of a repository. NTU is engaged in a JISC funded repository enhancement project (April 2009-March 2011), Supporting, Harnessing and Advancing Repository Enhancement (SHARE) working with Desire2Learn, the providers of the University's VLE. The design of the Learning Object Repository (LOR) located in the VLE, has prompted consideration of how to map the LOR to the academic and professional service structures of the University and to facilitate resource sharing. Initial requirements analysis entailed development of a model specification describing the storage structure of the LOR to reflect the primary functional needs of the academic community. Use case scenarios capture distinct user roles and categories including academic, administrative, reviewer and LOR coordinator roles. Use cases form the basis for determining user access requirements and associated permission sets to support publishing and object management. Pilots are validating the LOR model and the application of a star (hub and spoke) methodology. The methodology devolves responsibility to the nine academic Schools and professional services retaining minimal central management needed to ensure the integrity of the repository and work-flow processes to support the efficiency of its services. The design of the repository cannot be decoupled from the business processes that operationalise its use. The decision to devolve responsibilities to Schools for deposits, retrieval and reuse of OER is predicated on sufficiency of support and guidance. Quality assurance processes include checklists to ensure the accessibility of content, copyright compliance and guidance on good resource management. The vexed challenge of metadata management has prompted much debate with a compromise between traditional approaches vs Web 2.0 sought. A consensus has been agreed to adopt a small sub-set of UK LOM Core, which will be available to users. Three views are available: basic, intermediate and advanced views respectively, with metadata adjusted accordingly. Technical work on metadata template profiles is in progress, to investigate an element of metadata automation. As OER work in progress, this presentation offers an active exemplar of design decisions, challenges and issues presented by open educational content.

Keywords: Use cases, roles, methodology, work-flow processes, meta-data management

References: Community Dimensions of Learning Object Repositories, TrustDR development pack: <http://trustdr.ulster.ac.uk/outputs.php>

Charlesworth, A and Ferguson, N and Schmoller, S and Smith, N and Tice, R Sharing eLearning Content: a synthesis and commentary. <http://ie-repository.jisc.ac.uk/46/>

Key Perspectives Ltd, Research Information Network, Natural Environment Research Council, JISC (2008) To share or not to share: <http://www.jisc.ac.uk/news/stories/2008/06/researchdata.aspx>

Bates et al, 2006. Rights and Rewards Project: Academic Survey - final report. Loughborough: Loughborough University

OER1010 Oral Presentation

Using a Structured Approach to Authoring OER Content: An Evaluation of Two Cases.

Frank Banks, The Open University, UK.

Conference Theme: Open educational content

Abstract: The Teacher Education in Sub Saharan Africa (TESSA) OER materials are a response to the teacher crisis in many developing countries, with millions of unqualified teachers entering the classroom (see www.tessafrica.net). The TESSA teacher professional development materials were developed by a collaboration of eighteen institutions and are currently being used by 300 000 teachers across nine African countries. To ensure that the resources were appropriate and relevant, these OERs followed an agreed common template for construction with the intention to facilitate versioning for the different school contexts, in four languages. OpenLearn (see www.open.ac.uk/openlearn) is an OER site containing over 10 000 hours of learning materials from the UK Open University. With well over five million unique visitors, its purpose was to showcase the Universities materials, to attract new students and to investigate new possibilities in the creation of new course content. It too was created around a template as shown by the OpenLearn module 'Creating Open Educational Resources' (<http://openlearn.open.ac.uk/course/view.php?id=3636>). The Open University took a leading role in the development of both TESSA and OpenLearn. Using these as case studies, this paper analyses the systemic organisational benefits and constraints of a structured template approach to OER content production. It seems that such an approach is successful – both the TESSA and OpenLearn OER sites have won prestigious awards. However, this structured template methodology for OER content production is here critically investigated, particularly in relation to:

- The level of support needed by authors new to creating OERs;
- The cost-benefits of production;
- The speed of creation and re-creation;
- The way cultural norms impact on notions of 'ownership', 'sharing' and 'adapting' the work of others;
- The expectations of the user/learner in terms of preparation for study, navigation and level of response.

Keywords: Teacher Development; Structured authoring; Evaluative Case Study

References: Banks, F., Leach, J. and Moon, B. (1999) 'New Understandings of Teacher's Pedagogic Knowledge' in Leach, J. and Moon, B. (eds) *Learners and Pedagogy*, Paul Chapman publications, London. ISBN 1 85396 428 X.

Bereiter, C. and Scardamalia, M. (1996) 'Re-thinking learning' in D.R. Olson and N. Torrance (eds) *The handbook of education and human development: new models of learning, teaching and schooling*, New York, Blackwells.

Caswell, T, Henson, S, Jensen, M. and Wiley, D (2008) 'Open Educational Resources: Enabling universal education', *The International Review of Research in Open and Distance Learning*, Vol. 9, No. 1, 11 pp.

Moon, B. (2007) 'Building the research and development agenda around school based teacher education programmes: a new imperative in sub-Saharan Africa', *The Curriculum Journal*, 17:3.

OER1011 Oral Presentation

CORRE: A workflow framework for transforming teaching materials into OERs

Samuel Nikoi and Tania Rowlett - Beyond Distance Research Alliance. University of Leicester

Conference Theme: Open Educational Content

Abstract: Openness has become a defining quality of the 21st century associated with values such as freedom, participation, empowerment, collaboration and lifelong learning (Straub 2008). In the Higher Education sector, this has resulted in the development and dissemination of Open Educational Resources (OERs). Currently there are over 3000 open access courses from over 300 universities worldwide (Yaun, MacNiel and Kraan 2008), providing flexible content that can be adapted to local needs and conditions (Downes 2006). Authoring tools such as eduCommons, LAMS, GLO Maker II, Xerte and COMPENDIUM; licenses such as Creative Commons; and repositories such as iTunes U and OER Commons enable institutions and individuals to generate and access OERs. For many academics new to open learning, a major challenge is transforming existing teaching materials into OERs (Lane 2006). Many questions arise, including re-contextualising materials, usability under appropriate licenses, format accessibility, availability across different learning platforms and domains, and trackability. In this article we present and discuss an integrated workflow framework developed to answer some of these questions. Our CORRE framework (Content-Openness-Reuse/Repurpose-Evidence), for transforming existing materials into OERs derives from the OTTER project, one of the JISC institutional strand OER projects. CORRE has four main stages, each defined by a set of criteria matched to indicative evidence: Content focuses on gathering and screening existing teaching materials for turning them into OERs. Openness assesses the legal, pedagogical and technical perspectives of transforming existing content into OERs. Reuse/Repurpose, the sociocultural dimension, involves validation of transformed materials with academic partners and potential users. Evidence addresses questions related to sustainability in terms of the value and usefulness of an OER through a process of tracking using multiple survey mechanisms. The value of CORRE lies not simply in its suitability as an agile method (Boyle 2006) for transforming existing teaching materials into OERs, but more importantly, in its use of indicative evidence for assessing the quality, accessibility, adaptability and potential impact of OERs.

Keywords: OER; academic attitudes; learning design; open access; open education; independent learning; copyright; sustainability; reuse; repurpose.

References: 1. Boyle, T., (2006). An Agile method for developing learning objects. In L. Markauskaite, P. Goodyear, & P. Reimann (Eds.) *Proceedings of the 23rd Annual Conference of the Australasian Society for Computers in Learning in Tertiary Education: Who's Learning? Whose Technology?* (pp. 91-99). Sydney: Sydney University Press.

2. Downes, S., (2006). Models for Sustainable Open Educational Resources. *Interdisciplinary Journal of Knowledge and Learning Objects*. vol 3. 2007. pp. 29 – 44.

3. Lane, A., (2006). From Pillar to Post: exploring the issues involved in repurposing distance learning materials for use as Open Educational Resources. Found at: <http://kn.open.ac.uk/public/document.cfm?docid=9724> [Accessed: 22 October 2009]

4. Straub, R., (2008). Is the World Open? Found at: www.elearningpapers.eu. 1 N° 8. pp. 1-5. [Accessed: 19 October 2009]

5. Yaun, L., MacNiel, S., and Kraan, W., (2008). Open Educational Resources – Opportunities and Challenges for Higher Education. Found at: http://learn.creativecommons.org/wp-content/uploads/2008/09/oer_briefing_paper.pdf [Accessed: 19 October 2009]

OER1014 Oral Presentation

Demystifying Re-Usable Learning Objects

Beverly Leeds and Debbie Barnes, University of Central Lancashire

Conference Theme: Open Educational Content

Abstract: This paper outlines the work of three funded projects at a UK university that created re-usable learning objects (RLOs) and an open access repository to locate and download these open educational resources. The RLOs were created by the E-Evolve and REVOLVE projects funded by HEFCE and JISC and open access to the materials is being developed by the JISC funded EVOLUTION project. Based on research undertaken the projects have developed re-usable and accessible materials in the form of RLOs that are designed to be used in a variety of ways within a module or programme of study. The materials are available to review and download for use, re-use or repurposing from the EVOLUTION materials repository www.employability.org.uk. The materials are all SCORM 4 compliant and have been used in Blackboard, Moodle and WebCT. There is much debate surrounding the definition (see Churchill, 2007) and granularity (Rehak and Mason, 2003) of learning objects which can be a mystery to academic staff not familiar with the concept. The EVOLUTION OER materials have been designed in a format aimed at being familiar to academics in order to facilitate the re-use and re-purposing of these objects. As a result all the materials were developed by practicing academics without any specialist IT knowledge. The re-useable objects have been developed at two levels; learning activities and re-usable materials. The learning activities are packaged learning content as a series of tasks using resources and materials. Each activity follows a specific pedagogy and provides learning outcomes for the activity. The re-usable materials are unpackaged raw materials such as worksheets and mini-lectures to be used in different combinations. The paper progresses by outlining the model for developing learning objects and designing for re-usability that is accessible for non-technical academic staff. Some issues surrounding the project will then be addressed, the main one being the issue of sustainability of the materials. The paper will also address re-use in different contexts including different subject disciplines and non-UK institutions. It concludes by discussing the use of the model to develop materials in other contexts and outlines the plans to maintain EVOLUTION.

Keywords: OER, RLO, Re-Usability

References: Churchill, D. (2007). Towards a useful classification of learning objects. *Education Tech Research Development*, 55,479–497.

Rehak, D., & Mason, R. (2003). Keeping the learning in learning objects. In A. Littlejohn (Ed.), *Reusing online resources: A sustainable approach to elearning*. London: Kogan Page.

OER1015 Demonstration

FETLAR project

Sue Milne, Consultant to FETLAR project

Conference Theme: Open educational content

Intended audience: Learning technologists with responsibility for subject areas requiring mathematics, QTI specialists, those interested in e-assessment

Abstract: The JISC-funded MathAssess project (September 2008 – March 2009) took existing QTI toolkits and developed them so that they provide the necessary functionality for mathematics. The new tools are Open Source (New BSD License) and conform to the QTI Version 2.1 specification. They have been enhanced as part of the FETLAR project within the HEA OER program and are now available for use in real-life teaching and learning, alongside collected OER for Mathematics in the FETLAR Virtual Appliance. The tools are suitable for creating QTI questions in any discipline, and provide additional facilities essential to any subject involving numeracy or mathematics, ranging from science and engineering, to nursing, social sciences and business studies. These facilities are:

- Display of mathematical expressions
- Manipulation of mathematical expressions
- Creation of randomised items
- Comparison of input and expected answer algebraically, not just string matching.

Once the tools are adopted by users, the future of the standards used in creating them becomes more assured, and hence the sustainability and interoperability of materials created with them. Alongside these tools, FETLAR provides search facilities which improve the efficiency with which academics can gather resources for their courses. The demonstration will show how users can:

- Discover OER suitable for a revision course in basic algebra,
- Assemble assessment materials, including individual questions and complete assessments, which relate to the selected resources,
- Modify the assessment materials by
 - Creating or amending a question using the MathQuate question editor,
 - Storing the question in the Minibix+ item bank.
 - Using Constructr+ to find the question in the Minibix bank and insert it in a test.
 - Storing the revised test in the Minibix+ test bank.
 - Delivering that new test as part of a Moodle course.
- Demonstrate interoperability by running a question in two different renderers: JAssess and QTIEngine.

Keywords: e-assessment, QTI, open source, open standards, mathematics

References/URL <http://stack.bham.ac.uk/course/view.php?id=14>

OER1016 Oral Presentation

Repurposing with a purpose – a story with a happy ending.

Lyn Greaves, Thames Valley University Clare Bradley, London Metropolitan University, RLO-CETL Professor Sibel Roller, Thames Valley University

Conference Theme: OER designs

Abstract: This case-study presents findings and continued outputs resulting from work undertaken as part of a JISC funded project. Project BL4ACE (Greaves, L 2009) working with RLO-CETL colleagues, set out to develop further the impact and reach of Re-usable Learning Objects across the Thames Valley University curriculum. The project successfully redesigned an existing academic skills module by creating and embedding learning objects to scaffold independent learner activities. It strengthened a learning design that had already demonstrated improved retention, progression and learning gain over two successive years (Greaves et al, 2007). The team successfully represented and communicated the learning design for the Business subject area and effectively increased real and widespread use through demonstrating effective transferability across subject domains to the subject areas of Health and Law. The student progression statistics for both the Health and the Law students show a significant progression and learning gain between the previous cohort and the current cohort who had the revised scaffolded curriculum. Although we can't say for certain that the embedding of the LO's are causal drivers for learning gains, comparative

cohort performance and evaluation of learners' experiences certainly indicate that they play a significant role. We learnt a great deal from the project particularly in the use of the Generative Learning Object Maker Tool for repurposing existing learning objects and curriculum materials to fit the local subject pedagogy and course and module needs. The presentation will outline the extent our development work led to improved student learning and describe the tangible/measurable institutional benefits that have been realised through the work of the project. We describe the barriers and enablers in using learning objects from other institutions for reuse and adaptation (using the GLO Maker tool), and incorporating them into the module designs, in particular resource implications. Student results and feedback from student evaluations will be presented that highlight the success of the approach, and our experiences and lessons learned in terms of impact of innovations on learners, on teachers and on the institution will be shared.

Keywords: Learning designs, learning objects, GLO Maker, student retention and progression improvement

References: Greaves, L. 'Blended Learning 4 Academic Competence and Critical Enquiry (BL4ACE)' JISC RePurpose Project, March 2008-2009

Greaves, L., Bradley, C., Cook, J. (2008). A Blended Learning Design to Support Student Learning. In Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2008 (pp. 4643-4651). Chesapeake, VA: AACE.

OER1017 Oral Presentation

OSS Watch and OpenSpires Projects

Rowan Wilson, University of Oxford

Conference Theme: Open Educational Communities

Abstract: The Creative Commons movement draws much inspiration from earlier innovations in copyright licensing within the free and open source software (FOSS) communities.1 Can looking at the success factors behind mature and sustainable FOSS communities help us to understand how to create similarly successful communities around the copyright works that make up open educational resources? The OSS Watch free and open source software advisory service2 has been funded by the JISC since 2003 to help UK higher and further education engage with both the use and the creation of FOSS. In this time OSS Watch has helped and observed many developing open communities, both inside and outside of the sphere of education. In early 2009 JISC and the Higher Education Academy funded the University of Oxford, along with any other institutions, to release substantial quantities of Creative Commons-licensed open educational resources. By hosting both this project (OpenSpires3) and the OSS Watch advisory service, Oxford University Computing Services has gained a wealth of experience of the barriers to release of copyright works under open licences within further and higher educational institutions, as well as an understanding of the kind of communities that succeed while nurturing high quality resources. This presentation will seek to synthesise and communicate lessons from this combined experience.

