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ALT-C 2009
"In dreams begins responsibility" — choice, evidence, and change

Conference Introduction and Abstracts

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Welcome to ALT-C 2009

Manchester University sets the scene for this years' conference from which we are thrilled to offer an all-encompassing programme based on the challenges our community faces.

Our three excellent keynote speakers for 2009 are:

■ Martin Bean, Vice Chancellor Designate at the Open University, UK;
■ Michael Wesch, Assistant Professor of Cultural Anthropology at Kansas State University, USA;
■ Terry Anderson, Professor and Canada Research Chair in Distance Education at Athabasca University, Canada .

Alongside our keynote speakers, the programme will be infused with sessions addressed by the following invited speakers:

■ Jonathan Drori, CBE; Director, Changing Media;
■ Heather Fry, Head of Learning and Teaching, HEFCE;
■ Diana Laurillard, Professor of Learning with Digital Technologies at the Institute of Education;
■ Matthew McFall, Learning Sciences Research Institute and School of Education, University of Nottingham;
■ David Kennedy, Director and Associate Professor, Teaching and Learning Centre, Lingnan University, Hong Kong;
■ Richard Noss, Co-director of the London Knowledge Lab;
■ Vanessa Pittard, Director of Evidence and Evaluation, Becta;
■ Aaron Porter, Vice President (Higher Education) of the National Union of Students (NUS);
■ David Price, Co-founder of Debategraph (www.debategraph.org).

ALT-C 2009 offers an extensive programme of demonstrations, long papers, research papers, short papers, sponsor sessions, symposia and workshops from a broad representation of the ALT and e-learning communities based on the challenges our community still face:

■ learning from history to build on past gains and avoid previous mistakes;
■ spreading innovations that are of true value, rather than mere fads;
■ redesigning pedagogy, the curriculum, and assessment methods to secure a substantial positive impact on learning;
■ ensuring cost effectiveness by various means, from working effectively at a large scale, to supporting peer-assisted learning cultures;
■ developing a research culture that informs practice, and a culture of practice that uses research evidence.

We'd like to convey our appreciation to all those who submitted papers to the conference and to the Programme Committee for their excellent work in reviewing all submissions and selecting those that comprise the conference programme.

A particular thank you goes to Haydn Blackey, Linda Creanor, Hugh Davis, Amanda Jefferies, Liz Masterman, Maggie McPherson and Brian Whalley for all their hard work in putting the research proceedings and abstracts together.

The ALT organising team are also very deserving of gratitude. Their experience and understanding of what it takes to organise ALT-C is key in making this event a success year on year.

As ever, it's your continued support and passion for learning technology that keeps ALT-C at the top of the conference agenda in the UK, thus we hope you enjoy, absorb, and play a part in its success.

Co-Chairs, ALT-C 2009 Programme Committee

Tom Boyle
London Metropolitan University

Gilly Salmon
University of Leicester

Statement of Support from David Lammy, MP, Minister of State for Higher Education and Intellectual Property, Department for Business, Innovation and Skills

BIS | **Department for Business Innovation & Skills**

My Department and the Department for Children Families and Schools both appreciate the important role of learning technologists and learning technology in education and training worldwide.

I very much welcome the theme of the 2009 ALT Conference and in particular its emphases on the spread of innovations that are of true value rather then fads and on developing an evidence-based approach to technology decision-making.

Technology has a central role to play in enabling learning providers to innovate and to respond, and we see it as a vital tool to help achieve our ambitions. Its role is vital to ensuring our university system remains world class and that our whole education system meets the needs both of learners and of the economy. Ensuring that providers and learners use technology well is a crucial component in our plans and we see the strong need for a technology strategy which supports learners of all ages and sectors as they move through the education and skills system; and not just in this country, but across the world through high quality, effectively-supported on-line distance learning.

The last few years have seen a major and irrevocable structural shift in the scope for ICT to enhance learning wherever it is taking place. The shift results from the ubiquity of the Internet and of devices — often personally owned — through which learners can find and access content, and from the increasingly large volume of content that is available online. Thus the first place we now look to find out something is on the Web, rather than in a place, in a book, or directly from an expert. ALT, through the community of learning technologists it supports and through conferences like ALT-C, is playing a key role in developing our understanding of the changes that are taking place, by supporting a research culture that informs and is informed by practice and a culture of practice that uses research evidence. Learners create learning; but teachers and institutions create the conditions under which learning can take place. The structural shift is changing those conditions for good: by taking account of this, universities, colleges and schools will serve their learners, and the economy, well.

It therefore gives me great pleasure to put on record our support for ALT-C 2009 *"In dreams begins responsibility" — choice, evidence, and change*, as well as for the valuable work of ALT and its individual, organisational, and sponsoring members.

I'm sure that your conference will generate debate, enthusiasm and action. I wish the conference well.

The ALT-C team

On behalf of the ALT-C organising team, we welcome you to the 16th International Conference of the Association for Learning Technology.

This year's conference will maintain the quality of previous conferences while incorporating features that will further enhance your experience. This includes our social networking site 'CrowdVine', which you can use to locate and connect with people attending ALT-C and find the most up-to-date information on what's happening at the conference itself, visit: **altc2009. crowdvine.com**

ALT-C 2009 will also be the launch-pad of the ALT Open Access Repository Our repository will not only contain post-prints of ALT-J and other learning technology materials, it will also be the holding area for this years conference timetable, abstracts and research proceedings for your perusal, visit: **repository.alt.ac.uk**

Also, you can now follow it on twitter: **twitter.com/A_L_T**, enabling you to keep in touch with what's going on in the association through an additional channel.

We look forward to meeting you and hope you not only enjoy this year's conference, but also find time to experience many of the activities Manchester has to offer.

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The trustees of ALT would like to thank the following for providing sponsorship for this years' conference.

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Keynote speakers

Michael Wesch
Assistant Professor of Cultural Anthropology at Kansas State University, USA

Dubbed "the explainer" by Wired magazine, Michael Wesch is a cultural anthropologist exploring the impact of new media on society and culture. After two years studying the impact of writing on a remote indigenous culture in the rain forest of Papua New Guinea, he has turned his attention to the effects of social media and digital technology on global society. His videos on technology, education, and information have been viewed by millions, translated in over ten languages, and are frequently featured at international film festivals and major academic conferences worldwide. Wesch has won several major awards for his work, including a Wired Magazine Rave Award, the John Culkin Award for Outstanding Praxis in Media Ecology, and was recently named an Emerging Explorer by National Geographic. He has also won several teaching awards, including the 2008 CASE/Carnegie U.S. Professor of the Year for Doctoral and Research Universities.

Mediated Culture/Mediated Education

It took tens of thousands of years for writing to emerge after humans spoke their first words. It took thousands more before the printing press and a few hundred again before the telegraph. Today a new medium of communication emerges every time somebody creates a new web application. A Flickr here, a Twitter there, and a new way of relating to others emerges. New types of conversation, argumentation, and collaboration are realized. Using examples from anthropological fieldwork in Papua New Guinea, YouTube, classrooms, and "the future," this presentation will demonstrate the profound yet often unnoticed ways in which media "mediate" our conversations, classrooms, and institutions. We will then apply these insights to an exploration of the implications for how we may need to rethink how we teach, what we teach, and who we think we are teaching.

Martin Bean
Vice-Chancellor Designate of the Open University

Martin Bean will take on the role of the Open University's fifth Vice-Chancellor from October 2009. Currently General Manager responsible for product management, marketing and business development for the Worldwide Education Products Group at Microsoft, Bean has held senior executive positions in North America, Asia Pacific and Europe, and brings to the role more than 20 years experience in global business training and education. He has held executive management roles in leading organisations, including Novell Inc., Sylvan Learning, Thomson Learning, and New Horizons Computer Learning Centres, Inc. Martin Bean is a member of the National Board of Directors of Jobs for Americas Graduates and was a member of the Board of Directors and Executive Committee for the Computing Technology Industry Association, chairing its Public Policy Committee, 2002–2004.

Innovation in ICT continues to enable new and effective ways to open learning to all who seek it. The challenge for The Open University from the beginning was to deliver mass higher education on an individual basis. That challenge remains the same today. The Open University asks for no

entry qualifications and delivers to over 200,000 students and users of their course materials each year. In this presentation Martin will reflect upon The Open University's pioneering use of technology for large-scale delivery of educational opportunities over the last 40 years and contrast that with where The Open University sees the greatest opportunity for the application of ICT and innovation over the coming years.

Terry Anderson
Professor and Canada Research Chair in Distance Education at Athabasca University, Canada — Canada's Open University

Terry Anderson has published widely in the area of distance education and educational technology and has co-authored or edited six books and numerous papers. Terry teaches educational technology courses in Athabasca's Masters and Doctorate of Distance Education programs. His research interests focus on the evolution of communications technologies and pedagogies applied in distance education contexts. Terry is also the director of CIDER—the Canadian Institute for Distance Education Research (cider.athabascau.ca) and the editor of the open access, International Review of Research on Distance and Open Learning (IRRODL www.irrodl.org). The complete text of his most recent edited book The Theory and Practice of Online Learning (2008) is available as an open access resource at www.aupress.ca/books/Terry_Anderson.php. Learning is rapidly evolving from an activity that is designed, packaged and delivered by formal learning organizations, to one co-designed by individuals and networks of life-long learners. In this presentation Terry talks about the evolution of online learning from delivery models designed around monolithic virtual learning environments, to ones in which a variety of tools are used to connect learners with teachers, resources and collaborators. Effective learning now continuously morphs among individual, group, network and collective activities. Each requires learning designs and tools that adapt to and exploit the unique learning affordances of that context.