Keywords: Open Educational Resources, Open Source Software, Sustainability, Community, Copyright, Copyleft, Governance

References:

1 <http://creativecommons.org/weblog/entry/5668>

2 <http://www.oss-watch.ac.uk>

3 <http://openspires.oucs.ox.ac.uk/>

OER1018 Oral Presentation

The Challenge of OER to Academic Practice

Tom Browne, Richard Holding, Anna Howell and Sue Rodway-Dyer –Education Enhancement, Academic Services, University of Exeter

Conference Theme: Open Educational Communities

Abstract: The degree to which Open Educational Resources reflect the values of its institutional provider depends on questions of economics and the level of support amongst its academics. For project managers establishing OER repositories, the latter question - how to cultivate, nurture and maintain academic engagement - is critical. Whilst participating in the JISC-funded institutional OER programme (2009-10), the team at the University of Exeter encountered a range of academic opinions on OER, and followed many as they rode the peaks and troughs of opportunities and challenges that this kind of work entails. This paper discusses the potential motivators for academics in providing OER material, as an understanding of these is helpful when introducing the subject to new contributors, and when informing planning decisions - both procedural and financial - so that key incentives are protected. We will also look at the reasons for some academic scepticism surrounding OER and how these views can be - if not tempered - then at least understood with a view to informing future policy. The enthusiastic advocacy that some academics possess in relation to OER is borne of their vision of its use. It's important to ensure that the high priority objective of obtaining academic support does not overlook instances where there is tension between this vision, and what can be achieved with available resources. We will discuss the key information that OER managers need in order to mitigate this scenario. OER projects do not work in isolation from internal competition and project managers must be sensitive to the conflicting pressures that academics have to contend with in their work profile. We will discuss the value of establishing where an OER project sits within an institution's educational and research strategies, and its financial framework, the questions to ask and the signs to spot to obtain this information, and how managers can use this knowledge to make decisions, avoid pitfalls and garner support. Finally, we will address academic initiatives and reward schemes, including a discussion of how IPR and copyright can not only present challenges but also play an important role in motivating and demonstrating academic engagement. **Keywords:** JISC, academic engagement, education strategy, IPR, copyright, teaching, project management, motivation, OER, research strategy

References: Challenges to long-term sustainability of OER (OLCOS 2007), summarised in the CETIS report Open Educational Resources – Opportunities and Challenges for Higher Education (2008)

Features of successfully sustained online content projects, a draft checklist derived from the Strategic Content Alliance/Ithaca report Sustainability and Revenue Models for Online Academic Resources (May 2008)

Lou McGill, Sarah Currier, Charles Duncan, Peter Douglas, December 2008. Good intentions: improving the evidence base in support of sharing learning material

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Evaluating collaborative participation and engagement for learning and creativity in OER communities

Panagiota Alevizou, Open University Tina Wilson, Open University Patrick McAndrew, Open University

Conference Theme: Open Educational Communities, OER Design

Abstract: Recent advances in Information and Communication Technologies (ICTs) enable educational and cultural institutions to rethink and experiment with their conduct of learning using digital social media and networking tools. Meanwhile, several well-known – yet distinct – initiatives within the OER world continue to purport a mission of education as a ‘public good’. In addition current thinking as well as emerging United Kingdom (UK) and international policy agendas on education are shifting from the idea of simply providing access to content, towards the notion of creating ‘open participatory learning ecosystems’ (cf. Smith and Casserly, 2006; Seely-Brown 2007; Seely-Brown & Adler 2008). At the core of these evolutionary trajectories of OER mediation, the notion of community and participation become more complex. Put simply, an OER community might consist of those who collaborate to create or reuse OER content. Alternatively a community may be formed by interactions between tutors and peers aggregating in the study and creative adaptation of particular OER units. Likewise, as the landscape of OER becomes more diversified (comprising of initiatives coming from both established educational institutions and from ‘alternative’ or informal social constellations of interest and practice), so does the configuration of social production of content in learning environments. The question then arises as to the appropriateness of community building tools or mediating artefacts that address different audiences’ inscriptions or goals to facilitate engagement. To address these questions we first chart definitions of, and affordances surrounding participation and community engagement in a diverse body of OER initiatives. Secondly, deploying Engeström’s framework on social production as a new landscape for learning (2007), we draw on a number of interviews with OER professionals and volunteers as well as on insights on learner behaviour to offer a mapping of learning situations across ‘informal’/‘formal’ public spaces. We conclude by problematising the notion of collaborative communities or ‘relational networks’ within an OER context and by proposing a framework that takes into account a number of boundary issues concerning design of original and OER content (Wilson, 2007), and peer-production of content, including expertise, locus of agency and pedagogy (Conole et al., in press).

Keywords: OER communities, relational networks, community building tools, learning design, participatory expertise

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Resource description, discovery, and metadata for Open Educational Resources

R. John Robertson (University of Strathclyde), Phil Barker (Heriot Watt University), Lorna Campbell (University of Strathclyde)

Conference Theme: Open Educational Content

Abstract: Drawing on our work supporting the JISC / HE Academy Open Educational Resources programme (<http://www.jisc.ac.uk/whatwedo/programmes/oer.aspx>) the presentation and paper will examine five tensions which relate to describing and sharing OERs. The paper will outline the different stakeholder groups whose needs have to be considered (these include: independent learners, enrolled students, academics, institutions, consortia, and aggregation services). We will consider the strengths and weaknesses of both sides of each tension and factors which may influence stakeholders to prefer one side of the tension over the other or instances in which the tension can be sidestepped. It will also offer the authors’ opinions and concerns. These tensions can be outlined as follows:

1. Description for local needs vs. description for interoperability How do OER initiatives decide what descriptive information they need? What influences do the different stakeholder groups have? Do standards help or hinder this decision?
2. Search Engine Optimization vs. description for specialized discovery tools How are people going to find the content? Should we check our keywords with to Google adwords? Does it matter for discovery tools what type of license we pick and how we encode it? How do the limits of service APIs affect description?
3. Specialist vs. generic standards Is Simple Dublin Core (oai_dc) enough? Do I need to use IEEE LOM? Should I content package or just zip?
4. Rich metadata vs. thin metadata How much metadata do you need to create? Is any of it used anyway? Does detailed description promote more visibility or easier discovery?
5. Metadata vs description Do we need metadata if we have a cover page (or vice versa)? Does full text indexing eliminate the need for keywords?
6. RSS/Atom based dissemination vs. OAI-PMH based dissemination What tools, services, and communities can take advantage of each dissemination approach? Are there any inherent difficulties with either approach?

Keywords: metadata, resource description, UKOER, OER

References: Barker, P (2009) ‘About Metadata & Resource description’ <http://blogs.cetis.ac.uk/philb/2009/09/14/about-metadata-resource-description-pt-1/> <http://blogs.cetis.ac.uk/philb/2009/09/14/about-metadata2/> ccLearn <http://learn.creativecommons.org/> (2009) Enhanced Search for Educational Resources— A Perspective and a Prototype from ccLearn <http://learn.creativecommons.org/wp-content/uploads/2009/07/discovered-paper-17-july-2009.pdf>

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OER1022 Oral Presentation

An OER Amnesty

Alex Fenlon, Engineering Subject Centre

Conference Theme: Open Educational Content

Abstract: This paper will discuss perceived attitudes and observed barriers to the release of Open Educational Resources (OER) within UK Higher Education Institutions (HEIs) and Further Education Colleges (FECs). Through an OER pilot project involving seven partner institutions across the UK, a pattern of Intellectual Property Right (IPR)-related obstacles has arisen. The main issue faced by the project was academics' unfamiliarity with IPR when it came to releasing materials to the wider world outside of their institution and 'normal' publishing routes. This paper proposes that academics do not need to have an in depth knowledge of IPR but institutions do. HEIs and, to a lesser extent, FECs, are rapidly becoming more 'savvy' when it comes to the recognition, protection and enforcement of their IPR arising from research outputs. The findings of this project suggest that this same awareness has not transferred to teaching departments and staff. The confusion at academic level has a knock-on effect which manifests itself as uncertainty within the institution over ownership of teaching materials. For OER to thrive and become sustainable, this uncertainty must be removed. An institution must be certain that its materials were produced by a member of its staff in the course of their employment and that it therefore owns the copyright in those materials, subject to the terms of employment. Only when an institution is certain of this can it enforce, protect or even identify its rights and thus pursue an OER related policy. This paper will propose that the solution to surmounting the significant and substantial IPR barriers (and therefore permitting the release of OER materials) would be a move towards an OER amnesty. All materials produced within HEIs, FECs and possibly even wider educational establishments should either fall under a new educational exception in copyright legislation or automatically become subject to compulsory open licensing schemes such as Creative Commons.

Keywords: UKOER, EngSC, IPR, copyright, infringement, legal issues, barriers

OER1023 Oral Presentation

The Open University on iTunes U: Developing an editorial framework and sustainable production workflows: An OER case study

Catherine Chambers & Ben Hawkrige, The Open University

Conference Theme: Open educational content

Abstract: Since launching in June 2008, The Open University on iTunes U has generated over 8 million downloads and currently averages around half a million downloads a week. With 1 million users accessing and downloading our content it's clear that there is not only a hunger for OER but for mobile learning via portable devices such as the iPod or the iPhone. The OU on iTunes U is an example of a repository that is serving the 21st century mobile learner and how audience consumption of content is influencing editorial decision making such as how material is structured and stored within the repository; for example according to device as opposed to media type. As this paper will illustrate, the OU on iTunes U is a proven repository for global reach but it also offers opportunities for enhancing content and delivering it to audiences in a variety of formats. Content has been piloted using a variety of methods including incorporating learning objectives or augmenting additional audio to ensure contextualisation or topicality. This paper will also explore the structuring and potential re-use of material, it will document the editorial process and resources involved in the OU on iTunes U site, including the importance of brand design, compiling effective meta-data and an awareness of the OER audience. It will also address issues surrounding functionality, rights clearances and limitations on public re-use. Finally, it will discuss how Open Models such as this could potentially represent opportunities for new university work-flows where academics re-create themselves for new markets.

Keywords: Open University, podcasting, content, course materials

OER1024 Oral Presentation

Preparing effective OERs from undergraduate science courses: granularity, re-use and re-purposing

Mark Goodwin, Suzanne Lavelle and Annette Cashmore GENIE CETL, Department of Genetics, University of Leicester

Conference Theme: Open educational content

Abstract: Open educational resources (OERs) can be categorized in a number of different ways. The categories are based on a range of information that is assumed to be relevant to producers and users, including topic, teaching objectives, level, pedagogical approach, teaching technologies and user groups. This information can then be used to organize OERs into repositories in a way that helps users to find the resources they need quickly and efficiently. Another important dimension that must be considered by producers of OERs is the size and complexity of the material provided: the 'granularity' of the OERs. Repositories can contain a range of materials, from individual digital assets, through information objects, learning objects and learning activities, to coherent and progressive programmes of learning design with associated assessment regimes (to use categories from Ferguson, 2007; adapted from Littlejohn et al., 2008). This dimension raises a number of questions, however, especially if the aim is to encourage the re-purposing of OERs alongside their re-use. As one moves through the levels of increasing complexity, re-usability and adaptability are progressively lost in favour of the pedagogical structure and context that are characteristic of effective teaching materials. Individual assets are flexible and easy to re-purpose precisely because they are not tied to specific teaching contexts. In contrast, complex programmes of educational materials work because they have been designed to teach specific topics to specific audiences in specific ways. A focus on the learning needs of identified users is a key element of effective teaching, but it is this that makes the materials difficult to sub-divide and re-purpose as OERs for different teaching objectives and different audiences. This presentation will explore this tension between preparing whole courses of integrated OERs (difficult to re-purpose but effective teaching) and OER repositories that contain collections of individual learning objects (easy to re-purpose but divorced from a wider educational context). It will examine how it has been resolved in some existing repositories, and examine some of the decisions taken in the process of adapting whole undergraduate science courses as OERs for the authors own OER repository: the Virtual Genetic Education Centre (<http://www.le.ac.uk/ge/genie/vgec/>).

Keywords: OERs / digital assets / learning objects / learning design / re-purposing / re-use / granularity

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OER1026 Oral Presentation

Evaluating a Cancer Biology learning package for OER

Dr. Momna Hejmadi, Department of Biology & Biochemistry, University of Bath

Conference Theme: Open Educational Content

Abstract: The intentions of Open Educational Resources are to build productive networks through sharing learning and teaching materials. Securing appropriate IPR release and licences are vital in this process, in order to allow others to enhance or adapt whole packages and their components. Although it offers greater potential and value for academia, especially where there is a need to maximise the value of resources, it still needs cultural changes by academics to engage with the OER goals. In partnership with JISC, we are one of a consortium of 9 universities headed by the HEA Centre for Biosciences, trialling a pilot programme to support Open Educational Resources in cancer biology. The goals of this pilot project are to identify and resolve a significant number of issues and barriers which can impede the practice of discovering, sharing and openly building upon resources. This project evaluates a) the issues in repurposing a successful Cancer Biology learning resource for OER through the JORUM repository. The content package is based on a successful interactive e-resource designed to develop a strong conceptual understanding of the complex cellular processes of DNA replication, damage and repair pathways in cancer. It includes novel animation material incorporating cutting-edge research, learning exercises and tools. The resource has been successful in achieving the learning outcomes and has been popular with the students since its introduction in 2006 (Hejmadi 2007 b) Issues of securing appropriate IPR release and licences, c) Sustainability (regular maintenance and updating) d) Adherence to interoperability and accessibility standards (conform to SENDA guidelines) e) Ways of effective dissemination (including social networking Web 2.0 technologies to maximise impact and assess usefulness). The presentation will describe the work in progress, detailing the process of resource development to enable other authors to adopt a similar approach when producing their own content.

Keywords: Repurposing learning packages; IPR issues; dissemination by Web 2.0

References: M V Hejmadi (2007) Improving the effectiveness and efficiency of teaching large classes: Development and evaluation of a novel e-resource in cancer biology. *Bioscience Education Electronic Journal* Vol 9-2.

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OER1027 Oral Presentation

Skills for Scientists: creating and supporting a sustainable OER environment

Tracey Madden, Higher Education Academy Physical Sciences Centre

Conference Theme: Open Educational Content

Abstract: The Skills for Scientists project took a number of practitioners with pre-existing teaching resources from across the physical sciences disciplines and supported them through the process of making those materials available as open educational resources. Our aim was that those practitioners would be enabled to continue to engage with the OER culture, forming a community of practice and act as inspiration and support to their peers, and we as a Centre would take our experiences and use them to support the rest of our discipline community and beyond. We will show how those involved in this project met the many challenges in producing open content including addressing the accessibility both of their resources and the tools for sharing; understanding the role of metadata and how to incorporate it into resources; understanding IPR in the context of OER including the use of third-party content, and selecting suitable open licenses through understanding the implications of their use. We will also illustrate how the project made use of existing repositories, institutional and others such as JorumOpen, and Web 2.0 services for the storage and sharing of OER and contrast their effectiveness, ease of use and potential for measuring uptake and impact. Above all, we will demonstrate how we structured the process specifically in order to make it sustainable and showcase the resources we produced in the course of the project to enable others to benefit from the lessons learned in all practical matters of producing OER.

Keywords: OER, physical science, chemistry, physics, forensic science, ukoer, skills for scientists, physical sciences centre, sustainability, repositories, web 2.0, IPR

OER1028 Oral Presentation

OER Adaptation and Reuse across cultural contexts in Sub Saharan Africa: Lessons from the TESSA consortium.

Freda Wolfenden & Alison Buckler, The Open University, UK; Fred Keraro, Egerton University, Kenya

Conference Theme: Open Educational Content

Abstract: Much is written of the potential of Open Educational Resources (OERs) to contribute to improvements in the quality of and access to education, particularly in environments such as Sub Saharan Africa. But some of the greatest challenges to more wide-spread use of OERs lie in the processes of adaptation and re-use. Such activities require skills, time and resources and as yet little has been reported on how best to support user communities to harness and integrate OERs for their own local systems and cultures. This paper describes an empirically based approach to understanding and representing the OER localisation processes as it occurred across the TESSA (Teacher Education in Sub Saharan Africa) consortium - 13 African teacher education institutions and 5 international organizations. Between 2006 -8 the consortium collaboratively designed and produced a bank of OERs to guide teachers' classroom practices in school-based teacher education in 9 Sub-Saharan African countries. At the heart of the TESSA OER bank are 75 core study units developed in a structured template. Each centres around clearly defined strategies for teachers to think about and experiment with in their classrooms. Each unit was then adapted and versioned to the nine country contexts by colleagues from participating TESSA institutions in those countries including translation to Arabic, English, French, and Kiswahili. The authors draws on a range of studies including analysis of the TESSA template, semi-structured interviews with colleagues who participated in the localisation process at three TESSA consortium institutions (in Ghana, Kenya and Sudan) and an evaluation of the localised materials resulting from this process to suggest ways in which other institutions and projects might learn from the TESSA experience. The paper attempts to make explicit the kinds of knowledge, skills and support employed in the localisation process, the problems encountered and the role of the structured template in supporting this process. It concludes with suggestions for guidance and possible tool development to support other users in adapting OERs for their own context whilst maintaining the quality of the OERs and working towards self-sustaining communities of users.

Keywords: Teacher Education; Sub Saharan Africa; OER Adaptation

References: Conole, C. & Weller, M. (2008) 'Using learning design as a framework for supporting the design and reuse of OER' *Journal of Interactive Media in Education* <http://jime.open.ac.uk/2008/05>

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OER1029 Oral Presentation

OER: Simulation Learning

Professor Paul Maharg, University of Strathclyde Patricia McKellar, University of Warwick

Conference Theme: Open Educational Content

Abstract: There is a developing literature (e.g. Koohang & Harman 2007 and Hodgkinson-Williams & Gray 2007) and a developing strategic literature (Downes 2007) around high profile OER projects (e.g. MIT's OpenCourseware Initiative and the Open University's OpenLearn projects). But it could be argued that while major initiatives such as these are necessary to show the possibility, the use of and the ongoing viability of OER projects, there needs to be more of a ground up approach between staff in various institutions, and for specific pedagogic and disciplinary purposes. This is already happening in some areas of the world (e.g. the Japan OCW Collaboration Group) but much more is needed. Our project, funded by JISC and HEA and led by UKCLE, focuses on providing OER to facilitate the use of simulation and related approaches to learning. Simulation is a powerful and innovative form of teaching and learning. The benefits include situated learning, active learning, the embedding of professional work patterns and practices in academic programmes, the enhancement of professional programmes, and the creation of more authentic tasks and deeper student understanding of symbolic thinking as well as of professional practice. A number of simulation techniques and engines exist that can be used in HE (largely commercial, though there are open-source versions). However the full-scale development of a body of widely shareable and re-purposable educational content amongst simulation designers and users has been to date almost non-existent. This has had serious consequences for the uptake of simulation as a form of situated learning; for whilst the power of simulation as a heuristic is widely recognised, so too is the effort required by staff to create and resource simulations. Building on the success of the recently-completed SIMPLE project, and going beyond it, this project aims to show how an HEA subject centre can help its community to develop and share the resources required for the creation and use of simulations. The project aims to create a community of practice to form around simulative approaches to learning by helping staff and users to create, use, evaluate and re-purpose simulations much more effectively than would have otherwise been the case. Our session will examine the background, some of the highly complex issues surrounding the concept of OER, and will present the case for the development of open educational simulation resources within our own and other disciplines.

Keywords: OER, Simulation, Resources

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<http://www.open.ac.uk/openlearn/home.php> <http://www.jocw.jp>

<http://www.ukcle.ac.uk/research/projects/oer.html>

OER1030 Oral Presentation

Unicycle – A sustainable model for institutional implementation of OER

Simon Thomson, Nick Sheppard, Leeds Metropolitan University

Conference Theme: Open Educational Communities

Abstract: As part of the pilot study into OER funded by JISC and the HE Academy Leeds Metropolitan University has set out to establish a sustainable OER network within the institution which aims to develop a cultural awareness of OER materials, their development, use, and reuse. This case study will be presented to outline areas of good practice, pitfalls and guidelines for future development. Leeds Met has set out to engage all areas of the institution in the development and use of OER materials. We will present our findings with regards to the technical and physical requirements of an institutional OER repository, support and management of content, data collection, ipr, storage and retrieval. We will also present our findings on our strategic approach to engaging staff in the creation and use of OER materials, including managing IPR issues, diversity of subject area requirements, quality control and co-ordination of content. We will present our "unicycle" model of sharing and engagement that will demonstrate our engagement approach with regard to strategic inclusion of OER as part of a wider assessment, learning and teaching strategy. The presentation will also examine the work we have done locally and in conversation with national colleagues on the consideration for a robust reward and recognition programme to engage and encourage academic staff to provide materials for OER use. The presentation will also include a demonstration of our Open repository for submission and retrieval of OER content, and our work with Open JORUM to develop a national repository of Open Educational Resources. Above all the presentation will offer an insight into a strategy and approach to OER that aims to create a sustainable model for OER long after the initial funding has elapsed.

Keywords: Oer, unicycle, JISC, Leeds Met, strategy, institutional, HE Academy, reward and recognition, repository, open search **References:**

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OER1031 Demonstration

Opening up special collections: the use of GLO Maker with resources from the Women's Library

Tom Boyle, Debbie Holley and Teresa Doherty, London Metropolitan University

Conference Theme: Open Educational Content

Intended audience: Academics keen to develop their expertise with accessing and working with special collections; developers seeking copyright free images; those with an interest in women's contemporary culture; those keen to develop their skills in the incorporation of materials into the GLO Maker authoring tool for creating their own resources.

Abstract: This session will demonstrate the results from combining a powerful OER authoring tool with access to rich, reusable content. The authoring tool is GLO Maker 2 [1]. This is a teacher oriented authoring tool based on explicit, reusable learning designs. Specific learning objects can be generated by linking multimedia content into these designs. The content for the learning objects demonstrated in this session is derived from the Women's Library at London Metropolitan University [2]. The Women's Library is a cultural centre housing the most extensive collection of women's history in the UK. Access is free and open to everyone from undergraduate level, and to internal and external scholars and researchers. Following an extensive digitalization project, special collection materials are now available for inclusion in the design of teaching and learning resources. A pilot project was conducted with academic staff at London Metropolitan University Business School, the RLO-CETL [3] and The Women's Library. The GLO Maker tool was used together with material from the digitized collections to create rich, multimedia learning objects. The pilot project was designed to develop staff awareness of the materials available in a special collection library. One example of an artifact is the poster covering 'how to create a poster', and this work has been extended to encompass a student poster day, when students are invited along to create a series of posters either around their own subject or discipline or to enter a competition to design the best poster to encourage students to design for impact when creating posters for assessment. The pilot aims to extend the range and variety of learning and teaching contexts available, and to reflect the changing needs of the wider educational community, where sharing of topics of academic value with known communities of interest are encouraged by emerging JISC policy [4]. This demonstration will showcase the learning objects created. It will reflect on the process of engaging staff in the creation of rich, OER learning objects. The demonstration will also show how these learning objects can be repurposed by other tutors to meet their local needs and preferences. Those attending will be given online access to the full 'package' of resources – the GLO Maker 2 authoring tool, the generative learning objects produced, and the location of specific resources in the special collection.

Keywords: The Women's Library, GLO Maker, Business, Fashion, Special Collections, Learning Objects

References: [1] <http://www.glomaker.org/> [

2] <http://www.londonmet.ac.uk/thewomenslibrary/>

[3] <http://www.rlo-cetl.ac.uk>

[4] JISC Special report on Digitisation, curation & two-way engagement, 2009

<http://www.jisc.ac.uk/publications/documents/digicurationfinalreport.aspx>

OER1035 Oral Presentation

Dimensions of Culturally Sensitive Factors in the Design and Development of Learning Objects

Mei Qi, Tom Boyle, London Metropolitan University

Conference Theme: OER design

Abstract: Open educational resources (OERs) are designed to be globally reusable. Yet comparatively little attention has been given to cultural issues. This paper addresses the issue of culturally sensitive factors that may influence the design of reusable learning objects. These influences may occur in different aspects of the design and development, and are often subtle and hard to manage. The paper proposes a structured approach to explore and organize the culturally sensitive factors that are likely to be encountered in terms of four major dimensions. These dimensions serve to articulate and classify the large and diverse literature on cultural differences into a manageable format. This provides a basis to address cross-cultural issues during the process of the design and development of open educational resources (OERs). These dimensions, elicited from a detailed review of the literature, and initial cross cultural comparative study in the UK and China (Qi, Boyle & Xue, 2007) are:

1. The Knowledge dimension relates to cultural issues that are associated with the content of learning of the learning objects, and the required prior knowledge of learners.
2. The Pedagogical dimension explores the culturally sensitive factors related to the activities of teaching and learning. Laurillard's (2002) conversational framework is used as the basis for examining the cultural influences on effectiveness of learning.
3. The Access dimension focuses on cultural diversity in human computer interface design.
4. The Technology dimension focuses on the cultural differences in the technical infrastructure and learners' technological knowledge and skills. These differences influence the use of OERs and learners' experience of OERs.

The talk will outline the four dimensions and illustrate how they can provide a framework to sensitize OER developers to culturally sensitive factors that influence the cultural accessibility and appropriateness of educational resources.

Keywords: Culture, Cultural influence, Cultural dimensions, Cross-cultural design, Learning object

References: Qi M., Boyle T. and Xue Y. (2007) Cultural influences on learning object design and development. Paper presented at ALTC 2007, Nottingham, September 2007.

Laurillard, D. (2002). Rethinking University Teaching: A conversational framework for the effective use of learning technologies 2nd ed., London: Routledge

OER1036 Oral Presentation

Evaluating the Practice of Opening up Resources for Learning and Teaching in the Social Sciences

Dr Darren Marsh (C-SAP), Ms Anna Gruszczynska (C-SAP)

Conference Theme: Open educational communities

Abstract: This paper is based on the preliminary findings of the C-SAP OER project "Evaluating the Practice of Opening up Resources for Learning and Teaching in the Social Sciences", part of the subject strand of JISC/HEA Open Educational Resources Programme. The paper adopts a case-study based approach and engages with the theme of open educational communities as it emerged in the context of the project. The C-SAP OER project has endeavoured to adopt a critical social science perspective on the processes, motivations, and incentives for sharing digital educational resources. In our exploration of the challenges connected with sharing materials and/or practice in the context of OER we draw upon insights gained from the model of academic peer review (while remaining aware of its limitations with regard to openness/inclusivity). Within that model, research is seen as a collective endeavour whereby previous insights are publicised both to share the immediate 'discovery' and to allow future research to build on its new insights. Accordingly, the C-SAP OER project attempts to develop

ways in which teaching and learning resources can move from a model of tacit, individualised production and consumption to one whose assumptions are shared so that the resources to be made 'open' are as fully appreciated as possible. At the same time, such a culture shift is hardly a straightforward process. Therefore, on the basis of our small-scale study (six institutional partners within the CSAP OER project) – we would like to engage with the questions posed in the call for papers and explore the challenges of sharing open content within the social science community. We would also like to share preliminary results of our exploration of Web 2.0 affordances and pedagogic frameworks to support sharing OERs. Finally, this paper will also address the on-going concern of the project team – what (if anything) is special about the social science disciplines with regard to sharing OERs? **Keywords:** Web 2.0, pedagogy, OER, sharing, social sciences, sustainability

OER1039 Oral Presentation

Open Content Literacy: developing a framework to support newbie content makers and sharers

Lindsey Martin, Alison Mackenzie, Edge Hill University

Conference Theme: Open Educational Content

Abstract: The current debate on the future of Higher Education in the UK has produced a vision of online and blended learning supported by a core of open educational resources available to universities and beyond. Knowing that reuse and adaptation (repurposing) of such content has potential to support scalable and sustainable diffusion of elearning within organizations is, however, very different to knowing how to locate, create, adapt or share content. Edge Hill University in the North West of England was one of 20 institutions funded by JISC under its Repurposing & Re-use of Digital University-Level Content and Evaluation (RePRODUCE) programme to test perceptions around reusable content in a real-world setting that involved developing, running and quality assuring a technology enhanced course using at least 50% of learning materials sourced externally to our institution. Located within SOLSTICE, Edge Hill's centre of excellence for teaching and learning, the ReFORM Project re-developed Dyslexia/Specific Learning Difficulties in Higher Education (Support Issues) adopting a blended learning approach and using teaching content largely constructed from externally sourced material. Among the lessons learned was the realisation that designing a curriculum with mostly reused and repurposed learning objects can be 'messy' and time consuming, reinforcing Littlejohn and Pegler's (2007, p169) assertion that use and repurposing of digital content is dependent upon deliberate planning for reuse at the initial design stage. Post-project reflection supported by primary sources such as project blogs, reports, correspondence and semi-structured interviews with team members have informed our thinking about longer-term strategies to address issues of cultural change necessary to 'mainstream' wide-scale sharing of digital teaching content within our university. This paper describes an important unintended outcome of the ReFORM Project; an Open Content Literacy Framework developed to support engagement and informed decision-making of staff new to working with open educational content whether as creators or 'consumers'. The Framework is a work in progress, undergoing peer review within Edge Hill and with colleagues in other institutions who are working with open educational content. Delegates will access the Open Content Literacy Framework, share the evaluation and lessons learned and have the opportunity to offer feedback.

Keywords: Open Content Literacy, Open Content Literacy Framework, Know How

References: Littlejohn, A. and Pegler, C. (2007) Preparing for blended e-learning. London: Routledge

OER1040 Oral Presentation

The Global Grid for Learning: Unifying Commercial and Open Education Resource Providers Through A Single Digital Content Supply Network for Global Education

Theodore Lynn, Dublin City University

Conference Theme: Open Educational Content

Abstract: Throughout the world significant investments have and are being made in the design and development of digital learning content repositories and brokerage systems to facilitate the exchange of metadata and associated content to educational software systems. While attempts have been made to include commercial content providers, most of these initiatives are organized regionally and financed by government, sub-government or donor agency funding and focus on the sharing of open education resources. Contrarily, commercial content providers are suspicious of open education resources and associated licensing models. The Global Grid for Learning is an initiative funded by Cambridge University Press, a not-for-profit organization, with a vision to create a unified digital content supply network for global education connecting users and software systems to both commercial and open education resources. This paper provides an overview of the initiative and discusses some of the content, metadata and system interoperability challenges encountered to date, including country context issues dealt with in the context of the Arab world, and how this project has sought to address them. It also discusses cultural barriers encountered when dealing with both OER and commercial content providers and efforts to overcome these. The presentation will conclude with a status update on the project, a live demonstration of the system and a discussion of opportunities on the project for future research collaboration, OER discovery and OER exchange.