Social software and web 2.0 applications create opportunity to move formal education from a content transmission to a knowledge creation models. However, such systemic change creates disruption in current practices, attitudes and required skill sets of faculty and education administrators. Adoption and effective use does not come easily for institutions especially for this with successful histories with older models of teaching and learning. This talk is designed to explore, expose and challenge educational leaders and to equip them as effective agents of change in their learning contexts.

The presentation overviews a conceptual model that differentiates the functions of groups, networks and collectives in supporting formal education and informal learning. The effective use of these new technologies requires new pedagogical models of learning and teaching. The session overviews new pedagogies that have evolved within a network intensive context. These include connectivism—'a pedagogy for the networked era' and traces its development from constructivist and chaos theory. Finally the session looks at how learning ecologies are developed and sustained throughout and beyond formal education.

Invited speakers

Aaron Porter

Vice President (Higher Education) of the National Union of Students (NUS)

Aaron Porter is Vice-President (Higher Education) for the National Union of Students, responsible for leading representation and campaigns for students in UK higher education. In his first year at NUS, he has sought to ensure NUS is more representative of the student population in HE.

'A student perspective on institutions use of technology to enhance teaching & learning in the 21st century.'
Student expectations and perceptions as to the use of the technology in higher education is rapidly changing. This session will seek to assess the current picture, and identify the extent to which UK is meeting the expectations of our student body.

I will draw out some examples of good practice, and also identify some areas of weakness and development.

I will also examine research conducted by NUS which looks into how technology can play a role in the provision of teaching, pastoral support, assessment and feedback, provision of IAG and the facilitation of peer-to-peer learning.

Richard Noss

Co-director of the London Knowledge Lab

Richard Noss is co-director of the London Knowledge Lab, an interdisciplinary collaboration between the Institute of Education, and Birkbeck, University of London. He is Professor of Mathematics Education at the IOE, and holds a Masters degree in pure mathematics and a PhD in mathematical education. He was co-founder and deputy scientific manager of the Kaleidoscope EU network of excellence, and is currently the director of the Technology Enhanced Learning phase of the Teaching and Learning Research Programme, funded jointly by the ESRC and EPSRC.

Vanessa Pittard

Director of Evidence and Evaluation, Becta

Vanessa is currently Director of e-Strategy at Becta, leading Becta's work in the areas of strategic co-ordination, evaluation and research, and innovation and futures. Originally appointed as Director of Evidence and Evaluation, Vanessa has led Becta's research and evaluation since 2004. Prior to working at Becta Vanessa led the ICT Research and Evaluation team at DfES, developing and managing a programme of research to inform the development of technology policy and strategy. Before 2002, Vanessa had a long career in the University sector, leading the Department of Communication Studies at Sheffield Hallam University before moving into government research.

Jonathan Drori, CBE
Director, Changing Media

Jonathan Drori has dedicated his career to media and learning. As the Head of Commissioning for BBC Online, he led the effort to create bbc.co.uk, the online face of the BBC (an effort he recalls fondly). He came to the web from the TV side of the BBC, where as an editor and producer he headed up dozens of television series on science, education and the arts. After almost two decades at the BBC, he's now a director at Changing Media Ltd., a media and education consultancy, and is a visiting professor at University of Bristol, where he studies educational media and misperceptions in science. He continues to executive produce the occasional TV series, including 2004's award-winning "The DNA Story" and 2009's "Great Sperm Race." He is on the boards of the Royal Botanic Gardens and the Woodland Trust.

Being mighty: how mortals can make learning technology projects that cause real impact.
Too much effort and too much money are spent on educational trials and technology-based services which are just so-so and horribly unscalable. If only there was an easily understood 10-point checklist for anyone commissioning, procuring or producing innovative pilots and services, that would make them more likely to create fabulous things. Here is an aide-memoire to flourish in moments of confusion. It's based on lessons and experience from broadcast media and advertising and the launch of many new services. Use it and your budget will go further, your projects will build better brains and all will be right in the world.

David Price
Co-founder of Debategraph

David Price co-founded of Debategraph (www.debategraph.org) with the former Australian Minister for Higher Education Peter Baldwin. Debategraph is a creative commons social venture that combines argument visualization with collaborative wiki editing to make the best arguments on all sides of complex public debates freely available to all and continuously open to challenge and improvement by all. Debategraph was piloted with the UK Prime Minister's Office and is currently being used by The Independent newspaper and the European Commission, as well as a collaborative learning tool in various universities and schools. David has a Ph.D. from the University of Cambridge in organizational learning and environmental policy and is a Fellow of the Royal Society of Arts.

David will describe the ideas underpinning Debategraph, demonstrate its use in practice, and discuss how Debategraph is being deployed to map the issues around climate change policy in the build up to the United Nations Climate Change Conference in Copenhagen (in collaboration with, amongst others, the Open University and MIT).

Heather Fry
Head of Learning and Teaching, HEFCE

Heather Fry has used learning technology in teaching and played a strategic part in its introduction into an HEI; she now heads Learning and Teaching Policy at the Higher Education Funding Council for England.

In this session Heather will address a range of policy issues at the level of the institution and sector. She will draw on HEFCE's guidance about using and embedding learning technology that was published earlier this year to supplement its strategy. She will also mention the HEFCE Task Force on on-line learning and the HEFCE funded OER initiative.

Institutions use a range of terms to describe their use of learning technology, but whatever the terminology, stage of evolution, or goal, there is still much to decide and determine about how to maximise learning benefits in this rapidly changing field.

Diana Laurillard
Professor of Learning with Digital Technologies at the London Knowledge Lab, Institute of Education

Diana Laurillard is Professor of Learning with Digital Technologies at the London Knowledge Lab, Institute of Education, leading externally-funded research projects on developing a learning design support environment for teachers, and on developing software interventions for learners with low numeracy and dyscalculia. She was previously Head of the e-Learning Strategy Unit at the Department for Education and Skills, and served as Pro-Vice-Chancellor for learning technologies and teaching at The Open University. Her book Rethinking university teaching: A conversational framework for the effective use of learning technologies is one of the most widely cited in the field.

Evaluating learning designs through the formal representation of learning patterns
Open design is an intriguing concept for education, because the development of pedagogy has never operated in this way before. With the opportunity now to share ideas and designs through digital representations several projects have set out to capture pedagogy through representation in the form of 'learning patterns', modelled mostly on architectural patterns, as 'solutions' to a 'problem' in a 'context'. The paper will report on initial attempts to use learning patterns to evaluate the pedagogy embedded in a learning design sequence. To what extent can they be described in terms of formal computational metrics for the quality of a learning design, so that a learning design system could provide feedback to users?

Dr Matthew McFall

Learning Sciences Research Institute and School of Education, University of Nottingham

Dr Matthew McFall is currently half way through a second doctorate at the Learning Sciences Research Institute, University of Nottingham.

His interests include designing technologies/artefacts/games/resources/ experiences which generate interest, wonder, curiosity, learning and joy. Amongst other things!

Boxes of Learning Delight and Cabinets of Curiosity: Working with Wonder for Wonderful Learning.

Dr Matthew McFall presents a whistle-stop tour of realms of wonder—histories, conceptions, and manifestations, past, present, and future. Drawing on his experience as a conjurer, trickster, and wonderer, he will be offering up a selection of devices and designs (artefacts, instruments, and games) that could facilitate and afford wonderful learning experiences in formal and informal educational settings.

David Kennedy

Director and Associate Professor, Teaching and Learning Centre, Lingnan University, Hong Kong

Associate Professor David M. Kennedy has over 30 years teaching experience in education including the last seven years in Hong Kong. He has published widely in teaching and learning involving technology, pedagogical frameworks for the use of ICTs, problem-based learning environments, visual and information literacies, and evaluation of curriculum innovations in a diverse number of academic domains. He is currently the Director of the Teaching and Learning Centre at Lingnan University in Hong Kong. He has undertaken consultations, professional development and seminars related to eLearning, curriculum design, information literacy, using free and open source software, outcomes-based approaches to teaching and learning, and mLearning in the UK, Hong Kong, Australia, Mauritius, South Africa, Russia, Finland, Canada and Malaysia. He is also a member of the Editorial Boards of the 'Journal of Multimedia and Hypermedia', the 'International Journal of Teaching and Learning in Higher Education (IJTLHE)', and the Journal 'Education as Change'.

Creating learning environments that are both teacher and student centred, simultaneously: Opportunities and issues

Some have argued that Web 1.0 environments are passé: Web 2.0 is where the action is! However, what may be more useful is to think of Web 1.0 and 2.0 applications as offering a raft of potential affordances and opportunities. Learning designs that incorporate an LMS/VLE to provide support for scaffolding, grouping and organising learning can be combined with Web 2.0 applications (e.g., for students to share, and collaborate) and ePortfolios. The synergy of these tools offers increased flexibility, manageability and more student-centred learning.

The presentation will examine an outcomes-based approach to learning design and how this may be supported by the synergy of Web 1.0 and Web 2.0 applications.

Introduction to Abstracts

On behalf of the editors of this book of Abstracts, a warm welcome to ALT-C 2009! This year's conference is unusual in that its theme invites delegates to draw inspiration from poetry: "In dreams begins responsibilities," an epigraph to W.B. Yeats' collection *Responsibilities*. What this phrase, and the poems in the collection, suggest is that, in choosing how to bring about change, one must act with the common good in mind rather than merely follow one's own interests. However, to do this one must first have a clear vision of the intended outcomes: a vision that is both *realistic* and *realisable* by others.