Keywords: Digital Content, Metadata, Educational Brokerage, Digital Content Repositories, OERs, Systems Interoperability, Semantic Interoperability, Localisation

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Simon, B. and Oberhuemer, P.: Austrian Learning Network for Higher Education – Metadata and Interface Specification for Interoperable Educational Systems. http://www.fnm-austria.at/strategiecontent/Dateiablage/download/Metadata_Model_2006-06-26_Version_1.1.pdf?file%5fid=23005, FNMA, 2006 as cited in Simon, B., Oberhuemer, P. and Kristofl, R.: The Everlasting Dawn of

OER1041 Demonstration

Supporting student groupwork through multimedia and web software

Peter Hartley, University of Bradford

Conference Themes: Open Educational Content, OER Design

Abstract: In 2009, the LearnHigher Groupwork resource (<http://www.learnhighergroupwork.com/>) won the JORUM Learning and Teaching Competition and the ALT-Epigeum Award for the most effective use of video in an educational or training context. This session will demonstrate how we developed this resource and discuss implications for student learning. The resource can be used 'stand-alone' by individuals and/or student groups or in a lecturer-led session to work on particular issues. It focuses upon students' experience of small group projects. These now occur in virtually all subjects within HE, often have a significant time allocation, and typically include an oral presentation within the assessment. The success of these experiences depends upon students' interpersonal expertise. We structured the resource along a timeline which follows a group of students, beginning with their first meeting, concluding with the evaluation of their group oral presentation, and passing through a maze of tricky situations along the way! The resource adopts a problem-based learning approach, encouraging users to analyse problems and identify interventions in response to given scenarios, to engage with group members' and external commentators' reflections on their experiences, and to explore underpinning theories and useful techniques. The resource has been developed in line with particular pedagogic approaches and to deal with specific problems which have been identified in the literature. For example, there is evidence that the use of video material stimulates and supports learning (US National Teacher Training Institute, 2003). But we also know that getting hold of good quality, 'believable', easily accessible, and student-centred footage is not easy. We are also aware that students do not necessarily use resources to support them in group working even though they encounter problems (Lizzio & Wilson, 2006). To resolve these issues, the project adopted a collaborative and evaluative approach – collaborating with and seeking students' and teachers' feedback at all stages during the development phase; evaluating and piloting materials as developed. As well as explaining/analysing our pedagogic approaches, this session will: briefly demonstrate the resource; discuss how students have responded to this learning design; outline future development plans; and discuss collaborative and evaluative approaches to resource design more generally.

Keywords: groupwork; multimedia; open educational resource

OER1042 Demonstration

The 4C Initiative: A Case Study on Digital Content Capacity Building

Dr. Theodore Lynn, Mr. Neil Bruton, Dublin City University

Conference Theme: Open Educational Communities

Abstract: This demonstration presents an overview of the digital content capacity building strand of Cambridge University Press' 4C initiative. The 4C Initiative is a global initiative by Cambridge University Press to (i) develop a digital content supply network for education; (ii) connect education to a billion digital resources in the next ten years; (iii) help educators and educational institutions worldwide to collaborate; and (iv) build local digital content publishing capacity worldwide. The digital content capacity building strand is managed by Dublin City University's Learning, Innovation and Knowledge Research Centre and funded by Cambridge University Press and Nominet Trust. The goal of this strand is to provide educators with the preliminary skills needed to discover, evaluate, integrate and expose digital content online. The focus of the project is proficiency rather than expertise. Starting in November 2009, online synchronous learning seminars are delivered by subject matter experts from a variety of public and private sector organisations on aspects of searching, evaluating, licensing (including copyright), viewing/playing, modifying, integrating, describing and exposing/sharing digital content are available for free through a Webex Training Centre service. All sessions are recorded and available to educators and learners as learning objects under a Creative Commons license. Where possible, each module will be delivered in multiple languages and specifically English, Arabic and at least one African language. In line with the sponsor organisations' missions, the digital content capacity building strand will contribute towards the advancement and dissemination of knowledge worldwide and specifically via the Internet and in deprived areas of the world:

- o Encouraging collaboration within the global education community
- o Encourage best practice use of digital content for education
- o Building digital content publishing capacity for OERs
- o Increase the volume of digital content for education

The initiative is internationally-focussed and complements a number of existing UK and international projects. The presentation will outline the evolution of the initiative including challenges and achievements at the time of presentation. It will also include a demonstration of the training platform, OERs generated from the initiative and details on how educators can support in the delivery of training and make use of the OERs generated from the initiative.

Keywords: Digital Content, Capacity Building, OERs, Online Learning

OER1044 Workshop

Organising Open Educational Resources (OOER)

Facilitators: Dr Megan Quentin-Baxter, Director, Suzanne Hardy, Senior Advisor (Information), MEDEV; Dr Jane Williams, Director eLearning, Centre for Medical Education, University of Bristol

Conference Theme: Open Educational Communities

Intended audience: Academic and clinical staff interested in releasing teaching materials as OER within medicine, dentistry and veterinary medicine teaching

Background & rationale: A Subject Strand project led by MEDEV (1) was awarded to a consortium of 18 UK Higher Education Institutions (HEIs) (2) as part of a one-year £5M OER pilot programme, funded by the Higher Education Funding Council for England (3) and administered by the Joint Information Systems Committee (4) and the Higher Education Academy (5). Main idea(s) to be explored: Focusing on the discipline context, this non-technical workshop will explore policies, challenges, and solutions to making medical, dental and veterinary teaching materials Open Educational Resources (OER), based on the experience of a consortium of 18 UK HEIs.

Activities participants will engage in:

- o Short talks introducing the context
- o Small group work exploring key issues

- Toolkit presentations and discussion
- Sharing of good practice and networking

Participants will explore and evaluate the practical interactive toolkits, in relation to their own situation, contribute advice and expertise to enhance these free tools, and become part of a community interested in releasing teaching materials as OER in an international discipline specific context. Participants will receive these toolkits, plus a pack of teaching resources, contributed by consortium partners which can be freely used in their own teaching.

Intended outcomes: The workshop will outline the project methodology, showcase the interactive toolkits developed to enable institutions to 'go OER', and facilitate networking of interested parties. Participants will explore policies, challenges, barriers and solutions to releasing teaching materials as Open Educational Resources (OER) on the Internet. These include copyright and IPR, patient consent, institutional policy, quality and pedagogy status, and resource discovery and re-use. They will go away armed with the knowledge and toolkits to enable them to take the OER agenda forward in their own HEI.

Keywords: OER, toolkits, community, medicine, dentistry veterinary medicine, policy, teaching materials, copyright, IPR, consent, quality, pedagogy, resource discovery, reuse, resources, international, discipline, networking, support

References:

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3. <http://www.hefce.ac.uk>
4. <http://www.jisc.ac.uk/oer>
5. <http://www.heacademy.ac.uk/ourwork/learning/opencontent>

OER1045 Oral Presentation

VirtualDutch : Open Educational Resources and Distance Learning in a Lesser Taught Language Community

Ulrich Tiedau, UCL

Conference Theme: Open Educational Communities

Abstract: 'VirtualDutch' is an inter-institutional lesser-taught language community involving the Dutch departments at UCL and the universities of Sheffield, Cambridge and Nottingham. Its main aims are to create and share Open Educational Resources, and to develop web-supported forms of inter-institutional collaboration in teaching and learning. The programme started in 2001, mainly in response to the declining interest in modern languages in the UK which is affecting all modern languages, but the lesser-taught languages like Dutch in particular. Confronted with diminishing resources and threats of discontinuation of language programmes, VirtualDutch brings existing resources, expertise and interest together in an open Dutch learning community. A comprehensive range of OERs has been released since the start of the programme, including self-access reading skills courses, online reference works and multimedia studypacks for autonomous learning, covering various aspects of Dutch language, literature, history and society. All these resources are openly accessible in a open community environment for learners of Dutch. Of course strategic considerations were only one factor behind the development of VirtualDutch. By sharing resources and expertise amongst the participating institutions and making them openly available, the initiative has also brought more breadth and depth to the curriculum and created a VirtualDutch learning community across and beyond institutional boundaries. Students benefit from the encounter with a wide range of learning environments, from classroom contact to multimedia language instruction via virtual learning environments and web-based autonomous learning with the self-study-packs. They also feel part of a larger Dutch studies community in the UK, especially when they collaborate in joint teaching projects involving students and staff from all institutions. While collaborative teaching and learning has successfully been embedded into the curriculum of the four participating universities, VirtualDutch in an accompanying move now also offers a fully modular and purely distance-based degree programme. The first steps in this strategy are two short courses geared to language learning and a fully accredited Postgraduate Certificate in Dutch Cultural Studies (by Distance Learning). The presentation will give an overview of the experiences of the VirtualDutch learning community in; the experiences with collaboratively creating, sharing and publishing teaching and learning resources; the benefits and pitfalls encountered and some first results from the distance programme, a case study which may potentially be of interest for other lesser-taught subjects!?

Keywords: Dutch; Virtual; Lesser Taught languages; Modern languages; OER; Open Learning Community

OER1046 Oral Presentation

Producing DAISY talking books for Open Educational Resources without manual intervention

Gerald Schmidt, The Open University

Conference Theme: Open Educational Content

Intended audience: All

Abstract: This paper describes a fully automated workflow from our OpenLearn OER project to full DAISY talking books with synthetic speech, ePub, Word and MP3 for portable media players. The heavy lifting is done by DAISY Pipeline. All tools used are cross-platform, free and open source. Minimal effort is required to enable additional inputs to the system, so other OER projects can easily produce the same range of outputs.

Keywords: Open Educational Resources; accessibility; DAISY; DAISY Pipeline; ePub; open source; collaboration

References/URL: <http://openlearn.open.ac.uk/>

OER1047 - Symposium

"Made for sharing" – the changing world of learning and teaching

Chair: Nicola Siminson, Jorum – University of Manchester

Conference Theme: Open educational content, OER design, Open educational communities

Intended audience: Anyone involved in the creation of learning and teaching materials, repository managers, UK FE & HE members, OER interest. Teachers, Learning technologists etc.

Abstract: Since Jorum's inception, a shift has occurred in the world of learning and teaching resources – from cautious sharing, to a growing desire to make resources available openly – with Jorum playing its role throughout. Through a range of stimulating papers addressing all three conference themes, and subsequent discussions, participants will discover what makes individuals, institutions and communities share learning and teaching resources, and how Jorum supports these activities by adding value. Jorum is a JISC-funded national repository for learning and teaching resources, created by and for the community, and offers a long-term home for these resources, playing a key role in the UKOER

programme . Jorum is run jointly by the national data centres Edina and Mimas . Jorum aims to be a benefits-led service. It provides and stores free resources to save teachers time, showcases an institution's efforts, and increases the discoverability of resources through enhanced metadata. Jorum both hosts and points to resources, from individual files and content packages to web links, increasing the visibility of these resources. Creative Commons licensing, and the use of sharing tools such as Flickr, YouTube and SlideShare, are increasing. JorumOpen enables resources to be discovered and downloaded in the same open way, but by providing a trusted source of designated learning and teaching resources. Content within JorumOpen will be exposed to search engines such as Google later this year. As part of the OER movement, the Jorum Learning and Teaching Competition rewards innovation in the creation and sharing of resources. Held in conjunction with the ALT-C 2009 conference , the competition entrants have provided Jorum's first fully open access resources, including the "English as a Lingua Franca" resource created by York St John University . Other material is on its way into JorumOpen, from resources created by the UKOER Programme, to RLO-CETL materials , to resources from individuals and institutions across the UK. Jorum exists both within a landscape of repositories, and a network of communities of practice (CoPs) which are developing around the creation and sharing of learning and teaching resources. Jorum is collaborating with a range of partners, organisations and initiatives, such as the Irish National Digital Learning Repository (NDLR) , demonstrating the importance of sharing learning and teaching resources. A CoP with which Jorum is involved is the Information Literacy Reusable Learning Objects (IL RLO) Sharing group , which has emerged from discussions at a recent IL conference , and is one of a series of initiatives originating from the University of Birmingham . The Sharing Learning Objects in Healthcare Special Interest Group (SLOHSIG) includes staff at the School of Nursing Educational Technology Group (SONET) , who have been creating repurposable resources for eight years. Subsequent discussion time will allow participants to ask questions of all the presenters, and the following issues will also be debated:

- o What makes people share?
- o What are the barriers to open sharing, and how might these be overcome?
- o How can you contribute?

Background & rationale: Jorum is changing, and making OERs available via the new JorumOpen service. Jorum exists both within a landscape of repositories, and a network of communities of practice which are developing around the creation and sharing of learning and teaching resources, and Jorum is collaborating with a range of partners, organisations and initiatives. This symposium aims to bring together some of these partners to showcase their work, share their experiences and motivations, demonstrate the importance of sharing learning and teaching resources, and consider the impact of the Jorum service.

Main idea(s) to be explored: Through a range of stimulating papers and subsequent discussions, participants will discover what makes people, institutions and communities share learning and teaching resources, and how Jorum can support these activities and add value. We will address all three key conference themes (Open educational content; OER design; and Open educational communities).

How will discussion be facilitated? Following the 5 paper presentations, subsequent discussion time (facilitated by the symposium chair, Nicola Siminson) will allow participants to ask questions of all the presenters, and the following issues will also be debated: What makes people share? What are the barriers to open sharing, and how might these be overcome? How can you contribute?

Keywords: Jorum, JorumOpen, Edina, Mimas, Open Educational Resources, OER, OER design, Open educational content, Reusable Learning Objects, RLO, information literacy, metadata, repositories, sharing, contribute, deposit, strategic approach, Open educational communities, open access, community, Communities of Practice, CoP, UKOER Programme, Content, UK, FE, HE, Learning, Teaching, Open source, Licences, JISC, Learning Design, Teaching practices, Higher Education, Further Education, Healthcare, Design, Re-using, Objects, Resources, Creative Commons, Open access

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3. <http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer.aspx>
4. <http://edina.ac.uk/>
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9. <http://www.google.co.uk/>
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19. <http://slohsig.wordpress.com/>
20. <http://www.nottingham.ac.uk/nmp/sonet/index.php>

OER1047a Short Paper (part of Symposium OER1047)

What has Jorum ever done for us?

Laura Shaw & Jackie Carter, Jorum, University of Manchester

Conference Theme: Open educational communities

Abstract: This paper will review how Jorum has provided the infrastructure and support in the sharing of learning and teaching resources. Jorum has grown from a place to share and 'keepsafe' learning and teaching resources for the UK further and higher education communities - to embracing open sharing. Jorum's successes and lessons learned, including overcoming barriers to access and licensing issues will be explored in relation to our community of users. Jorum, a JISC funded national learning and teaching repository was initially born out of the requirement to share JISC project outputs. Today the framework has developed to enable sharing of all content, whether within a 'walled garden' - facilitated under JorumUK, or through JorumOpen - embracing Creative Commons licensing for open sharing. Jorum has been a major part of the support infrastructure for UK Open Educational Resources (OER), which includes the JISC/HEA OER pilot programme. This has given Jorum the opportunity to engage with and support the 30 projects from 80 institutions within the programme, along with other OER initiatives. Jorum succeeds through listening to its community of over 7000 users, which has helped shape the service you see today. Evaluation work undertaken by the Jorum team and its community has led to Jorum opening up and engaging with Web2.0, allowing the

service to reach the wider audience and encourage the deposit of resources. A number of challenges have arisen through working across all subject areas in post-16 education. Jorum has several approaches to managing this, which will be shown in the 'Jorum roadmap', outlining the recommendations and plans being taken forward. The notion that communities form around great content (Powazek, 2002) is the driver for everything Jorum does. This will be supported by evidence collated prior to and after JorumOpen is made available which will provide an initial review of the willingness of the community to share openly. In summary - Jorum has brought together the skills and experience of those who have the desire to create and share learning and teaching resources, and has acted as a catalyst in the way learning material repositories are used today. **Keywords:** OER, Jorum, Repository, Support, JISC, Resources, Learning, Teaching, UK, FE, HE, Creative commons, Licences, Deposit, UKOER Programme, Sharing, Open Educational Resources, Contribute, Community, Content

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OER1047b Short Paper (part of Symposium OER1047)

Designing, sharing and re-using learning objects: thoughts from BRUM, ReJiG and ReLo at the University of Birmingham

Nancy Graham, University of Birmingham

Conference Themes: OER design, OER communities

Abstract: This talk will focus on aspects of designing, re-using and re-purposing learning objects, both to support information literacy training and more general study skills in an effort to open up educational resources for librarians. BRUM Project The Birmingham Re-Usable Materials (BRUM) Project ran from 2006-2007 and the aim was to create, and make freely available via the web and the Jorum learning object repository, a suite of bite-size learning objects for academics to use with their students to support the teaching of information skills. ReJiG project The Re-purposing from Jorum into GEL (ReJiG) project ran from 2008-2009 and its aim was to identify gaps in our study skills resources and then to find and re-purpose relevant learning material on Jorum to plug those gaps. Issues that came out of this project included discoverability and availability of material and ease of re-use/re-purpose. ReLO The Re-purposing Learning Objects (ReLO) initiative at Birmingham will continue the work from ReJiG and BRUM. ReLO will focus on the process of re-using and re-purposing information skills learning material. Librarians will re-purpose each others learning resources and by using a logbook track usage of updated versions and capture a richer layer of metadata on the quality and effectiveness of re-purposed material. The following project conclusions will then be discussed: Design and technology For maximum re-usability ensure that learning objects are as adaptable as possible. Make material granular and generic wherever possible. Also ensure that pedagogical considerations come before the desire to use new technology. Sharing Think about potential users when deciding where to host material and how to package and label it. Be as open as possible (using JorumOpen for example) and even consider setting up a community of practice to share material. Re-using/re-purposing Where possible attach greater meaning to learning objects by assigning a richer level of metadata (e.g. on associated learning outcomes). This will ensure potential users fully understand the context of learning objects and will enable them to match material to their own needs. The ability to track re-use of learning objects would help enable understanding of how others utilize material.

Keywords: RLOs, re-usable learning objects, information literacy, metadata, repositories

OER1047c Short Paper (part of Symposium OER1047)

Designing award winning resources – a different approach.

Mark Dransfield & Rachel Wicaksono, York St John University

Conference Theme: OER Design

Abstract: The production of good quality learning resources is generally considered to lie in the domain of specialist professional staff; those with design and development skills. This oral presentation will consider ways in which colleagues with non-technical skill sets, can produce high quality, standards compliant learning resources. Traditionally, academic staff approach learning technologists with a specific brief and rationale for the development of a learning object. The LT will then work to the brief to produce an effective resource. This is a sensible approach in many cases, however the knowledge regarding the intricacies of the development, the technologies used and so on, mean that small revisions or future amendments to the resource, can take longer than necessary, depending on workload or professional progression. In a small institution where resources are tight, this approach is not scalable. The presentation will outline an alternative, perhaps more scalable approach to the development of high quality learning resources, within a small institution. Namely, a collaborative and developmental approach to the creation of resources, where academic staff are empowered to create resources. The role of the learning technologist thus shifts from developer, to facilitator and advisor. Exemplification of this point will use the award winning Jorum Learning and Teaching Competition resource; English as a Lingua Franca. The presentation will also consider how the design of the learning object relates back to a sound pedagogical framework of enquiry based learning (EBL). The collaborative nature of the project, the involvement of students as researchers and the EBL framing which underpinned the development process, led to an output which might not have been achieved with a different approach.

Keywords: OER design, strategic approach

OER1047d Short Paper (part of Symposium OER1047)

Opening Doors to Digital Learning: Open educational repositories for community discovery, sharing, reuse and activity

Catherine Bruen, NDLR, Trinity College Dublin, David Jennings, NDLR, University College Dublin

Conference Theme: Open Educational Content, OER Communities

Abstract: The National Digital Learning Resources (NDLR) Service for Ireland is evolving. By the end of 2009 the new service will be launched with some fundamental changes that will impact the future way staff of Irish Higher Education Sector, work, collaborate and develop learning resources as individuals and as members of subject discipline SMART COPs. Up to now the NDLR Pilot has been a closed entity for use by the Irish Higher Education community only with a bespoke licence. Collaborative partnerships with national and international institutions, organisations and industry have been restricted. The new NDLR service is based on the delivery, development and support of open educational resources (OER). To facilitate this, the NDLR now supports the use of Creative Commons (CC) Licenses and thus is aligned with the core principles of cLearn. The fundamental change to the usage of the NDLR is provided by the 'open access' to its resources via a new environment. This 10-15 minute presentation will focus on how NDLR is looking to the future to support the use of open digital content for improving the quality of teaching resources; enhancing associated teaching practice; encouraging a reduction in the cost of teaching via sharing and reuse of digital resources, and above supporting collaborative development and sharing of resources across the education sector in Ireland and internationally, embracing partnerships with research and industry. The OER Movement means that anyone, anywhere may view and utilise the resources under the CC Licence permissions. This reveals new possibilities for subject discipline networks to utilise the impact of digitised materials offered freely and openly to collectively raise the bar for learning design and use and reuse for teaching, learning and

research. Finally this presentation will outline some of the ways of supporting a vision where Higher Education sector staff are supported and promoted in the collaboration, discovery, development and sharing of learning resources and associate teaching practices through use of innovative approaches and social networking tools.

Keywords: Open Educational Resources, Communities of Practice, Learning Design, Teaching practices, Open Source, Open Access, Higher Education

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OER1047e Short Paper (part of Symposium OER1047)

Emergence of a sharing community in health care education

Wharrad, HJ; Windle, R & Riley, F (University of Nottingham) Clarke, E (University of Coventry), Parkes, M (York St John University)

Abstract: SONET[1] has been producing open educational resources (OER) for health care education since 2001 and is a partner in two influential Higher Education bodies: UCEL[2] and RLO-CETL[3]. We have now released over 100 Reusable Learning Objects (RLOs) as OER under a Creative Commons licence and these are being used extensively at Nottingham and reuse worldwide. Whilst free and easily accessible content facilitates reuse, in educational terms curriculum relevance, authenticity and quality are key determinants of reuse achieved through collaborative development processes, particularly during the design and content creation phase[4]. Students, lecturers, media developers, clinicians, NHS users and carers, and NHS trainers have all contributed knowledge and ideas at the collaborative, interdisciplinary workshops that initiate each OER development project[5]. The workshops foster a sense of ownership of process and outputs, leading to the use of the OER and a growing community of use as networks are extended via a range of dissemination routes. Many similar open educational communities are creating OER in healthcare including the health CETLs CIPEL and ALPS, founding members of the Sharing Learning Objects in Healthcare Special Interest Group (SLOHSIG). The SIG was conceived at the Sharing Learning Objects in Healthcare conference held at the University of Nottingham in March 2009, attended by 70 delegates nationwide with an interest in Learning Objects, e-learning repositories and their application to healthcare education. A focal point of the conference was a dedicated learning object repository, to which delegates could upload learning objects prior to the conference, and which subsequently provided a focus for discussions around the issues of sharing resources. It became clear during the conference that many delegates had materials that were being used within their institution that they were willing to share but were unsure how to make available as OER, and indeed whether the materials were suitable for sharing. SLOHSIG aims to promote such sharing and reuse of OER, and to facilitate collaboration amongst colleagues and institutions engaged in OER development and repositories, both within and outwith the UK. A key objective is to 'unlock' educational content by running workshops to show the benefits of sharing OER and how to overcome the perceived and real barriers to sharing. The focus of our presentation will be on the benefits of working as a group, motivational aspects and how we plan to work with Jorum as a Jorum Community.

Keywords: Communities, healthcare, RLOs, repositories

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OER1048 Demonstration

JorumOpen - DSpace as an OER Repository

Peter Burnhill, EDINA, University of Edinburgh

Conference Theme: Open Educational Content

Intended audience: Technical software engineers, repository managers.

Abstract: Open Educational Resource (OER) creation has gained significant momentum recently, thanks to projects such as the OER pilot programme. With the possibility of an increase of OERs available to educational staff - how can an end user find open content which is useful to them? Jorum, a JISC-funded Service in Development, has been committed to collecting and sharing learning and teaching materials within the UK Further and Higher Education community. With the advent of "open" content, Jorum is launching a new option in January 2010 - JorumOpen, which will provide a central place to find nationally hosted learning materials developed by the UK Further and Higher Education sector. JorumOpen will allow any user, from any country, free and unrestricted access (without authentication) to learning materials licensed under a Creative Commons licence. The central component of JorumOpen is the open source digital repository DSpace, which was originally developed by MIT Libraries. To facilitate an open access digital learning resource repository, the Jorum team has made significant modifications to the DSpace software, which include:

- o Support for learning resource standards such as IMS Content Packaging and SCORM Content Packaging
- o Support for remote resources hosted on an external site
- o Implicit registration process linked with UK Access Management Federation (only required for content depositors)
- o Support for metadata standards such as IEEE LOM, IMSMD and Dublin Core in content packages

This demonstration will showcase JorumOpen in detail, highlighting the technical changes made to the underlying repository platform, and also covering the various ways in which resources can be found in Jorum:

- o Machine to machine (M2M) interfaces

- Major search engine integration
- Future searching technology in the Jorum roadmap

Keywords: OER, Jorum, JISC, Learning, Teaching, Materials, Open, JorumOpen, DSpace, SCORM, Metadata, Technical, Search

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OER1050 Oral Presentation

Evaluating the current status of OpenCourseWare in Turkish Tertiary Education: benefits, barriers and incentives.

Engin Kursun (1), Tina Wilson (2), Patrick McAndrew (2), Kursat Cagiltay (1), Middle East Technical University, Turkey (1) The Open University UK (2),

Conference Theme: Open Educational Content

Abstract: Advances in Information and Communication Technologies (ICT) provide real opportunities for improving access, transfer and sharing of knowledge and information. One outcome from ICT is the Open Educational Resources (OER) movement, which expanded during the last decade. The Massachusetts Institute of Technology (MIT) OpenCourseWare (OCW) initiative played an important role in instigating the OER movement around the world (Atkins et al, 2007; Scatler, 2009). The impact of this movement has been seen in Turkish Tertiary Institutions with the establishment of the Turkish Academy of Science (TAS). In October 2006, a Turkish OCW Consortium was formed with twenty-four member universities in the leadership of TAS (Yazici et al., 2008). The number in the consortium has since increased to forty-eight. Initiating an OCW project at an institution requires careful planning of resources and vision (Henson, 2005). OCW also involves a systemic approach to minimize unexpected problems and gain maximum benefit. Without doubt, instructors in Turkey are the key players at this early stage of the movement and it is important to understand their perceptions and tendencies in relation to publishing their course materials. This study aims to inform decision makers and other key stakeholders to facilitate strategic change in terms of OCW in Turkey. To accomplish this aim an online survey was developed to ascertain the faculty members' perspective of potential benefits, barriers and incentives of the OCW movement. Surveys were sent to the consortium's forty-eight Turkish Higher Education Institutions. This paper addresses the following main research questions from the Turkish faculty members perspective: What benefits do faculty members accrue from publishing course materials freely on the Internet? What barriers do faculty members face when they want to publish course materials freely on the Internet? What incentives would enable faculty members to publish course materials freely on the Internet? Preliminary findings indicate that instructors have a positive reaction to sharing their courses freely on the Internet. However, instructors want their materials to remain unchanged when they are reused. They have particular problems with copyright issues and they are not sure whether they will gain support from their own institution.

Keywords: Barriers, Benefits, Incentives, OpenCourseWare

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OER1051 Oral Presentation

Cultural Imperialism or Multicultural Mix? Promoting OER reuse through collaboration

Santos, A.I., McAndrew, P. (The Open University, UK); Mendonça, M.M. (UnisulVirtual, Brazil)

Conference Theme: Open Educational Content

Abstract: The release of open educational resources (OER) from the Higher Education sector has increased in recent years (Carson, 2007) but might be perceived as dominated by English speaking organisations and built on their cultural and educational models. The usability and reusability of the content then could also be limited to English-speaking audiences. While there is certainly some truth in this view and legitimate concern about the potential for a “cultural imperialist” (e.g. posts such as Blackall, 2009) approach led from the easy global transfer of culturally-based material, the very openness in OER offers opportunities for exchanging the provider and consumer roles to offer a “multicultural mix”. In this paper we will look at the cultural messages that are contained in OER in the context of the variety of material that is on offer and the diversity of those involved in the field. This will then lead to a case study of an organisation that has embraced the opportunities that are offered to discuss a successful experience of OER provision and reuse, prompted by a dynamic collaboration between the distance education department (UnisulVirtual) of the Brazilian university Unisul, and the British OER initiative OpenLearn, of the Open University. Through an active collaboration cycle involving mentoring and supporting OER champions at UnisulVirtual (McAndrew, P. and Santos, A.I. 2009), this collaboration resulted in a number of outcomes: the translation and adaptation of OpenLearn content from English into Portuguese; the publication of new content provided by the user in both English and Portuguese at OpenLearn and, most interestingly, a new mode of OER use that resulted in the enrolment of nearly 400 students to undertake an open content-based course in Brazil. We will discuss a number of issues faced in the process of content localisation and adaptation, and how the user-collaborator ended up assuming a leadership role in terms of staff engagement and content provision. This role evolved into a self-sustainable content production, adaptability, use and reuse approach that can inform a framework for OER that embraces the opportunities for cultural communication and sharing.

Keywords: OER, cultural mix, OER repurpose, collaboration

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OER1052 Oral Presentation

Captivate: audience engagement and open educational content in the visual arts

Leigh Garrett, Director, Amy Robinson, Collections Manager, Visual Arts Data Service, a Research Centre at the University for the Creative Arts

Conference Theme: Open Educational Content

Abstract: This case study will discuss how the JISC-funded Enhancing VADS project (October 2008 to September 2009) engaged with new and existing users of the Visual Arts Data Service and will showcase the enhancements made to the service. The Visual Arts Data Service (VADS) provides free access at the point of use to over 120,000 items for learning, teaching and research across the higher education sector. This includes primarily still images, but also moving images, documents, multi-media packages, and learning resources. Usage has grown by 600% over the last 5 years; and now 1.75 million images are viewed each month. The Enhancing VADS project's key objectives were: to enhance the discoverability of the visual resources by the introduction of an OAI-PMH service; to establish how the wider academic community currently engaged with the collections; and to increase usage by developing services and tools based on user requirements, including user tagging, a hierarchical subject taxonomy, and enhanced lightbox features enabling a user to curate and share a collection. By developing OAI-PMH (Open Archives Initiative - Protocol for Metadata Harvesting) capabilities on our database, VADS has become a data provider, enabling service providers, such as BBC Century Share, to harvest our metadata via the protocol and re-use it in new open educational resources. The original lightbox tool, prior to enhancements, was an output of the PICTIVA Project, which set out to promote the use of on-line image collections in learning and teaching in the visual arts through the VADS collections. The tool enables users to collect digital images into one or more groups and also to email these to others who can then 'adopt' the lightbox. The project completed in September 2009 and has been well received by the sector so far. The response from existing and new users will be measured on an ongoing basis to ensure VADS continues to captivate and engage.