Liz Masterman

How does this poetic vision translate into the world inhabited by teachers, researchers and learning technologists?

Many of you have shared with us your dreams for *redesigning the curriculum* in order to bring about a real positive impact on learning. For example, three symposia will explore the challenges to curriculum design that are surfacing in the current JISC Curriculum Design programme (Corfield; Owen; Sheppard), and a workshop will encourage participants to engage with open educational resources (Wilson). Work on redesigning learning and pedagogy reported in short papers includes the use of wikis as peer-mentoring tools among postgraduate tutors (Paterson); fostering digital literacy in students (Keegan); understanding how students manage digital technologies in their formal and informal learning (Sharpe; Cotton); and investigating how to assess students' digital media productions (Jones).

Redesigning the curriculum through technological innovation focuses in part on how to design for learning in virtual worlds. For example, why do we still use 2D tools to mediate movement in 3D worlds (Farley)? And what are the ramifications of translating scenarios described in a text-based medium into a virtual world (Boardman)?

Of course, teaching staff need to be supported in developing the knowledge and skills to innovate, and a number of papers report on ways to engage teaching staff in e-learning and improve e-learning practice, from social networking for building online communities of lecturers (Cappelli) to "reverse mentoring" of lecturers by their students (Goossens). The institutional perspective on curriculum redesign is examined, too: for example, the challenges that face universities operating in a dual mode of campus-based and distance learning (Dence).

These, then, are some of the visions that will be outlined at the conference. Responsibility for their implementation has three main dimensions: learning from history in order to maximise gains and avoid past mistakes; spreading innovations that are of true value, not just passing fads; and ensuring that innovations are cost-effective: that is, capable of being scaled up or of fostering learning cultures and communities.

The sub-theme *learning from history* features a number of reviews and evaluations, both within and across institutions. Unsurprisingly, these address perennial topics such as the sustainability of e-learning (Gunn); strategies and techniques for engaging stakeholders in institutional change projects (Quinsee); how to encourage teachers to share their learning resources (Morris); and contrasting perspectives on the past, present and future of the VLE (Clay; Ivins; Malikowski; Ogilvie; Quinsee).

Spreading innovation has been interpreted in three ways: innovative approaches to teaching and learning, innovative technologies and innovative processes. A number of workshops have been designed to disseminate

techniques and develop participants' skills in key areas of learning and teaching, including developing students' digital literacy (Sharpe); appreciating both the opportunities and the risks in using innovative technologies with learners (Weller); and online peer observation (Bennett). Unsurprisingly, papers with a technological focus cluster around Second Life: for example, gender differences in attitudes towards learning in SL (Toro-Troconis); eliciting students' self-efficacy in SL (Trinder); and how SL can be combined with mobile technologies to facilitate the transition from school to university (Magill). However, virtual worlds do not enjoy a monopoly: we also learn about the challenges to assessing student-created podcasts (McElearney) and how students can be helped to revise collaboratively through linking Google Talk to a wiki named, aptly enough, "Examopedia" (Malik).

As well as administrative processes such as assessment (e.g. Kerrigan; Oprandi) and QA (e.g. Englund; O'Hare), papers under the sub-theme of spreading innovative processes look at teachers' and students' life trajectories, including supporting teachers in moving towards online and blended learning (Dence; Keppell) and supporting students as they move from secondary to higher education (Alberts; Walker).

The final dimension of responsibility, *cost-effectiveness*, has a small but varied range of papers, covering topics from the applicability of business process management to e-learning (Khoo) through to the use of classroom capture technologies to share effective practice among 15 universities (Williams).

All of the papers, workshops and demonstrations in the conference are underpinned by research, practice or a combination of the two. However, as the conference call also reminds us, realising dreams in a responsible manner entails close ties between research and practice. We need to *build a research culture that informs practice*, and a culture of practice that builds on research results in order to ensure the sustainability of research-based innovations. Conference papers on this theme cover, inter alia, techniques for capturing the learner experience (Jameson; Parnis); formulating a research agenda for emerging technologies in education (Veletsianos); and a timely consideration of the relationship among research, evidence and practice (Patel).

To conclude, we have endeavoured in this introduction to give you a flavour of the range of short papers, symposia, workshops, demonstrations and posters at this year's conference. Now we invite you to read on, make your own selection and enjoy the conference itself.

Liz Masterman
for the Editors

[1] Papers are referred to by the name of the first (or only) presenter: see the Index for the pages on which they can be found. Citations in this introduction are for illustrative purposes only.

Abstract layout

We have grouped papers in sessions that have been given an indicative title. This title along with the day and time of the session is replicated on the side bar of each page to make specific sessions much easier to find. The running order is in line with the programme and each day is clearly marked through the document and on the contents page.

Rooms for each session will be shown on the final timetable which will be given to delegates on arrival.

All papers have a unique ID. There are two indexes: one organised by unique ID; the other alphabetically by author.

Paper type

Authors

Tuesday sessions — Day

Redesigning user centred learning — Session title

Demonstration

0214
The Question Creation Activity module for Moodle: student generated quiz questions as a method of enhancing learner autonomy and encouraging peer-assisted learning — Paper number and title

Authors
Mr Peter Ruthven-Stuart
Future University, Hakodate

This demonstration will report on the philosophy behind and development of a Moodle activity module called "Question Creation Activity", which is intended to give students more control over their learning. This module is free to download and install in Moodle systems (Ruthven-Stuart). Non-Moodlers should also find this demonstration beneficial since the underlying pedagogic approach is transferable. For example, it is possible for teachers to have students create quizzes with other authoring tools.

2

**Tue
10.55** — Day and time

Teachers are aware of the need to encourage their students to take more responsibility for their learning. Consequently, many of them are attempting to blend technology into their teaching in the belief that it will allow their students to become more autonomous. One such technological tool that has grown in popularity in recent years is Moodle, a free open source Virtual Learning Environment (VLE). Moodle is thought to be eminently suited to facilitating learner autonomy because of its constructivist pedigree. Yet, it is just as possible to use Moodle to perpetuate the traditional roles of teacher and student, as it is to create a course that frees students from the strictures of 'sage on the stage' type pedagogies. Indeed, Moodle lacks features that overtly encourage students to study on their own. Consequently, the presenter has joined forces with a programmer to create an activity module for Moodle called the "Question Creation Activity". In this activity teachers require students to make specific question types. The act of making questions, distracters and corresponding feedback requires students to have a deeper understanding of the subject than is needed to simply answer questions about that subject. The questions can be graded automatically or assessed by a teacher, and questions that meet a certain standard are subsequently included in Moodle quizzes.

The presenter will describe how the activity has been used in university courses, and then participants will get hands-on practice with the activity. By the end of the demonstration, participants will understand how to use this new module in their own Moodle courses, and also have some appreciation of the issues involved in customising an open source learning environment.

Ruthven-Stuart, P. *The Question Creation activity module*. Demonstration. Available from qca.petesweb.org

Session two: Abstracts   Redesigning user centred learning

— Session title

1

Tuesday sessions

Demonstration

Authors

Mr Peter Ruthven-Stuart
» Future University, Hakodate

2

Tue
10.55

Redesigning user centred learning

0214

The Question Creation Activity module for Moodle: student generated quiz questions as a method of enhancing learner autonomy and encouraging peer-assisted learning

This demonstration will report on the philosophy behind and development of a Moodle activity module called "Question Creation Activity", which is intended to give students more control over their learning. This module is free to download and install in Moodle systems (Ruthven-Stuart). Non-Moodlers should also find this demonstration beneficial since the underlying pedagogic approach is transferable. For example, it is possible for teachers to have students create quizzes with other authoring tools.

Teachers are aware of the need to encourage their students to take more responsibility for their learning. Consequently, many of them are attempting to blend technology into their teaching in the belief that it will allow their students to become more autonomous. One such technological tool that has grown in popularity in recent years is Moodle, a free open source Virtual Learning Environment (VLE). Moodle is thought to be eminently suited to facilitating learner autonomy because of its constructivist pedigree. Yet, it is just as possible to use Moodle to perpetuate the traditional roles of teacher and student, as it is to create a course that frees students from the strictures of 'sage on the stage' type pedagogies. Indeed, Moodle lacks features that overtly encourage students to study on their own. Consequently, the presenter has joined forces with a programmer to create an activity module for Moodle called the "Question Creation Activity". In this activity teachers require students to make specific question types. The act of making questions, distracters and corresponding feedback requires students to have a deeper understanding of the subject than is needed to simply answer questions about that subject. The questions can be graded automatically or assessed by a teacher, and questions that meet a certain standard are subsequently included in Moodle quizzes.

The presenter will describe how the activity has been used in university courses, and then participants will get hands-on practice with the activity. By the end of the demonstration, participants will understand how to use this new module in their own Moodle courses, and also have some appreciation of the issues involved in customising an open source learning environment.