Keywords: retrieval, reuse, engaging users, Web 2.0 tools

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OAIster <http://www.oaister.org/>

Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) <http://www.openarchives.org/OAI/openarchivesprotocol.html>

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OER1053 Oral Presentation

Improving the OER Experience: Enabling Rich Media Notebooks of OER Video and Audio

Brandon Muramatsu, MIT Andrew McKinney, MIT Peter Wilkins, MIT

Conference Theme: Open educational content

Abstract: Need to find a specific segment in an hour-long OER web video, webcast or podcast of a lecture? Want to read a transcript of that lecture? Want to bookmark, annotate, or discuss video or audio clips from an entire lecture? The SpokenMedia project at MIT is developing a web-based service to enable automatic lecture transcription. And it is developing a suite of tools and services to improve interaction with OER webcasts and podcasts enabling students and faculty to create rich media notebooks to support their learning and teaching. The open educational resources movement is currently characterized by a vast amount of textual content (in PDFs, web pages, wikis, etc.) and a growing collection of video and audio lectures. Learners and teachers can easily locate materials in the large text-based collections such as Wikipedia or OpenCourseWares, and in most OERs. However, it's much more challenging to find the equivalent specific video segment out of an hour-long OER video lecture. Video and audio is currently searchable based on the textual metadata cataloged with the resource. This data is usually limited to a title and description, and perhaps a few tags or subjects. Better crafting of the titles and descriptions of these videos can only go so far to improve discoverability—why not use the lecture content itself to find the exact clip a student needs to improve his/her

understanding? Are there tools and technologies that the OER community can use to improve the discoverability of video, and more specifically to find individual video segments to provide a richer learning experience? The SpokenMedia project at MIT is developing a web-based service to enable automatic lecture transcription. The project is also developing a suite of tools and services to improve interaction with webcasts and podcasts enabling students and faculty to create rich media notebooks to support their learning and teaching.

Keywords: Automatic Lecture Transcription, SpokenMedia, Rich Media Notebooks, Search, Discovery, Video, Podcast, Webcast, Audio

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OER1054 Workshop

Towards a Network of Content and Curriculum: Interoperability of OER

Brandon Muramatsu, Jeff Merriman, Vijay Kumar, MIT

Conference Theme: Open Educational Content, OER Design, OER Communities

Intended audience: OER repository developers, tools and services developers/projects. OER project managers OER content developers.

Background & rationale: Our vision is to significantly ease the discovery and adoption of the widest range of on-line educational resources by educators and learners. We want to enable faculty and students to access the digital content that they need from any applications they choose. As a step toward realizing this vision we suggest the development of a Network for Content and Curriculum (NCC) to leverage and advance the interest and success around real-world interoperability efforts for achieving true openness across educational content and software in support of teaching and learning. The last fifteen years has witnessed a dramatic change in the ways curricular content is accessed. The Web has provided the potential for access to seemingly unlimited digital content. In the last ten years, there has been a significant increase in the development of organized collections of educational resources and repositories, in both open and proprietary formats. The new challenge is to more efficiently locate this content and use the most appropriate content in the appropriate contexts and curricula.

Main idea(s) to be explored: Current and past experience with a variety of projects, including repository/collection development (including Connexions, MIT OCW, MERLOT and the U.S. National Science Digital Library), standards and specifications development (including IEEE Learning Technology Standards, IMS Content Packaging, O.K.I. Repository Spec.), as well as tools and services development, leads us to observe that:

- The educational resource landscape comprises numerous, developing and established projects that address different goals and audiences. These projects vary widely in the technical expertise and capabilities available to them.
- In general, interoperability & collaboration are seen as important, but rarely given due consideration or resources: When asked, everyone is “interested” in and understands the value of interoperability—in extending the reach of their projects and collaborating with others. However, very few projects set aside budget or development time to participate in interoperability efforts.
- Culture and language considerations are important. Through working with a wide range of projects, across diverse subject areas, interest levels and from multiple countries, we recognize the importance of being sensitive to cultural (sharing, openness, etc) and language considerations.

We propose a workshop to build upon prior work, with the attendees of OER 2010 (and participants in current JISC OER programmes).

Activities participants will engage in:

- General overview of why interoperability, and a network for content and curriculum can lead to the ability for faculty and students to access the digital content that they need from any applications they choose.
- Short presentations of how OER projects are already collaborating to enable access to content.
- Time to play with existing tools and examples—e.g., OER Commons and Folksemantic.com
- Facilitated discussion leading to the outcomes.

Intended outcomes:

- Discussion of readiness to engage in projects, and what interoperability means for conference attendees.
- Creation of a prioritized list of issues and barriers in interoperability.
- Identification of possible approaches to improve interoperability and/or a roadmap to interoperability for attendee projects.
- Identify potential projects to improve the interoperability from pedagogic and/or technical perspectives.

Keywords: Interoperability, OER, Network for Content and Curriculum, NCC

References/URL: Folksemantic.com: <http://www.folksemantic.com/>

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OER1055 Oral Presentation

Reuse: the other side of sharing OERs

Chris Pegler, The Open University

Conference Themes: Open educational content, Open educational communities

Abstract: Reusing online resources has long been acknowledged as key to developing a sustainable approach to e-learning (e.g. Littlejohn (2003)). Indeed, it is difficult to envisage a productive future for e-learning that does not include sharing of resources. Opportunities to generate content online have escalated. Sharing, in the sense of publishing, comparing, collaborating and combining new resources, is increasingly common and frequently ‘open’. Described as ‘a learning object plus an open license’ (Wiley, 2009), open educational resources (OER) help resolve one of the most significant barriers to sharing – the rights issue. However, sharing of OER is a two-sided process. It requires use of the resources, for the sharing cycle to be completed. Otherwise we simply have intent to share, or ‘planning to share’ Leslie (2008) – the good intentions around reuse identified by McGill, et. al. (2008). OER is more than simply making shareable resources available in a technically reusable guise. It needs to facilitate productive sharing exchanges between participants who may not have met, supporting discovery, adaptation and reuse of resources across different contexts – whether as one-off transactions, or within on-going collaboration. In doing so it needs to engage with complex cultural change – not just in countering resistance to offering resources (Lee, 2008), but also in knowing why reusing resources would be desirable in an academic culture which places high value on originality. This session presents a model for predicting the reuse potential of OER projects within UK HE, and thus improving the chances of reuse occurring. The model is grounded in longitudinal research (2002-2009) based on resource reuse within the UK across a spectrum of sharing contexts, from courses and

individual collections, to national and open repositories. It focuses on the influence and interaction of technology (including open licenses), motivation and resource utility on each side of the resource reuse transaction – the supply and the demand (or use) dimensions of resource sharing. Presented as a ‘dashboard’ style tool, the resource reuse prediction (RREP) model will help OER projects anticipate areas of resistance to reuse and suggests ways to address or minimize these.

Keywords: SCORE, reuse potential, UK HE, sharing

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OER1056 Oral Presentation

Exploring the links between digital scholarship and open educational communities

Eileen Scanlon, Martin Weller, Institute of Educational Technology Open University, Katerina Avramides London Knowledge Lab University of London

Conference Theme: Open Educational Communities

Abstract: Changes in communication and publication practices of academic researchers in higher education are occurring due to the impact of the information age and the rise of open educational resources. The impact of the information age consists of a changed landscape which offers researchers new ways of working and new kinds of academic output for educators to use in their teaching. Access to open educational resources is a significant feature of this changed landscape. We are engaged in a research project examining academic practices in teaching and research in the light of this changed landscape. One of the influential commentators on these new phenomena of communication Borgman (2007) examines the role that information technology plays at every stage in the life cycle of a research project and contrasts these new capabilities with the relatively stable system of scholarly communication, which remains based to some degree on publishing in journals, books, and conference proceedings. Two academic areas in which the potential impact of these developments are particularly striking is the area of research in education, in particular in the interdisciplinary area of educational technology where both research and teaching practice is being influenced by developments in open educational resources (McAndrew et al. 2009) and in scientific research where the investment in e-infrastructure and changes in scholarly communication patterns. This paper will use some interviews from our data set, those with educational technologists in two institutions, to examine the concept ‘open educational communities’. One area which we are seeking to explore is how communities of practice develop (Wenger, 1998) and how such communities function. Ghosh et al. 2002 have reported on open source communities, which function as self-organising, knowledge sharing communities. We are particularly interested to see whether the practices developed in relation to the use of open educational resources for teaching have any impact on the extent to which researchers value the open source movement in publishing or vice versa. We conclude with a discussion of other communities which are hybrid-educational technologists forming informal learning communities around open educational resources (see e.g. Burbules et al., 2006).

Keywords: Open educational communities, digital scholarship

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OER1057 Oral Presentation

Siyavula: Building Communities to Support Teacher Use, Localization and Sharing of OER

Cynthia Jimes, Institute for the Study of Knowledge Management in Education

Conference Theme: Open Educational Communities

Abstract: South Africa’s recent attempt at implementing a new set of outcomes-based curriculum standards has highlighted challenges for teachers that cannot adequately be met by the country’s current resources or professional development programs. Siyavula, a South African based project, seeks to address this need by offering quality open educational resources (OER) to teachers across all grades, subjects, and learning areas. The project’s overarching goal is to support teachers in finding and adapting resources that match their local teaching and learning needs, and in sharing knowledge about resource use and pedagogy. Drawing on a theory of action that views communities of practice as central to the sustainability of open content models, Siyavula provides targeted professional development workshops and social networking tools that support teachers in building communities around Siyavula resources. The Institute for the Study of Knowledge Management in Education (ISKME) has been conducting research on Siyavula’s activities and those of its teacher users to increase understanding of factors that contribute to the creation, use and localization of OER within the South African teaching and learning context. This presentation will focus on the research findings that shed light on the formation and engagement of Siyavula’s OER communities, and the role that these communities play in the use and reuse of OER. Based on observations of Siyavula’s professional development workshops, interviews with workshop facilitators, a survey of workshop participants, interviews with Siyavula community members, and analysis of community activities through Google Analytics and other web analysis tools, the presentation will tell the story of Siyavula’s OER communities and community development activities. The presentation provides evidence, for example, of the role that communities play in ensuring that new resources are added back to the wider user environment. The presentation also points to implications for community building efforts, including the importance of leveraging existing, offline communities of practice as starting points for online OER communities, the centrality of organic community-building techniques in relation to those that are more structured or forced, the role of self-identified, emergent champions who serve as informal leaders in inspiring new OER communities, and the importance of exploring alternative solutions for community members who currently work in predominantly paper-based environments.

OER1058 Demonstration

Process Arts: a new collaborative online studio community exploring Process in Arts Practice

Chris Follows, University of the Arts London

Conference Theme: Open educational communities

Intended audience: Students, teachers and artists

Abstract: How can professional and educational studio art practices be documented and shared online? What are the advantages and disadvantages of showing the art studio process and viewing the processes of others? It is common practice for students, teachers and artists to document their practice through exploring and questioning the making process, for example in sketchbooks or through samples and experimentation. Those that do, have few options for presenting this documentation to others. How do students, teachers and artists approach, view and use such forms of documentation? Process Arts is a new collaborative online resource showing user driven video, image and text documentation of the many hidden traditional and contemporary creative processes practiced in educational and professional art studios daily. The website provides a dynamic user driven online studio community that focuses on making at all levels in art and design, stimulating discussion, interest and collaboration, whilst also sharing, informing and engaging with the wider online community. The two key aspects of developing Process Arts are: Environment: Creating a simple, user-friendly and accessible media driven site with good multi media functionality. Content: Exploring different methods of documenting and communicating arts practice online and assessing how much support, advice and guidance is required to facilitate and encourage the development of skills and ideas. Although Process Arts is an open resource, and widely accessible, presently, only staff and students at UAL will be able to upload content directly. Process Arts is due to go live in January 2010. Early feedback has been extremely positive. Students viewing the site have been eager to engage, and several students have commented 'they wish they had a website like this, years ago'. Staff have commented on how much they like the idea of students and staff uploading content together, and believe 'its the right time for a project like this' and 'Process Arts can be the conduit for creative exchange, encouraging communication while supporting learning across all disciplines and media.' External visitors viewing content via our YouTube channel have commented on how useful, helpful and inspiring the content is. The presentation will discuss and demonstrate how Process Arts has been designed with these issues in mind.

Keywords: Collaborative, Process, documenting, sharing, Arts, Art studio, Art practice, making

References/URL: Process Arts is due to launch in January 2010 and be widely accessible in time for the conference.

OER1059 Oral Presentation

Pull yourself together! Remote searching of multiple sources to best present OER materials.

Rob Pearce, Loughborough University and Lisa J Rogers, The Institute for Computer Based Learning, Heriot-Watt University

Conference Theme: Open educational content

Abstract: The HEA/JISC funded OER pilot project positively encourages the exploitation of technically sophisticated web-based services such as YouTube, Flickr etc. to present resources released by the project. The challenge is to then create a search facility that is able to pull together appropriate resources spread over a number of services on the web yet offer more information and presentational flexibility than the de-facto benchmark search tool, Google. This paper presents an attempt to embrace the sophisticated interconnectivity available from these services and the human, technical and metadata considerations. The aim is to avoid creating another database that duplicates (possibly incorrectly) information held elsewhere eliminating the confusion that may cause and the maintenance load that checking and updating would cause. The Engineering OER project is investigating the uses of APIs, RSS Feeds and lightweight technological approaches such as Yahoo Pipes to aggregate and filter the metadata from the third party sites. By building the system using established web interchange standards this methodology can scale beyond the project that produced it making it more flexible, sustainable and upgradeable. Any number of other sources might be potentially added or removed as required in the future. The approach of using these third party systems provides added benefit to a database of resources. For example the image host the API of the image host Flickr provides the option of presenting the search results in a variety of resolutions. Others allow direct embedding of resources to help facilitate re-use. This approach is not without problems however. Initiating searches involving multiple service providers, most of which are free-to-use commercial products and therefore with no service level agreements. Technical stability and business longevity in a fickle, developing marketplace also mean added risk. Although the risk is high so are the rewards for such an approach.

Keywords: Risk, technical interoperability, web2.0, standards, sophisticated, distributed, methodology

OER1060 Oral Presentation

Collating global evidence of the design, use, reuse and redesign of Open Educational Content

Tina Wilson (1), Robert Schuwer (2), Patrick McAndrew (1), The Open University UK (1), Open University of the Netherlands, Heerlen, Netherlands (2)

Conference Theme: Open Educational Content

Abstract: Open Educational Resources (OER) are available globally in many OER repositories. Since The Massachusetts Institute of Technology (MIT) (<http://web.mit.edu/>) OpenCourseWare (OCW) initiative began, seven years have elapsed. Therefore it is time to consider and evaluate what has worked, why and how we can maximise on the design and redesign of OER for the benefit of learners and teachers. Open Learning Network (OLnet) is an outward facing and open research project, which started in March 2009. Based on lessons from experience and evidence worldwide, the initial aim of the project is to draw in existing OER and social networked communities to evaluate what types of OER have worked well in terms of learning and teaching. The project investigates the best ways to develop new OER and redesign existing OER for reuse. OLnet is funded by the William and Flora Hewlett Foundation and starts from a base of having a number of partners, to build upon over the three-year period of the project. Methods for developing Open Educational Resources (OER) have evolved from different initiatives and projects. The first part of this paper is a step towards exploring the challenges faced and opportunities gained from different approaches. The methods adopted by two OER projects OpenER and OpenLearn are considered. Although OER may be created with one audience in mind (Higher Education) they can be adopted and adapted by different age groups and those with a variety of prior learning experiences. The second part of the paper considers the potential and actual adoption of OER by the school and further education sector. Questions addressed regarding the potential of OER are as follows: - Could OER material fit into the present timetable of study? - Might institutions provide assessment for OER material? - How would material be assessed? - What policies and procedures would need to be used or changed to allow the adoption of OER material for assessment? - Might OER material be better suited to learning in cases of non-

accreditation? Finally the paper discusses two examples of reuse: one of material from DigilessenVO and the other a contrasting example from OpenLearn.

Keywords: Open Educational Resources, Social Networked Communities, Reuse

OER1062 Oral Presentation

Never mind the technology – why would we share?

Charles Duncan, Intrallect Ltd, Lou McGill, Consultant, Sarah Currier, Sarah Currier Consultancy, Peter Douglas, Intrallect Ltd

Conference Theme: Open Educational Communities

Abstract: This exploration of the motivations around open educational communities is based on many years experience working with communities sharing educational resources at international, national; and subject-based levels. It draws on work carried out in two major JISC-supported projects – Community Dimensions of learning Object Repositories and Improving the Evidence Base in Support of Sharing Learning Materials which are themselves based on a large number of case studies. Six different approaches to sharing education resources have been examined:

- open sharing
- sharing through Communities of Practice (CoP)
- subject-based sharing
- institutional sharing
- national sharing
- informal sharing

One of the key considerations in any educational resource exchange is who are the producers and who are the consumers? Do they overlap or are they completely separate? Around a dozen different sharing initiatives have been examined and compared to try to extract common factors and these are summarised under the five headings:

- General benefits of sharing for global community
- Benefits of sharing for national community
- Benefits of sharing for educational institutions
- Benefits of sharing for those supporting/facilitating learning
- Benefits of sharing for learners

Through this work a number of business cases have emerged. No single set of business cases can be applied – in every case each venture must examine its motivation and settle on the business cases that most suit its cause. We also discuss ways of measuring the success of an OER venture as it is necessary, having made a business case, to show that it can be achieved.

Keywords: Sharing, communities, models, benefits

References:

“Good intentions: improving the evidence base in support of sharing learning materials” (Final Report), Lou McGill, Sarah Currier, Charles Duncan, Peter Douglas, Dec 2008, <http://ie-repository.jisc.ac.uk/265/1/goodintentionspublic.pdf>

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“Structured guidelines for setting up or evaluating LO repositories”, Anoush Margaryan, Colin Milligan, Peter Douglas, April 2007, http://www.academy.gcal.ac.uk/cd-lor/documents/CD-LOR_Structured_Guidelines_v1p0_000.pdf

OER1063 Demonstration

Sharing Educational Resources Through a Repository Without Logging In

Charles Duncan, Intrallect Ltd

Conference Theme: Open Educational Content

Intended audience: Anyone interested in distributing or using open educational content

Abstract: Jakob Nielsen describes “participation inequality” in web-based activities as the 90-9-1 rule. This suggests that for any activity (blogging, wikis, etc) 90% of people are passive and make minimal effort to participate, 9% are a little active but don't contribute much, and 1% do most of the real work. The percentages are not always accurate but the principle seems to apply quite widely. Some people refer to these three groups as paddlers, swimmers and divers, referring to the increasing level of commitment involved. If we consider how this principle applies to accessing open educational resources it is clear that any successful venture must reach the “paddlers”. This demonstration shows how a repository of educational resources, which might normally attract only swimmers and divers, can use web services to reach out to the tools that paddlers use every day to make sure the educational resources are always within easy reach and no particular effort is required. The demonstration will take the form of looking at “a day in the life of a paddler”. By working with everyday tools: email, web browser, iTunes, etc. the paddler will be regularly able to use open educational resources without ever needing to remember the URL of the repository or their username and password - definitely swimmer-type activities.

Keywords: Open access, participation inequality

References: Jakob Nielsen, http://www.useit.com/alertbox/participation_inequality.html

OER 1064 Symposium

Open Educational Resources. The “Health-E option?”

Chair: Richard Windle, University of Nottingham

Conference Themes: Open Educational Content, Open Educational Communities

Intended audience: Tutors, developers, repository managers, students, project managers, researchers

Background & rationale: Health Science Education is an area of the curriculum in which open educational resource (OER) initiatives have massive potential, but also where it poses particular concerns. The potential arises from the range and breadth of related courses, the numbers of students and institutions involved and the emphasis on student-centred, life-long learning. The concerns around OER in health relate to the quality of the materials available and the contextual differences between vocational groups of learners. Reusable Learning Objects (RLOs) are

the most widely used form of OER currently being used in health care education. These initiatives already demonstrate some of the potential outlined above, and also provide important lessons about addressing the challenges faced.

Main idea(s) to be explored: This symposium will review the use of RLOs in health science education and use the materials presented as a springboard for discussing contemporary OER initiatives more generally.

The first paper (Beyond the “usual e-learning enthusiasts”: Making the development of open educational resources, open) looks at development methodologies that are enabling many different stakeholder groups to share their knowledge and expertise through OER initiatives. The second paper (Caring and sharing. Evaluation of reuse of open education resources in health) discusses how issues of evaluation and quality of materials have been addressed. The third paper (Tales from the white-board: Case-studies in open educational resource development and usage) provides “real-world” cases studies of the use of RLOs and other open educational resources including podcasts. The fourth paper (Pedagogical characteristics of open educational resources) discusses a tool that has been developed to allow pedagogical assessment of open educational resources. The fifth paper (Face the OER storm with confidence. Use an umbrella). Discusses a tool that has been developed to allow tutors to assemble and ascribe context to open educational resources.

How will discussion be facilitated? Delegates will be invited to discuss the range of issues raised by these papers, to share their views and provide their own insights. The over-arching objective to be addressed through this discussion will be; “How can the experiences, lessons learned and knowledge gained through RLO development, usage and sharing be applied to contemporary OER initiatives?” Discussion outcomes will be collated using available media – eg interactive white board.

Keywords: Reusable Learning Objects, Reuse, Pedagogy, Communities, Stakeholder involvement, Evaluation, Quality assurance, Case-studies, Tools

References: Alexander, C. (1977). *A pattern language: towns, buildings, construction*. New York: Oxford University Press.

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Engeström, Y. (1999). *Activity theory and individual and social transformation*. In Y.Engeström, R. Miettinen & R-L Punamäki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge: Cambridge University Press.

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Lynn J., Bath-Hextall, F. and Wharrad, H.J. (2008) *Pharmacology education for nurse prescribing students – a lesson in reusable learning objects*. *BMC Nursing* 7(1), 2. SONET <http://www.nottingham.ac.uk/nmp/sonet/rlos> (accessed 3.11.09)

OER1064a Short Paper (Part of Symposium OER1064)

Beyond the “usual e-learning enthusiasts”: Making the development of OER open

Richard Windle, University of Nottingham Heather Wharrad, University of Nottingham Helen Laverty, University of Nottingham Lynne Marsh, University College Cork Cheryl Crocker, NHS Institute for Innovation and Improvement (NHSII) Clare Price-Dowd, NHS Institute for Innovation and Improvement (NHSII) Lucrezia Herman, University of Nottingham Catherine McAuley, University College Cork

Conference Theme: Open Educational Communities

Abstract: The power of open education resource (OER) initiatives lies in the potential for a broad range of stakeholders to share their knowledge. However, mechanisms that allow individuals, other than the usual e-learning enthusiasts, to create resources are often overlooked. The reusable learning object (RLO) approach to OER provision has proved successful in health care education partly because it addresses this need. Our approach is based around facilitation of communities of practice that empower individuals to design and create their resources (1). This has enabled the involvement of a wide range of stakeholder groups, including practitioners, students, service users and carers in resource design, thus harnessing their unique areas of expertise and sometimes providing a voice for these groups. The work is monitored by a series of quality assurance reviews, evaluation of the use and reuse of the OER produced and research of the experiences of the community. Here we report evaluations of 2 case-studies of stakeholder involvement in OER development. Firstly, a study involving 40 students of learning disability nursing from 7 Higher Education institutions in the UK and Republic of Ireland who authored a range of RLOs designed to inform or challenge their peers about working with this client group. Secondly, the involvement of health-care practitioners in the development of a range of resources dealing with improving the safety and quality of health and social care. The overriding challenge here was to meet the needs of the broad range of professions that this encompasses. The experience of the various stakeholder groups within these communities suggests a high level of empowerment. Findings show that the various stakeholder groups expressed clear pedagogical goals when considering and designing e-learning materials. However, the emphasis of the designs varied from those of academics. For example, students placed more emphasis on aspects of user-functionality (eg. feedback, support and control), whilst tutors focused more on the learning environment being created (eg. media richness and contextualisation). The impact of these differences is currently being investigated.

Keywords: Communities of Practice, Reusable Learning Objects, Student-generated content, Evaluation, Stake-holders, Health

References: (1) Boyle, T et al (2006). *An Agile method for developing learning objects*. 23rd annual ASCILITE

http://www.ascilite.org.au/conferences/sydney06/proceeding/pdf_papers/p64.pdf (accessed 3.11.09)

OER1064b Short Paper (Part of Symposium OER1064)

Caring and sharing. Evaluation of reuse of open Educational resources in health

Heather Wharrad, University of Nottingham Richard Windle, University of Nottingham Raquel Morales, University of Cambridge Claire Bradley, London Metropolitan University

Conference Theme: Open Educational Content

Abstract: Reusable Learning Objects (RLOs) are granular, interactive multi-media resources. We have been developing RLOs in health care for 10 years and have a mature catalogue of RLOs (1). Although these have been designed for use within the University of Nottingham, they have also been made freely available through a creative commons licence for reuse elsewhere. In order to determine whether learning objects are pedagogically effective we, as partners in the RLO-CETL, have developed an evaluation framework to collect an evidence-base for their use. Being theoretically grounded in Activity Theory (2) the framework is able to provide systematic feedback not only on learning effectiveness, but also on the many activities and deliverables associated with such a project. An evaluation toolkit consisting of a number of qualitative and quantitative instruments, including on-line feedback elements, paper-based questionnaires and protocols for semi-structured interviews and focus groups has been constructed to collect this information. These instruments have been extensively used in blended learning modules in pharmacology, clinical skills, study skills and evidence-based practice across the School of Nursing, Midwifery and Physiotherapy at the University of Nottingham where upwards of 4,000 students can access the RLOs at any given time. Results show a consistently positive evaluation of the materials by learners in areas such as effectiveness, engagement, content delivery and integration with other course elements. They also show that learners particularly value their visual and interactive elements and the ability to control their own learning. The toolkit has also been used to monitor the reuse of these RLOs internationally. Online feedback data demonstrates reuse

throughout Europe, Asia, North and South America and Australasia, providing a valuable model of successful sharing and the technical and cultural issues surrounding reuse. Furthermore, evaluations from these reuse audiences are as positive as those discussed above. This suggests that the development of resources that are highly aligned to the authentic learning needs of one audience provides value in their use as open educational resources.

Keywords: Communities of Practice, Reusable Learning Objects, Evaluation, Quality Assurance, Activity theory, Health

References:

1. SONET <http://www.nottingham.ac.uk/nmp/sonet/rlos> (accessed 3.11.09)
2. Engeström, Y. (1999). Activity theory and individual and social transformation. In Y.Engeström, R. Miettinen & R-L Punamäki (Eds.), *Perspectives on activity theory* (pp. 19-38). Cambridge: Cambridge University Press.

OER1064c Short Paper (Part of Symposium OER1064)

Tales from the white-board: Case-studies in RLO development and usage.

Damion McCormick, Joanne Lymn, Jennifer Dandrea, Fiona Bath-Hextall & Fred Riley, University of Nottingham

Conference Theme: Open Educational Communities

Abstract: It is important to ensure that any deployment of Open Educational Resources (OER) addresses a defined pedagogical need and is not simply technology for technology's sake. Nurse education exemplifies the need for a personalised approach to learning in Higher Education. Student nurses tend to study in large cohorts of mixed ability, whilst the wide course entry gates and high proportion of mature students leads to a diverse range of educational background (1). Coupled with this is the broad nature of the nursing curriculum and the need to ensure integration between theoretical and practical/vocational learning. Reusable Learning Objects (RLOs) have been adopted as the open educational resources of choice in many areas of the pre and post registration programmes within the School of Nursing, Midwifery and Physiotherapy at Nottingham over a number of years to support personalisation. They are being deployed in a range of blended learning contexts, including class-based work, self-directed learning and as support materials for "just in time learning". Many of these RLOs have been developed in-house, but they are combined with learning objects that have been developed at other institutions and also with other forms of OER such as podcasts and print material. Areas where these approaches are being used to particular effect include non-medical prescribing, evidence-based practice, biosciences and clinical skills. Here, we will present case-studies of their use in some of these areas, and discuss their ability to impact on the learning experience and achievement of the student through the use of evaluative data and tutor feedback. Students evaluate the RLOs very highly and particularly value the visual, interactive and student-centred aspects of their pedagogical design. Evidence suggests that the RLOs have a positive influence not only on students' perceptions of their knowledge-base and ability, but also on their level of attainment (1). One advantage of the OER nature of the RLOs is the evidence that students return to these resources once they have completed their courses and returned to practice. Also, they recommend them to others, increasing their impact beyond the classroom.

Keywords: Case studies Reusable Learning Objects Evaluation Reuse Embedding

References: 1) Lymn J., Bath-Hextall, F. and Wharrad, H.J. (2008) Pharmacology education for nurse prescribing students – a lesson in reusable learning objects. *BMC Nursing* 7(1), 2

OER1064d Short Paper (Part of Symposium OER1064)

Pedagogical characteristics of open educational resources

Richard J Windle, University of Nottingham Heather Wharrad, University of Nottingham Dawn Leeder, University of Cambridge Patricia Bluteau, Coventry University Elinor Clarke, Coventry University Francis Gordon, Sheffield Hallam University

Conference Theme: Open Educational Content

Abstract: The rapid increase in Open Educational Resources (OER) in health science education has led to the availability of a diverse range of materials. Despite metadata standards, there is still little way for tutors to assess and select materials against the attributes that are meaningful for them, such as their pedagogical characteristics or their interprofessional potential. This led us to develop a tool known as the learning object attribute metric (LOAM) to address this need. The tool, developed as part of the JISC Design for Learning programme, builds on IMS Learning Design (1) and also Patterns Language, that seeks to discover patterns within multiple solutions to a given problem (2). The tool is web-based and adaptable. It allows tutors to select from a range of validated attributes or to contribute new attributes for peer validation, thus adding to the pool of quality assured material. Each attribute has an associated Likert scale for measurement. After selection of attributes a bespoke tool that meets the tutor's requirement is created, allowing analysis of their selected e-learning resources and identification of those that best meet the needs of their learners. Analysis can be carried out on-line and the results are represented graphically so that a visual "footprint" of the learning resources' characteristics can be seen. The first set containing 12 attributes was designed to evaluate the reuse potential such resources. This includes attributes such as the degree of contextualisation and focus of the learning goal. A second set of 6 characteristics has been developed to assess the suitability of resources for interprofessional teaching and learning. This includes attributes such as authenticity and person-centeredness. The tool can be used in a number of ways including; selection of materials for course-inclusion, review of materials during development, or to research how particular attributes affect the use and effectiveness of given learning resources. Our initial results confirm the degree of variability in the pedagogical attributes of collections of learning objects used in health professional education, show that the tool is able to discriminate between these and identify the relationships between them.

Keywords: Pedagogy, IMS learning design, Reusable Learning Objects, Evaluation, Interprofessional learning, Reuse

References: 1) IMS Global Learning Consortium. (2003), IMS Learning Design information model version 1.0 final specification.[on-line], Available at http://www.imsglobal.org/learningdesign/1dv1p0/imslid_infov1p0.html (accessed 3.11.09)

2) Alexander, C. (1977). *A pattern language: towns, buildings, construction*. New York: Oxford University Press.

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OER1064e Short Paper (Part of Symposium OER1064)

Face the OER storm with confidence. Use an umbrella.