Ruthven-Stuart, P. *The Question Creation activity module*. Demonstration. Available from qca.petesweb.org

0225

Online numeracy support for students in further and higher education: a user-centred approach

Inadequate numeracy skills are a prevailing issue in UK further and higher education. Studies indicate that these problems can lead to poor performance by students in a wide range of subjects. There can also be a mismatch between students' perception of the demands of their chosen subject and the reality. Numerate elements may therefore be played down or left until later in a course. Poor numeracy skills can then impinge on student retention and academic performance and employability. The survey also showed that academic staff are generally the first point of support for numeracy problems in students but may be poorly-placed to provide such support. Even tutors who use sophisticated numerical methods in research and teaching may be unsuited to help students to learn, or re-learn, basic numeracy skills. Academic staff may also be unaware of what is being taught in modern school mathematics, and how it is taught.

The Students Upgrading Mathematics Skills (SUMS) Project provides access to a large suite of online materials for supporting basic numeracy skills, identified from a stakeholder survey. These materials are available for both individual self-supported study and for inclusion within academic programmes. The pilot resource being demonstrated will use a content management system to allow users (both students and academic and support staff) to view or download resource materials; record their rating of a resource, and add links or new resources or case studies. Materials can thus be re-used in a wide variety of contexts, and users are able to adapt resources to fit their own requirements. Associating case studies with specific resources or categories of resources provides a wider range of subject-specific context.

The demonstration will allow conference delegates to 'road test' the new resource following a brief introduction by the authors. Delegates will be able to discover the range and types of materials available. We will encourage feedback from delegates, both on the types of resources and our approach to consolidating and delivering them. This model of resource delivery is applicable across several areas, both for transferable skills and for specific academic applications. The SUMS project is supported by the Higher Education Academy EvidenceNet and Anglia Ruskin University.

Demonstration

Authors

Dr Toby Carter
Dr Dawn Hawkins
Mrs Jacqui McCary
» Anglia Ruskin University

Mr Jamie Myland
» Peterborough Regional College

Dr Julian Priddle
Mrs Philippa Priddle
» Science Training & Education Partnership

Research culture, evidence

Short Paper

Authors

Ms Helen Lyons
Mrs Louise Thorpe
» Sheffield Hallam University

0151

A biographical approach: exploring students' experiences of e-learning

This session will present the findings from recent research into students' experiences of e-learning in a biographical context. The biographical approach explores the life history of the participant in order to provide a detailed description of a particular phenomenon or social setting. According to Roberts (2002), the appeal of biographical research is that it is exploring, in diverse methodological and interpretive ways, how individual accounts of life experience can be understood within the contemporary cultural and structural settings. Using a biographical approach, it is possible to explore social and cultural changes by investigating personal experiences before, during and after the introduction of that 'cultural shift'. Biographical research therefore seemed perfect to explore the cultural shift from traditional education using paper, pencil, text book and face-to-face teaching, to an educational system that exploits new and emerging technologies to diversify methods of delivery and communication between tutor and pupil.

Using an adapted version of the diary-interview approach (Lyons and Thorpe, 2008), this study aimed to explore students' experiences of e-learning in the context of their holistic learning experience. Participants ranged in age from 18 to 48 and as such had diverse educational backgrounds. Participants were asked to keep a diary for a period of two weeks. Daily entries were to include a log of daily learning activities, reflections on those activities and a response to a daily question sent by SMS text message. They then attended an interview where themes emerging from the diaries were explored in more depth.

This approach enabled us to gather rich stories from the participants and provided an opportunity to explore when, how and why e-learning was introduced to them. In some cases, it was possible for participants to compare their current experiences to previous experiences before technology was a ubiquitous feature of learning. This session will present the biographical stories of our participants and in so doing explore the cultural shift that e-learning has provoked in education. We will share with attendees the question sets used in this research and provide guidance on how a biographical approach might be used in their own research projects.

Roberts, B. (2002) *Biographical Research.* Buckingham: Open University Press

Lyons, H. and Thorpe, L. (2008) *The Diary-Interview Approach: Exploring student experiences of e-learning.* In: Improving Student Learning — Through the Curriculum, Durham, UK, September 2008. [In press]

0175

Evidence in practice: challenges for 'doing' technology enhanced anything

Short Paper

Authors

Ms Uma Patel
» City University London

Dr Patrick Carmichael
» University of Cambridge

The Learning Society Research Programme in the 1990s framed Coffield's (2000) influential characterisation of the three stages of research as: romance, evidence and implementation. Nearly a decade later this resonates with the conference challenges, "we must dream and act on dreams but evidence must justify the choices we make". The discourse of evidence from research for practice raises new challenges at a time when the national Economic and Social Research Council/Engineering and Physical Sciences Research Council Technology Enhanced Learning (TEL) Programme and the JISC and ALT communities increasingly foreground the vision of new collaborations (interdisciplinary) and new accountabilities (learners and others).

The presentation will challenge the assumed relationships between evidence, research and practice by drawing on work emerging from the first six months of a three year, TEL project called 'Semantic Technologies for Enhancement of Case-based Learning' (Ensemble). The particular setting is 'learning though cases' on the postgraduate course, maritime operations and management' where the students are mid-career professionals. The sector is made up of different specialist fields (e.g. maritime: law, engineering, business); and the course, and lectures as well as student backgrounds reflected this diversity. The Ensemble team is also diverse with researchers from the social, cognitive and technological sciences. Narrative analysis of data from discussions between students, students and researchers, researchers and teachers, and researchers and researchers surfaces rhetorical practices (Edwards et al 2004) which suggests that evidence is neither absolute nor unified but instead emergent and in flux.

The argument is explained through illustrative stories which demonstrate that evidence is tied to transactions between claim makers and their audiences(s). Critically these transactions involve meaningful content and emotional resonance, as well as perceived authority of source and situational specificity. This means that the concept of evidence as acting on research findings is not enough for doing technology enhanced anything! The discourse of 'evidence based practice' is contrasted with the more generative 'culture of enquiry' (Hakkarainen et al 2004) positions in which knowledge, design decisions and the transformation of practice are dependent on learning, negotiation and interdependence.

Coffield, F. ed. (2000) *Differing Visions of a Learning Society.* Research Findings Vol 2. Policy Press: Bristol

Hakkarainen, K. Palonen, T. Paavola, S. and Lehtinen, E. (2004) *Communities of Networked Expertise: professional and educational perspectives.* Amsterdam: Elsevier

Edwards, R. Nicoll, D. Solomon, N. and Usher, R. (2004) *Rhetoric and Educational Discourse Persuasive texts?* London and New York: RoutledgeFalmer

Hakkarainen, K. Palonen, T. Paavola, S. and Lehtinen, E, eds. (2004) *Communities of networked expertise: Professional and educational perspectives.* Elsevier, Amsterdam

Authors

Mrs Natalie Parnis
Dr Julia Stephenson
Mrs Anu Sharma
Dr Linda Murray
» Brunel University

0241

Researching the transitional experience of non-traditional and mature students during their first year at university

The transition to higher education is often difficult for students, but especially to those with additional needs or with more limited family support (Student Lifecycle. The Higher Education Academy 2009). The objective of the 'e-Transition and e-Portfolio Project' currently being undertaken by Brunel University is to facilitate the transition of non-traditional and mature students into higher education. The aim is to design and develop effective e-learning programmes to engage first year students with non-traditional entry requirements.

Students within this target group were invited to participate in the preparatory programmes developed with the intention to give students a 'head start' at university. A pivotal project activity was the creation of an e-portfolio facility, 'GetPROGRESSive' a web-based tool embedded in Brunel's Virtual Learning Environment. The facility, which is adviser-supported, enables students to engage in student personal development activities, and encourages students to build their own e-portfolio to record their academic progress and achievements. The authors conducted an evaluation to accumulate a rich narrative of students' experiences during their first year at university. The main objectives of this research activity were to elicit information about the impact of the project activities on the students' transitional process into higher education in respect of 'preparedness' and 'integration', and also to evaluate the influence of the e-learning tools and features used in GetPROGRESSive on the students' experience.

The data gathering approach was derived from the 'life grid' (Sociological Research Online. Life Course Data Colletion: Qualitative Interviewing using the Life Grid, 2009), a technique to collect retrospective data. Students were interviewed and presented with a life grid which the interviewer and participant jointly completed in response to a series of structured questions. Mind maps were then formulated from the life grids as a visual representation to depict the common and variant themes elicited from the interviews.

The presentation will provide an account of the material generated through the life grid technique, illustrating how this can be transformed into a representation of the students' varied transitional experiences during their first year at university. Mind maps will be demonstrated which highlight the representation of these methods of data collection.

Sociological Research Online. Life Course Data Colletion: Qualitative Interviewing using the Life Grid. Available from www.socresonline.org.uk/socresonline/4/2/parry.html [accessed on May 11th 2009]

Student Lifecycle. The Higher Education Academy. Available from www.heacadmy. ac.uk/ourwork/institutions/wp/lifecycle [accessed on May 11th 2009]

Institutional lessons from history

0182

Learning from the learners: some lessons for all of us?

In 2007 students started to record, edit and publish lectures for themselves on a streaming server with RSS feeds to Blackboard and iTunes. This was done using simple voice recorders and open source editing software (Salmon et al, 2008). Over a 2 year period they were able to convince all academic staff to have their work recorded. This new resource has proved popular with all students and has involved little extra work on the part of technical staff. Subsequently, students at the college have started to become involved in a range of other voluntary and paid work related to the development of online resources. This has included students creating electronic clinical cases, digitisation of image banks, wiki editing and generating electronic flash cards.

The involvement of students has provided a number of benefits. With minimal extra cost it has been possible to significantly develop the range and depth of resources available. It has also helped to engage the student body in identifying and creating the materials that they perceive to be of most value. However, this approach has raised issues about the ownership of student generated resources, how much time students can afford to spend on the se projects without compromising their studies and how students views on what they want tally with institutional policies.