Michael Taylor, Richard Windle and Heather Wharrad, University of Nottingham

Conference Theme: Open Educational Communities

Abstract: The development and use of open educational resources (OER) in health science education, as in other areas, faces specific pedagogical dilemmas. Firstly for resources to be reusable they need to be context-neutral, but this loss of specific examples and insights may reduce their effectiveness in vocational courses. Secondly, although small, highly focused materials tend to be most reusable, their delivery in this form can obscure the links between subjects that are so important in an evidence-based curriculum. Educators wish to deliver holistic and contextualised materials to their students and tend to reject e-learning materials without these characteristics. Working closely with nurse-educators and students we have developed an approach and associated tool that enables them to utilize and ascribe contextual value to OER components, whilst allowing the individual components to remain small, context-neutral and as reusable as possible. Tutors search for and locate small OER components that cover aspects of the learning goals that they wish to address. The components are drawn into a user-

friendly interface that stores and orders them as a larger package that we have termed an Umbrella Learning Object (ULO). Certain common elements, such as assessment questions or glossary terms can be embedded within the XML components of such resources, and are then extracted from the components and combined in specific sections of the developing resource. The ULO-creator then allows tutors to add their own contextual materials in the form of audio, images, video and text before the completed resource is finalised and packaged. In this way learners are provided with holistic materials that are specific to their own practice, whilst the OER components can be recombined to meet other needs. The template is populated via a Flash interface, and this enables the ULO to become platform and server independent allowing the tutor to distribute the packaged ULO across many different repositories and platforms. Here, we will demonstrate the tutor-friendly ULO creation and adaptation process. We will also present initial evaluation and findings of its use and of the effectiveness of the resultant ULOs.

Keywords: Reusable Learning Object, Content creation tool, XML, Contextualisation

OER1065 Workshop

“Minds are like parachutes; they work best when open”

Helen Beetham, Lou McGill, Allison Littlejohn, Glasgow Caledonian University

Conference Theme: Open Educational Content

Intended audience: Everyone involved in the release and reuse of open educational content

Background & rationale: The JISC Open Educational Resources programme has funded almost 30 pilot projects to release open content from UK HE institutions and subject networks, and to evaluate the process for the benefit of the sector. This workshop offers an early opportunity to explore lessons learned and to try out a range of resources produced by the programme's synthesis and evaluation team.

Main ideas to be explored: 'Openness' as a feature of communities/organisations: What features of educational communities and institutions could be described as 'open', or precursors to full participation in 'open content' sharing? 'Openness' as a feature of content: What features of content allow it to be fully shared and reused in other contexts? Are these features enhancing of or inimical to specific pedagogical values (e.g. those which are strongly situated or context-based)? What are the implications for quality processes? 'Openness' as a value in education: What impact is 'open pedagogy' having, above and beyond issues of content, and how should we understand and promote this idea? 'Openness' as a feature of certain technologies and technology-based services: Are open web 2.0 solutions to content hosting over-riding the demand for deposit of content in open repositories? The workshop will build explicitly on Allison Littlejohn's keynote, allowing participants to further explore the idea of open scholarship and to examine emerging approaches to learning as knowledge sharing in open communities.

Activities participants will engage in: Discussion (issues as above) Exploration in themed sub-groups of four to six broad issues identified in evaluation (legal, technical, educational, cultural, organisational, ethical) Try and comment on staff development tools to support open content design, management, release and re-use Try and comment on organisational development tool: towards open content Personal reflection: values and priorities for open content

Intended outcomes: Better understanding of the issues involved in open content release Early exploration and chance to influence tools being developed for the sector Opportunity to define personal and organisational values and goals in relation to open content and open education

Keywords: open content, open learning, open education, open scholarship, JISC, OER, community, technology

References: <http://www.jisc.ac.uk/whatwedo/programmes/elearning/oer>

<http://www.caledonianacademy.net/spaces/oer/>

OER1066 Oral Presentation

Identifying and cataloging existing Public Health Open Educational Resources

Heather Hartwell, Ann Hemingway, Catherine Angell, Bournemouth University

Conference Theme: Open Educational Content

Abstract: This paper will present the findings of the PHORUS (Public Health Open Resources for the University Sector) project funded by HEFCE. This project is significant because the provision of free online educational resources (OER) has the potential to aid the development and divergence of the Public Health workforce in a global context, enabling inter-professional teams to learn and work together (Reeves et al., 2005). One of the aims of the PHORUS project was to identify and catalogue international Public Health resources that are already available online, and map these against the UK Public Health Professional Framework. This paper describes the process undertaken for cataloging the wide range of Public Health OER currently available online. In order to ensure accurate identification of Public Health OER it was first necessary to clarify the terms used in the research. Defining the term 'public health' was a key element in identifying OER which might be relevant to the subject. There is a wide range of opinion on the nature and scope of Public Health, and little consensus in defining the term (Turnock, 2008). OER are also interpreted in many different ways, depending on context (Rehak and Mason, 2003). Clear parameters were developed for describing Public Health and OER. These were used to develop a search strategy for locating suitable on-line resources. The search strategy developed for this exercise utilised inclusion and exclusion criteria based on expert opinion from a wide range of disciplines. Once each OER was identified the content provided was mapped against the UK Public Health Skills and Career Framework, enabling the scope of available resources, and their potential applications for teaching, to be clearly documented. A template was produced for cataloging existing English Language Public Health OER from around the world. This can be used as a valuable resource for Public Health educators and students. It may also highlight areas of Public Health in which there are few OER available, or differences between OER provision in different regions.

Keywords: Public Health, OER, online search

References: Reeves S., Zwarenstein M., Goldman J., Barr H., Freeth D., Hammick M., Koppel I., (2005) Interprofessional education: Effects on professional practice and health care outcomes.

The Cochrane Database of Systematic Reviews John Wiley & Sons, London.

Rehak and Mason (2003) Keeping the learning in learning object. Littlejohn, A. (ed) Reusing online resources. Kogan Page, London. pp.20-34. Turnock (2008) Public health: What it is and how it works. Jones and Bartlett, London.

OER1067 Oral Presentation

Can open educational resources meet the needs of national educational initiatives?

Kerry Welch, Chris Craggs, Richard Windle, Heather Wharrad, University of Nottingham

Conference Theme: Open Educational Communities

Abstract: In common with many areas of vocational education, nurse education has to respond to national initiatives and policies. In 2007, the Nursing and Midwifery Council (NMC) for England and Wales introduced a series of essential skills, for nursing students (1) that all schools of nursing had to comply with from September 2008. Previously, Reusable Learning Objects (RLO) have proved to be an effective method of addressing core nursing concepts, as they engage the student in an active, personalised learning process. Therefore, we have commenced the development of a series of RLOs which have sought to address the NMC essential skills cluster requirements. As the resources developed for this project are funded by the Centre for Excellence in Teaching and Learning for Reusable Learning Objects, they will be open educational resources (OER). However, as the NMC essential skills cluster assessments are a national initiative, all nursing schools will be required to adopt or develop resources in these areas. This imperative has provided us with an opportunity to investigate the evolution of OER in response to a specific educational need. Firstly, we are investigating the potential of our OERs for reuse in other institutions. Colleagues from a range of institutions and clinical settings have been asked to peer review the resources and to comment on whether they would be useful for them, whether they would use them and what changes they would prefer or need to see. Secondly, we are investigating the macro development of resources in this area, the level of duplication and the balance between OER versus closed educational resources. A questionnaire has been developed and circulated to Schools of Nursing within the UK. It asks what electronic resources individual institutions are using to address the initiative outlined above, whether they are intending to develop resources, whether these will be made available as OER and whether they would be interested in using already prepared OER's to address the requirements of this NMC initiative? Here we present an analysis of the OER designs created for this project, and the results from the peer review and resource surveys outlined above.

Keywords: Reusable Learning Objects Reuse Health Essential Skills Sharing

References:

Childs,L,L., Coles,L., Marjoram,B. (Eds) (2009) Essential Skills Clusters for Nurses. Theory for Practice. Chichester: Wiley-Blackwell.
Nursing and Midwifery Council (NMC). (2006) NMC Circular 35/2006. [online] Available at: <http://www.nmc-uk.org/aDisplayDocument.aspx?documentID=2286> [Accessed on 11th November 2009]

OER1068 Demonstration

Opening up foreign language education with the Flexible Language Acquisition Project

Alannah Fitzgerald (Concordia University, Canada / Durham University, UK) Shaoqun Wu (Greenstone Digital Library Lab, Waikato University, NZ)

Conference Theme: OER Design

Intended audience: This demonstration has the long-term aim of informing the design and use of future open-source educational software applications for language learning, including: the learning content, the learning environments, and the learning scaffolds that can be designed to best reflect OER standards. Demonstrations of collections from the Flexible Language Acquisition Project based on Greenstone's open source digital library software will be given with particular emphasis on their language learning and teaching applications. Reflections and discussion will be provided on uses for the collections based on research carried out at the University of Waikato in New Zealand and at Durham University in the UK. Selected collections for the purpose of this demonstration session will include:

- o Web Collocations
- o Web Concordancer
- o Web Grammatical Patterns
- o Web Phrases
- o Web Prepositions
- o Web Pronoun Phrases
- o British National Corpus Collocations
- o Educational Leadership Abstracts
- o Curriculum and Change Abstracts
- o Literacy and Bilingualism Abstracts
- o Literacy and numeracy for adults

Abstract: When learning a second or additional language how often have we heard our teachers say: "grammatically, you're correct but we just don't express it that way in French/English/Arabic/Chinese" – whatever the target language may be? A lot has been said in favour of data-driven learning with assisting language teachers and their learners to move beyond introspection when making judgements regarding: lexical collocations, frequency, pragmatic meaning, and details of phraseology. The Web is a potentially useful corpus for language study because it provides examples of words and word sequences that are contextualized, authentic and frequent. However, use of the Web for language study is primarily limited to: online language learning materials, activities, dictionaries, thesauri, multi-lingual translators, and concordancers, most of which require subscriptions for more in-depth and research-based language support. For example, one of our digital library (DL) collections, Web Phrases, presents an innovative use of the Web as a resource that does not rely on live search, but rather, utilizes an off-line corpus generated and supplied by Google. This contains short sequences of words, called "n-grams," along with their frequencies. They are pre-processed, filtered, and organized into a searchable DL collection based on Greenstone's open-source software containing 500,000 words and 380 million five-grams. The system presents these phrases (collocations, formulaic sequences or prefabricated items) in context by locating sample sentences containing them either on the Web, or in the British National Corpus. Results of initial user evaluations suggest that proficient learners can use the existing collections to generate text as well as revise it, whereas the more limited vocabulary knowledge of less proficient learners may restrict them to revising text. However, most learners' texts demonstrate positive effects at the lexical, grammatical and perhaps most saliently the pragmatic level. Observations also suggest a number of useful ways in which teachers can mediate the system for its effective use in supporting instruction.

Keywords: Design-based Research; Data-driven Language Learning; Digital Libraries; Web-based Corpus and Concordancing Applications; Web-based Language Learning; Web Search

References/URL: <http://flax.nzdl.org/greenstone3/flax?page=home>

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OER1070 Poster

Interactive Flash-multimedia in a PDF-document - the solution for a new breed of multipurpose e-learning applications

Atle Løkken, Karsten Tillerli, Joanne Teresa Kleppe, University of Stavanger, Norway

Conference Theme: OER Design

Abstract: The recent launch of Adobe's software packages (CS4 and CS5) has made it feasible to integrate Flash-content in PDF-publications, read in Adobe Reader. The solution exploits the best features of the traditionally two separate worlds of interactive multimedia and standardised, digital publication of documents and graphics, and lays the ground for a completely new breed of e-learning applications. The University of Stavanger, Norway, explores the new features of the PDF-format in the development of e-learning material to a web based bachelor education in nursing. The poster will show several examples of e-learning applications based on the solution, the methodology it constitutes, its benefits and challenges.

Keywords: PDF, FLASH, CS4, CS5, Adobe, Reader, interactive

References: <http://www.uis.no/nettop>

OER1071 Demonstration

How to get GLO-ing: GLO Maker 2.1 unleashed

Alan Leeder, University of Cambridge

Conference Theme: Open Education Content

Intended audience: Academics who wish to develop their own OER content; developers wishing to develop rich interactive content for the GLO Maker; anyone interested in authoring high quality content

Abstract: GLO-Maker [1], developed by the Reusable Learning Objects CETL [2], is a powerful yet simple to use multimedia authoring tool for creating media rich learning objects which lends itself to OER content production. The learning objects can be accessed from the Web or the desktop. At the core of good learning objects is good design and 'real-world' learning designs, extracted from practitioner-focused workshops are expressed explicitly in the tool. They provide the framework for creating new learning objects and are expressed as a sequence of pedagogical functions (e.g. "orient" – "comprehend" – "apply"). GLO Maker 2 also creates a default set of screen layouts to realise the chosen functions and provides pedagogical guidance with these screens. At the simplest level you can add content to the layouts provided. The tool supports a range of rich media content. The learning objects are easy to adapt to suit local needs and preferences. Each learning object can simply be loaded back into the tool, edited, and the new adapted version saved. This demo will consist of a walk-through of the key features of the tool and show some examples of how it has been used in practice, focussing on a case to update a series of somewhat dated online lectures in Medical Sociology at the University of Cambridge to transform them into visually stunning and pedagogically effective audio and video podcasts to support 21st century teaching.

Keywords: GLO Maker, Learning Objects, OER

References: [1] <http://www.glomaker.org/>

[2] <http://www.rlo-cetl.ac.uk/>

OER1072 Demonstration

Opencast Matterhorn Release 0.5 - Start Climbing!

Bjoern Hassler, University of Cambridge

Conference Theme: Open Educational Content

Intended audience: Academics, those who have an interest in lecture recording

Abstract: Opencast Matterhorn [1] is a free, open source platform to support the management of educational audio and video content. Institutions will use Matterhorn to produce lecture recordings, manage existing video, serve designated distribution channels, and provide user interfaces to engage students with educational videos. The 0.5 alpha release offers institutions and individuals a preview of Matterhorn's functionality, including the basics to capture, encode, distribute, and play media, lecture capture automation, and workflow flexibility. The demonstration is aimed at academics who have an interest in lecture recording, but is also suitable for technical staff wishing to obtain an overview of Matterhorn. For those interested in taking Matterhorn forward, further support through the UK-based Steeple-BR project [2] is available.

Keywords: Opencast Matterhorn, Open Source, OER

References: [1] <http://www.opencastproject.org/project/matterhorn>

[2] <http://www.steeple.org.uk>

OER1073 Poster

Open Education Repository in Support of Computer Science

Hagan, S.J., McCaffrey, S., Fraser, S., Subject Centre for Information and Computer Sciences, University of Ulster

Conference Theme: Open Educational Content /Open educational communities

Abstract: This JISC-funded collaborative OER Project created a OE Repository in support of Computer Science which collated high-quality reusable learning units under five thematic areas (Systems Analysis and Design; Computer Programming; Data and Computer Networks; Databases and Development of Problem-solving Skills.) The presentation will summarily address the challenges faced in making approximately 700 independent study elements from current award-bearing undergraduate and taught postgraduate programmes available. In doing, the Project Team addressed issues of IPR, accessibility, retention of pedagogical context and hierarchical metadata tagging. The Subject Centre and five GB higher education institutions (London Metropolitan University, Sheffield Hallam University, University of Portsmouth, Teesside University and University of the West of England, Bristol) addressed issues including appropriate engagement of higher educational subject communities, negotiation of technical barriers of accessibility, compliance with legal restraints and the best use of metadata.

Keywords: Reusable; Independent study elements; Learning units; Readme file; hierarchical metadata tagging.

References: Boyle, T. (2003) Design principles for authoring dynamic, reusable learning objects. Australian Journal of Educational Technology, 19, 1, 46-58.