This initiative has shown that the institution can benefit from more active engagement of students in developing their own learning resources. "Learning from the learners" has transformed some aspects of teaching at the college in a relatively short period of time. However, it is always important to first consider the wider implications of these approaches on student learning.

Oblinger, D. (2003) *Boomers, Gen-Xers and Millennials: Understanding the new students (Educause review).* Available from www.educause.edu/ir/library/pdf/erm0342.pdf

JISC (2007) *In Their Own Words — Exploring the learner's perspective on e-learning*

Salmon, G. and Edirisingha, P. (2008) *Podcasting for Learning in Universities.* Open University Press

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Short Paper

Authors

Dr Jane Hughes
Dr Fiona Strawbridge
Ms Sonja van Praag
Ms Brigitte Picot
» University College London

0281
Evaluating an institutional teaching and learning network

The University College London is an institution where research and evidence-based practice are highly valued, albeit not always in the context of teaching and learning. There are strong drives to improve assessment and feedback, support interdisciplinary working and maintain a high quality student learning experience. A dramatic increase in the number of courses with an online presence has brought some concerns about ensuring consistent quality. Support for learning technologies includes research seminars but teaching practitioners do not always attend these. We wanted to establish a means for practitioners to learn about and reflect on both local innovations and the outcomes of national initiatives and research.

A 'teaching and learning network' was established in 2006. Its stated aim was to become a space for sharing ideas and experiences across disciplines, a support for innovative thinking, and a gateway to further study. Monthly face-to-face sessions focus on a single topic and this is followed up online, through the associated Moodle space. From the start, learning technologies have been of central interest to participants. In 2008–09, meeting topics included: digital story-telling; wikis; course design; peer assessment; remote labs and simulations; learning spaces. We report on evaluation of the network during 2008–09, the main purpose of which is to inform its future development. The reach and impact of the network are key interests. We wish to understand the value to members of presenting their work, of attending meetings and of online participation. Analysis of membership, records of monthly meetings and forum discussions will be considered in the light of responses to a questionnaire, to be administered in June 2009, and interviews with network members who attend meetings and members who participate online only.

Membership is approaching 300 but a relatively small proportion attend meetings. Participants value cross-disciplinary talk about innovative practice. Attempts to raise awareness of learning technology research have been well received. Cross-fertilisation between the network and the broad spectrum of learning technology support provision in the institution is evident. The findings will enable us to understand the role that such a network can play in further development of good e-learning practices in an institution.

0321

Technology Enhanced Learning Support To Achieve Rigour (TELSTAR): citation management as a strategic driver for change

"How can the Open University manage the process of integrating legacy systems into a recently introduced institution-wide Virtual Learning Environmant (VLE)?" This JISC funded project seeks to prototype new approaches to embedding automated citation management services into the production of online distance learning material. One key aim of the project will be to provide course authors with flexible integrated solutions to creating and managing study related citations for learners. Conversely a key measurement of the project's success will be to determine how effective the solution is in supporting independent learners to manage citations and foster the development of cyberscholarship (2007) skills.

Managing the scale and complexity of digital information is a crucial element in developing online learning skills. Bibliographic management applications can be complex and difficult to learn particularly at a distance. Sustainable support and training for learners in the effective use of such applications are challenging for distance educators, particularly for providers delivering to high student populations. The plethora of different citation styles required by different domains often challenge and confuse learners, particularly those engaged in interdisciplinary programme based study.

TELSTAR will be investigating a three way integration for bibliographic management services. Integration with the in house course authoring tool, the VLE course website, and a student facing e-portfolio platform. The aim will be to provide a solution to flexibly port essential bibliographic citation data across these coexisting workspaces. TELSTAR is seeking solutions which will allow users to enter into 'citation dialogues' with learners and pedagogues in order to refresh and revitalise online learning references and ensure that library collections are dynamically used in the learning process.

Technologies such as citation linking software and digital object identifiers will be integrated into the prototype environments. A key aim will be to prototype an improvement on existing information management e-production workflows within the organisation. The project will also investigate and capture ways in which to promote more effective dialogue between librarians, course authors, e-production staff and learners with the goal of ultimately improving the student learning experience.

Arms, W.Y. and Larson, R.L. (2007) *The future of scholarly communication: building the infrastructure for cyberscholarship.* NSF / JISC workshop, Phoenix, Arizona, April 17 to 19. Available from www.sis.pitt.edu/~repwkshop/SIS-NSFReport2.pdf

Authors

Mrs Non Scantlebury
Mrs Anne Gambles
» The Open University

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Tue
10.55

Redesigning design

Short Paper

Authors

Dr Richard Hall
Ms Heather Conboy
» De Montfort University

0078

Connecting transitions and independent learning: an evaluation of read/write web approaches

Recent studies on the student experience in higher education highlight that a framework of technologies, both institutional and non-institutional, are crucial in connecting students' informal and formal learning (Hall 2009; Trinder et al. 2008). However, there is little research on how these technologies can be integrated into the student experience upon transition into HE, in order to motivate independent learning and engage diverse groups of learners (Anagnostopoulou and Parmar 2008; STAR 2009; Yorke and Longden 2008). This paper will report on the outcomes of a nationally-funded project that is evaluating strategies for enhancing the transition to independent thinking in higher education. At the heart of this endeavour sits the hypothesis that structured social interaction and collaborative working extends the individual learner's perceived and actual ability to make decisions, and to contribute to learning in a range of settings (Napier University 2007).

The authors will report on formal and informal pedagogic innovations, which support structured risk-taking within the following groups.

- Level one students in game art design, history, and politics, who are experimenting with a range of technologies to build subject and personal mastery.
- Level one students who are being mentored informally by level two students using read/write web technologies.

The innovations that will be reported are two-fold: firstly, the impact of structured professional development for academic guidance, transitions and independent study support tutors, and academics in education and politics and international relations; secondly, the development of read/write web tools and tasks in level 1 education and politics and international relations, including induction sessions to technology for students. The paper will draw out the headlines from an emergent action research approach that involves thematic analysis of student/staff interviews and analyses of online interactions.

As the project ends at the close of the 2008–09 academic year outcomes are as yet emergent. However, the thematic analysis will enable participants to:

- Judge the potential of these pedagogic strategies and tools for empowering learners who are new to higher education; and
- Identify a range of professional development needs for academic and support staff in promoting transitions towards independent thinking, using social media.

Anagnostopoulou, K. and Parmar, D. (2008) *Practical Guide: bringing together e-learning and student retention.* London: Middlesex University and HEA. Available from www.ulster.ac.uk/star/resources/Anagnostopoulou_Parmar.pdf

Hall, R. (Forthcoming 2009) *Towards a fusion of formal and informal learning environments: the impact of the read/write web.* Electronic Journal of eLearning

Napier University (2007) *Transforming and Enhancing the Student Experience Through Pedagogy.* Edinburgh: Napier University. Available from www.jisc.ac.uk/publications/publications/sfcbooklettesep.aspx

Trinder, K. Guiller, J. Margaryan, A. Littlejohn, A. and Nicol, D. (2008) *Learning from Digital Natives Project.* York: HEA. Available from www.academy.gcal.ac.uk/ldn

University of Ulster (2009) *Student Transition And Retention Project.* Coleraine: University of Ulster. Available from www.ulster.ac.uk/star/index.htm

Yorke, M. and Longden, B. (2008) *The first-year experience of higher education in the UK (Phase 2).* York: HEA. Available from www.heacademy.ac.uk/assets/York/documents/resources/publications/FYEFinalReport.pdf

0179

Managing curriculum design in an agile environment

This paper focuses on the work that Staffordshire University are doing to support change in curriculum design and development as part of the JISC Institutional Approaches to Curriculum Design programme. The Enable project will run for over 3 years and will join together various change initiatives around curriculum development into a coherent and radical overall change process, ensuring stakeholder needs are understood, problem areas clearly identified and providing a sustainable solution to managing change, including producing process models, technical solutions and advice to inform the wider community.

The project is using a "Theme", "Spoke", "Hub" approach where it is the hub that brings together various initiatives (Spokes) together under a number of different themes including: employer engagement, innovation in practice, process innovation, core data and interoperability. Stakeholders have been engaged from both the university and its project partners, with experiences captured using interviews, online blogs and polls.

The project has provided a base line of how it operates at the moment, it has created a number of process maps from all levels of curriculum design and development using enterprise architecture (including TOGAF). The project has also interviewed different stakeholders involved in curriculum design, and those involved in initiatives that impact on curriculum design, providing a list of common issues that initiatives are facing.

The same issues have been encountered by at least some of the initiatives, if not all, and impact across those initiatives, these issues have been left to fester. With the aid of Enable work has been started on addressing some of the more urgent issues. It is also clear that there has not been a vision for managing how issues get addressed by senior managers, or how their impact is managed across different aspects of curriculum design. The project has already identified required changes needed for project management within the institution, along with process models for identifying new issues and the required projects and engaging the relevant stakeholders.

Authors

Mrs Fleur Corfield
Mr Sam Rowley
» Staffordshire University

Short Paper

Authors

Dr Simon Cross
Dr Paul Clark
Mr Andrew Brasher
» The Open University

0219

Preliminary findings from a series of staff surveys on perceptions, attitudes and practices of learning design

Understanding the practice and process of designing learning is important to supporting and guiding both institutional and individual responses to new technologies, pedagogies and work-practices. This requires an understanding of attitudes and perceptions:

- Is learning design speaking to a perceived need?
- What factors combine, and when, in the planning, structuring and sequencing of learning activity, student perspectives and teacher intent that comprise learning design?
- What roles do different forms of graphical representation play?

This paper will report on a series of inter-connected staff questionnaires. These have been undertaken over spring-summer 2009 as part of ongoing work by the Open University Learning Design Initiative. They build upon an established evidence base built over the last eighteen months (Conole et al. 2008). We will outline how that evidence base has informed the questionnaires and present a summary of some initial findings. These data will examine the broad argument advanced in learning design discourse: namely, that the design of teaching and learning is becoming more challenging, complex and fragmented (see e.g. Lockyer et al. 2008). Furthermore, for staff who have encountered the graphical representations for support being developed by the Initiative, what is the perceived role of such representations?

In conclusion we will highlight how these data may have value in taking forward learning design at our institution. We will also seek to identify more general messages, such as the need for methods to better manage the complexity of design and the nature of support for using graphical representation. The paper is aligned with several of the conference themes: it seeks to use research evidence to inform practice; it looks squarely at issues associated with the design and re-design of learning; and it reports on a method of data capture intended to help support the implementation of design innovation.

Conole, G., A. Brasher, S. Cross, M. Weller, P. Clark, and J. White, (2008) *Visualising learning design to foster and support good practice and creativity.* Educational Media International 54: 3: 177–194

Lockyer, L. Bennett, S. Agostinho, S. and Harper, B. eds. (2008) *Handbook of Research on Learning Design and Learning Objects: Issues, Applications and Technologies.* Hersey PA: IGI Global

Staff skills

0020

Where does the university end and learning begin? Facilitating Personal Learning Environments to enhance ownership of knowledge

Virtual Learning Environments (VLEs) are closed systems which tend to lock learners into a "one-size fits all" pattern of learning (Kennedy 2009). Although they have their strengths (such as authentication, monitoring of student progression and convenience), the pattern of learning they attempt to enforce is not sustainable in that students are locked out of the resources of the VLE as soon as the course they are taking ends. Yet most students are transients within the university system, most staying for a fixed term of study. The stepwise creation of a personal learning environment based on freely available tools such as RSS readers, social bookmarking and online office suites enables students to use Web 2.0 tools for formal learning. By encouraging students to develop their own personal learning, research and networking spaces, they will be equipped with sustainable lifelong learning skills that can persist beyond their university careers and the confines of institutional learning management systems (Wilson 2006).

To this end, we will describe how we have revised our first year undergraduate key skills module to assist students with concepts and competencies of information literacy, ultimately leading towards the construction of a Personal Learning Environment (PLE) and a reflective e-portfolio (Attwell 2007). Rather than presenting a PLE as an academic concept, our aim was to embed Web 2.0 tools directly in the curriculum. Students were given tasks directly relevant to the science curriculum to provide basic building blocks for their PLE, for example, being asked to use a social bookmarking site to share links relevant to their course, and were taught how to use RSS feeds to find, bookmark and share recently published papers, etc.

Evaluation data and student feedback concerning the uptake, response to and sustained use of these Web 2.0 tools will be presented. By allowing students to feel more ownership of their learning and to participate in socially-constructed knowledge, we aim to foster not only academic progress but also engagement with personal development planning, and ultimately, life-long learning.

Attwell, G. (2007) *e-Portfolios — the DNA of the Personal Learning Environment?* Available from www.knownet.com/writing/weblogs/Graham_Attwell/entries/7709663746/7896831716/attach/eportjournal.rtf

Kennedy, D. (2009) *Virtual Learning Environments (VLEs): here to stay, or on the brink of demise?* The Plymouth Student Educator 1: 58–66

Wilson, S. (2006) *Personal Learning Environments: Challenging the dominant design of educational systems.* Journal of e-Learning and Knowledge Society 3:27–38

Short Paper

Authors

Dr Alan Cann
Dr Joanne Badge
Mr Stuart Johnson
Dr Jon Scott
» University of Leicester

2

Tue
10.55

Short Paper

Authors

Dr Phillip A. Towndrow
» National Institute of Education, Singapore

Dr Michael Vallance
» Future University, Hakodate

0034

Curriculum mapping for pedagogical change? Case studies from Asia

Curriculum mapping is recognised as a continuing process for orchestrating the scope and sequence of a curriculum to inspire coherence across grade levels, avoid unnecessary redundancies and provide teachers with timely feedback on curriculum implementation so that positive modifications can be made (Hale n.d.; Wiggins and McTighe 2007). Yet, while some might be attracted by the pragmatic affordances of structuring learners' understandings of important ideas based on the 'givens' of subject-specific syllabi, the input and significance of learning technologies in particular classrooms are less certain due to individual teachers' beliefs and classroom practices.

To better understand how curriculum mapping might be used as a vehicle for innovative and sustainable pedagogic change, and to illustrate the challenges, this paper presents case study evidence from two cultural contexts in Asia where 1:1 laptop programmes have been implemented very differently to meet the needs and interests of 21st century learners. In the Japanese case study all undergraduate students at a particular university are required to purchase a laptop. Although the university is deliberating upon its curricula beyond the traditional boundaries of departmental syllabi, the appropriation of digitally enabled teaching and learning remains weak. Curriculum planning is being used to facilitate an inter-disciplinary curricula that will make informed use of the students' laptops.

In contrast, education in Singapore is centrally-controlled and focused largely on the transmission of print-based skills. Evidence from one particular high school reveals the tensions that occur when top-down institutional direction for students to perform well in national high-stake examinations meet the more dynamic demands of applying technology in particular tasks. At present, curriculum mapping is being used in departmental meetings as a way of operationalising the "whats" and "hows" of the curriculum but is this enough to enhance and motivate meaningful mobile learning?

This paper provides a much-needed illustration of the unique planning and implementation issues surrounding the responsible use of curriculum mapping techniques within a non-western, digital learning context. This presentation will stimulate further cross-national comparative research efforts and discussion about the processes of technology-driven educational change.

Hale, J. (n.d). (2008) *Curriculum mapping 101.* Available from www.curriculummapping101.com [accessed on December 21st 2008]

Wiggins, G. and McTighe, J. (2007) *Schooling by design: Mission, action, and achievement.* Alexandria, Virginia: Association for supervision and curriculum development

0068

Reflect, review, renew: how the e-learning Maturity Model (eMM), a benchmarking tool, encourages reflection feedback and change.

Benchmarking is based on the concept of comparison and measurement. While the results obtained by benchmarking can often be misused and may be treated with suspicion, when used appropriately the findings of the benchmarking process can help the provider reflect on their strengths and weaknesses, facilitate organisational understanding and inform organisational implementations (HEAEDST, 2008). The e-learning Maturity Model (eMM) is a benchmarking tool designed to ensure educational organisation investments in e-learning design, development and deployment are meeting the needs of the learners, trainers and the organisation (Marshall, 2006).

In March 2008 the Waikato Institute of Technology (Wintec) received the benchmark results from the eMM tool (Left, Neal, & Marshall, 2008) which outlined the strengths and weaknesses of 35 e-learning processes within Wintec. A fine grained analysis, using the eMM Process Assessment Workbook (Marshall, 2006a), identified one process in particular, "E2: Teaching staff are able to provide regular formal and informal feedback on quality and effectiveness of their e-learning experience", which was deemed to be significant to the activities of professional development staff.

This paper presentation will begin with an overview of the E2 process and explore our institutes maturity and weakness as measured by the indicators associated with this process. It will then identify and outline the professional development initiatives offered to encourage staff reflection and elicit feedback thus providing evidence to drive change at an individual and institutional level. These initiatives include the development and ongoing support for an online community of practice, enhancing the pedagogical understanding of staff, the scheduling of regular face-to-face staff discussion forums to identify and disseminate best practice, and the provision of one-to-one staff support in portfolio development and reflective practice. Finally, the presentation will provide a preliminary report on the effectiveness of the initiatives undertaken and how they have impacted on teaching practice.

Higher Education Academy Evaluation and Dissemination Support Team (HEAEDST) (2008) *Challenges and Realisations from the Higher Education Academy / JISC Benchmarking and Pathfinder Programme.* Higher Education. Available from elearning.heacademy.ac.uk/weblogs/pathfinder/wp-content/uploads/2008/09/Bench_and_PathFinalReview20080926.pdf

Left, P. Neal, T. and Marshall, S. (2008) *Report on the Distance and Flexible Education Capability Assessment of Waikato Institute of Technology.* Blended Learning Solutions, Wellington

Marshall, S. (2006) *E-Learning Maturity Model Version Two: New Zealand Tertiary Institution E-Learning Capability: Informing and Guiding E-Learning Architectural Change and Development Project Report.* Report to the New Zealand Ministry of Education. Wellington. Available from cms.steo.govt.nz/elearning/projects/showall.htm

Marshall, S. (2006). *E-Learning Maturity Model: Process Assessment Workbook.* Available from www.utdc.vuw.ac.nz/research/emm/documents/versiontwo/20060726Workbook.pdf

Authors

Dr John Clayton
Mr Adam McMillan
» Waikato Institute of Technology

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Tue
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Section two: Abstracts | **Staff skills**

14

Spreading curriculum innovation

Short Paper

Authors

Mr Tim Cappelli
Dr Hilary Dexter
» University of Manchester

0047

Navigating an enquiry based curriculum using a curriculum knowledgebase

This paper studies the work done in developing a curriculum mapping knowledgebase for an undergraduate medical programme at a major university. This knowledgebase will allow tutors, students and administrators to find individual elements of the curriculum and plot their connections to other related elements. This will allow users to easily update Problem-Based Learning (PBL) cases, review Intended Learning Outcomes (ILOs) or identify gaps in assessment. The paper will highlight the issues of curriculum administration and development of a complex enquiry-based curriculum. Enquiry or problem-based curricular are typified by the complexity of the interrelationships between the component parts of the programme. Such curricula typically consist of problem-based scenarios, underlying knowledge, skillsets, learning activities, assessments, ILOs and various other elements which need to be co-ordinated, connected and maintained in order for the programme to function.

The development approach used in producing the curriculum knowledgebase involved the use of a rapid application model that fully involved end users in the process. Interviews with domain experts, workshops with users and validation workshops with other medical schools provided the project with a generic domain map for enquiry based curricular. The development phase then focused on the creation of an ontology based knowledgebase alongside a user interface.

The work has resulted in a domain map and ontology for enquiry based programmes that we believe is generalisable to any subject or context. This provides the basis for a customisable knowledgebase that may be contextualised for any institution. This knowledgebase is interfaced with a dual-purpose user interface that provides uses with a route-based navigation tool to explore the various elements of the programme, alongside a document-based interface that allows users to edit or review key curriculum documents in a co-ordinated approach

The project is limited in its application to one subject and evaluation of the work through use test cases and user feedback is still at an early stage. However, although the tool still requires further development, indications show enormous potential for the tool in helping intuitions plan and maintain complex curricular.

Short Paper

Authors

Dr Preeti Shah
Dr Hilary Dexter
Dr Neil Snowden
Prof Tim Dornan
» University of Manchester

0102

Can acquisition of expertise be supported by technology?

Professional trainees in the workplace are increasingly required to demonstrate specific standards of competence. Yet, empirical evidence of how professionals acquire competence in practice is lacking. The danger, then, is that efforts to support learning processes may be misguided. We hypothesised that a systemic view of how expertise is acquired would support more timely and appropriate development of technology to support workplace learning. The aims of this study were to provide an empirically based understanding of workplace learning and explore how learning could be facilitated through suitable application of technology.

We have used the medical specialist trainee as an exemplar of how professionals acquire expertise within a complex working environment. We describe our methodological approach, based on the amalgam of systems analysis and qualitative research methods. We present the development of a framework for analysis and early findings from qualitative data analysis. Based on our findings so far, we present a tentative schema representing how technology can support learning with suggestions for the types of technology that could be used.

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Author

Dr Cathy Gunn
» University of Auckland

0124
A practical guide to e-learning sustainability

This paper presents the findings of a study of factors that challenge or enable sustainability of e-learning initiatives within New Zealand tertiary institutions. The literature identifies this as a common challenge internationally, though opinions vary on where responsibility for action to address it lies. The immediate aim of the study is to inform implementation of a forward-looking institutional e-learning strategy. A high level of interest generated by the small-scale study suggests the findings may be useful to other institutions and national organisations.

A qualitative study used thirty semi-structured interviews to gain insight into the experience of e-learning practitioners, project managers and learning support staff. The sample size and range supported the identification of common factors rather than producing a comprehensive picture of tertiary e-learning initiatives nationally. The assumption was that identifying contributing factors would point to areas for action and further research. The retrospective study used evidence from real cases. The different perspectives of participants are summarised as recommendations.

One conclusion is that common barriers to sustainability remain to be addressed to increase rates of return on investment. This includes rewards for creative enterprise as well as financial return. Positive action is also required to reduce the risks of reliance on e-learning systems initially developed and maintained in an ad hoc manner. Various strategies identified as effective in promoting sustainability underpin recommendations for action by different stakeholders.

Completion of the study coincided with publication of a report from a JISC supported initiative with similar aims (Guthrie et al 2008). While the scale was grander, results are strikingly similar, though the recommendations reveal important points of difference. This suggests complementary strands of action rather than conflicting opinions on how to address the complex challenge of sustainability.

Common conclusions are:

1. sustainability of e-learning initiatives is a common and context specific challenge across the tertiary sector;
2. accommodating different stakeholder perspectives is a critical success factor; and
3. key areas for action to promote sustainability have been identified and strategies that have proved successful in different contexts are available for consideration.

The presentation will use illustrative cases to support recommendations for action.

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Infrastructure innovation

0126

Socialising learners through online induction: reflections on the transition to higher education

This paper reflects on the use of the University of York's institutional Virtual Learning Environment (VLE) platform to host an induction support site for two cohorts of biology undergraduate students. The site was made available to unconditional, confirmed students in September 2007 and 2008, with the aim of helping new students to prepare for their first term on campus. The paper reflects on the development of the site and its contribution to student learning, specifically information management and socialisation patterns during the first weeks of term.

The induction site was developed in order to provide incoming students with information about the university, the department and the undergraduate study programme. It also aimed to provide access to catch-up material, which students could use to brush up on specific subject areas such as chemistry and mathematics, and to give access to a blog where the new cohort of students could meet virtually and interact with current students at the university. As a result of feedback received from the 2007 cohort, the site was modified to include overview materials on learning styles and the methods of teaching that students were likely to encounter in class sessions.

Student feedback and survey responses confirm that the site was well received by those who used it, communicating important orientation information and providing a link to key university services including the online registration process. The site proved particularly valuable to international students in providing an environment in which they could make contact with peers from their own countries before arriving on campus, combining use of the site with non-university supported tools such as Facebook and personal email.

Our preliminary findings concur with other research evidence (Currant, 2008), suggesting that on-line induction support can make a difference in helping students to build peer relationships and develop a sense of identity with a department. Pre-arrival induction support can also help students to cope with the overwhelming volume of information that they face in the first weeks of term, and match their expectations on study requirements with those of academic staff.

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Authors

Dr Richard Walker
Mr Wayne Britcliffe
» University of York

Authors

Mrs Sarah Sherman
Ms Caroline Bell
» Royal Veterinary College

0234

Appropriate and Practical Technologies (APT) for students, teachers, administrators and researchers

Next generation web technologies present exciting opportunities to enrich teaching, learning and research. However, this potential has not yet been fully realised and there is a need to get the majority of users "signed up". In this context, this paper summarises the experience of a JISC funded project to explore the development and implementation of simple Appropriate and Practical Technologies (APT).

The APT project involved implementing a simple step-by-step approach to the introduction of new technologies at the Bloomsbury Colleges (Birkbeck, Institute of Education, London School of Hygiene & Tropical Medicine, Royal Veterinary College, School of Pharmacy and SOAS). We worked closely with both staff and students to encourage them to adopt collaborative web-based tools, such as Google Docs, to support their work. Demonstrator projects were identified across the Colleges, which involved a diverse range of stakeholders including students, teachers, researchers and administrators. The project, which consisted of five principle phases (research, development, implementation, evaluation and dissemination) was designed to ensure a rapid and agile development process in a relatively short time-scale.

Specifically, the project set out to address four key issues:

- Identifying existing constraints to the collaborative use of web 2.0 technologies
- Developing appropriate and practical technical solutions based on collaboration
- Embedding the use of collaborative technologies in a range of different institutional settings
- Empowering staff and students to exploit the true potential of web technologies in their work

The project reviewed the impact and benefit of web-based technologies using a number of research and evaluation tools. After a year, it was clear that not only had the demonstrators successfully adopted the technologies but they had also gone on to apply the approaches in different ways to support their work, spawning a range of unpredicted new initiatives.

In summary, this small scale project has demonstrated the benefit of a progressive introduction of appropriate technologies to day-to-day teaching and learning practice. The involvement of a number of different stakeholders working together has also helped nurture better understanding and cooperation across all the institutions involved in the project.

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2

Tue
10.55

Section two: Abstracts   **Infrastructure innovation**

0237

Dream on: slow progress in developing digital media infrastructures

Recent discussions have highlighted opportunities offered by using digital media and podcasting to enhance learning, especially where that involves the 'mass amateurisation' of media through academic and student production (Whamond 2008). However, academic enthusiasm and interest can be easily deflated by unreliable systems, and this presents a barrier for academic innovation, where there is a symbiotic relationship between infrastructure development and emerging demand. This research project sought to explore the progress made by UK universities in developing infrastructures to support innovative pedagogies enhanced by digital media.

The authors used two methods to investigate the progress of developing universities' infrastructures for user-generated media:

1. An email survey targeted at Blackboard Users groups and the Podcasting for Pedagogic Purposes (PPP) SIG explored enabling factors within institutions in supporting the use of digital media. Questions focused on particular aspects such as IT networks, equipment availability, institutional drivers, and media literacy.
2. A workshop in the style of a focus-group, involving academics, senior management and educational developers was run at a PPP event. Participants were asked to identify weak points in their institutional infrastructure, and a discussion was facilitated focusing on clusters of 'help requests' that emerged.

Participants in the focus group indicated that understanding how to develop our institutional infrastructure and thereby develop rich media-enhanced pedagogy is a complex but highly important challenge for the sector. Early results from the survey indicate a range of issues that represent barriers to the use of digital media in UK universities, but also a selection of technologies, policies and strategies that can contribute to effective infrastructure implementation.

This research indicates the distance that UK universities still need to travel before they achieve a mature infrastructure for digital media. The findings also include effective strategies that are worth sharing, and indicate priority areas for action. This paper will be useful for educational developers and those with responsibility for developing support and technical infrastructure, in informing future decisions and helping UK universities to realise the dream of effective infrastructure for digital media.

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Short Paper

Authors

Ms Susannah Diamond
Mr Andrew Middleton
» Sheffield Hallam University

Redesigning institutional processes

Short Paper

Authors

Dr Alejandro Armellini
Mr Roger Dence
» University of Leicester

O111

Challenges in designing for effective and sustainable e-learning in a dual-mode institution

Higher education institutions offering open or distance learning (DL) provision alongside traditional on-campus delivery can face particular course design, development and delivery challenges on account of their 'dual-mode' nature. Such institutions arguably are more typical than 'mono-mode', on-campus only or DL only institutions.

This paper describes the background and challenges associated with e-learning in the dual-mode context at the University of Leicester, which is at a critical point in the development of its DL portfolio. To date, such growth has been largely organic and entrepreneurial, and rooted in differing policies and practices in different departments. The aim is to reduce the element of 'distance' between on-campus and DL provision and to transform the student experience to provide 'equivalence' irrespective of delivery mode, with e-learning and learning design innovations being key enablers of change.

The e-learning capability and capacity building role supports academic departments in developing and enhancing e-learning effectiveness by bringing innovations into practice through the dissemination of research evidence. Potential learning technology transitions are based largely on externally-funded projects that inform individual course design and development initiatives. An initial benchmarking of e-learning exercise (2006) and three subsequent research and development projects (between 2006 to 2008) have been central to changes in e-learning design, assessment, embedding and sustainability in both modes of provision.

The paper summarises key outcomes in enhancing the e-learning aspects of course design and delivery in both modes. These include improved benchmarking scores in the critical areas of instructional design/pedagogy and learning materials, as well as in e-learning strategy, student understanding of system, student satisfaction and staff recognition and reward.

Key levers in narrowing the equivalence gap between modes of provision have been in learning design, expanding and normalising the use of technology, enhancing scope for the personalisation of learning, improving fit to the learning context (e.g. DL, work-based and continued professional development), utilising more diverse assessment methods, and improving the learner experience. Over 160 academic and support staff have taken part in intensive e-learning change workshops, resulting in more than 100 new or redesigned online activities. Some 26 internal and external courses to date have involved DL provision.

0285

Online Continuing Professional Development: why universities are missing out

The Training Gateway estimates that higher education has between 5 and 9% of the UK market for Continuing Professional Development (CPD). For CPD delivered via the Internet the figure is lower, almost certainly less than 5%. There are no significantly-sized online CPD programmes offered by any UK higher education institution. CPD is an area in which it would seem higher education institutions have the potential to contribute substantially more than they do at present. This unrealised potential is particularly true of online CPD where offerings from higher education institutions are still often experimental in nature.

In 2008, supported by Higher Education Funding Council for England's (HEFCE) Strategic Development Fund, The Open University, in partnership with the Universities of Cambridge, Derby, London (External System) and the Professional Associations Research Network set out to find out just what was stopping higher education institutions from succeeding in the online CPD market and what they needed to do differently.

The presentation will share the results of the project which covered:

1. Market analysis: Based on surveys of professional body members and training manager we sought to understand what is attractive about what higher education institutions have to offer and what is not
2. Institutional analysis: What aspects of the way higher education institutions operate impede online CPD programmes and what needs to change?
3. Course models: How can we use our knowledge of pedagogy to design e-learning course models for CPD that are both economic and effective?
4. Accreditation: How can short courses and other professional learning activities be aggregated to offer worthwhile academic credit?
5. Engagement and marketing: Through the vehicle of a prototype multi-institution portal we explored one avenue to cost-effective marketing underpinned by professional social networking tools

Treating online CPD as just a scaled down version of online degree programmes has clearly not worked well for higher education institutions. The work reported on offers some pointers and "worked examples" for how higher education could command a much larger share of the online CPD market if it is so minded.

Authors

Mr Jonathan Darby
Dr Keith Williams
» The Open University

Cost effectiveness, tools

Short Paper

Author

Ms Jocasta Williams
» University of Western Australia

0059
Classroom capture: a community of practice

The adoption of classroom capture technologies in higher education institutions is increasing (Gosper et al. 2008). This paper reports on a study undertaken in 2008 into a group of fifteen participating universities that have deployed large-scale classroom capture systems, conducting a critical analysis into this group's use of the technology and their gradual evolvement as an exemplary learning technology 'community of practice' (Wenger 1998).

The study employed two key methodologies: a series of quantitative assessments into the technology's usage at each university and of each university's use of the community resources; and a qualitative investigation into the operations of the community group. The study found that, during one semester in 2008, the community of fifteen universities had classroom capture systems installed in over 600 lecture theatres, and recorded in excess of 52,000 classes which received almost 2.5million hits by students.

The interactions and contributions taking place in the community during this period were driven by members. The sharing of information and skills across the community, on an institution-to-institution level or collectively, resulted in significant pedagogic and operational benefits for all community members. From a teaching perspective, it enabled member universities to leverage classroom capture best practices learned throughout the community to promote more effective, innovative uses of the technology to support student learning within their home institution. In terms of systems administration, knowledge-sharing in the community had an important impact on organisational efficiencies and productiveness, assisting in the employment of time-saving approaches, accelerating 'operational' learning through the sharing of differing procedures, and avoiding repetitive mistakes through the sharing of problem-solving techniques.

As a result of this study, a number of lessons were learned, particularly in terms of which community tools nurtured interaction and which tools did not. For example, linear discussions via an email mailing list were unpopular and relatively ineffective compared to social media tools like wikis which members feel encourage ongoing collaboration and offer superior accessibility and search features. This increased understanding of the community and its operations is already having a direct impact on the future developments of the community's framework, tools and resources.

Gosper, M. Green, D. McNeill, M. Phillips, R. Preston, G.,and Woo, K. (2008) *The Impact of Web-Based Lecture Technologies on Current and Future Practices in Learning and Teaching.* Australian Learning and Teaching Council. Available from www.cpd.mq.edu.au/teaching/wblt/overview.htm [accessed on May 17th 2009]

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0202

The wiki as an adaptive tool for developing research communication skills

Achieving "dreams" in terms of desired learning outcomes poses many challenging questions when designing online courses from socio-constructionist principles, where software choices can too easily dictate course decisions. Here we show how specific uses of the wiki tool can aid online skills development for research postgraduate students.

The course is part of a generic Skills training programme at the University of Liverpool and specifically encourages development in the areas of public communication of research, online presentation and feedback. The course has to be delivered entirely online within the Blackboard Virtual Learning Environment (VLE) and is designed for first-year, arts and sciences, part-time and off-site, research students, many of whom may have little contact with other postgraduate researchers and no previous experience of online learning.

The course provides a structured introduction to the online technologies. After an initial icebreaker, the students are required to edit pre-formatted wiki pages that use set questions to help them outline their research proposals. The layout enables students to share ideas and promotes an informal online discussion in a small group environment in a more open format than is possible with forums. Later the students use the wiki to develop the discussions into a web page describing their own research. Informal feedback and peer review complete the activity, while students are encouraged to debate the rules guiding this process through discussion boards.

The course feedback showed that the activity was widely appreciated; specifically the opportunity to present research to a wider audience and receive feedback. The pre-formatted wiki pages were as successful as the course forums in facilitating discussions, producing at least a similar number of postings per week to the discussions boards used elsewhere in the course. The students used the wikis to raise and answer questions both about their research and technical issues over the use of wikis. In general students kept rigidly to the template layout, although this was not forced by the technology and they were encouraged to be more creative. In summary, the wiki has proved a highly adaptive tool to help develop course activities.

Author

Dr Shirley G Cooper
» University of Liverpool

Future dreams

Short Paper

Author

Mr John Dermo
» University of Bradford

0117

Integrated, flexible, accessible and secure e-assessment: dreams, responsibilities and realities

One challenge faced by higher education institutions is how large undergraduate modules with several hundred students can be assessed in a valid, efficient, secure and scalable way. Traditional paper-based examinations can be labour intensive and time consuming, and e-assessment has been proposed as one possible solution (Bull and McKenna 2004). At the University of Bradford, the JISC-funded Institutional Exemplar project 2007–09, "Integrating thin client systems and smart card technology to provide integrated, flexible, accessible and secure e-assessment" (ITS4SEA), has used cutting-edge thin client technology to create a new 100 seater e-assessment cluster. The project has also looked into streamlining and automating procedures for proprietary systems in common use in the sector, integrating the student record, exam scheduling and e-assessment systems (Dermo and Eyre 2008). This builds on the 2007–08 Higher Education Funding Council for England (HEFCE) funded e-learning Pathfinder project "Embedding support processes for e-assessment" (Dermo 2008; Dermo 2009).

This session takes the theme of "dreams and responsibility" and focuses on challenges faced during the ITS4SEA project. Radical innovation of this kind requires commitment and acceptance of responsibility across the institution. In fact, many of the greatest challenges have not been technology-based, but rather related to communication, data integrity and the fact that automated systems ultimately require human beings to play their part in the process. The project was managed according to PRINCE2 methodology and the issues under discussion here were raised though the project's risk and issue logs.

This responsibility affects stakeholders across the institution, for example; instructors making sure that students are provided with adequate preparation and clear instructions; course teams developing high-quality secure banks of test items; invigilators receiving appropriate training; students turning up in the right room at the right time; department administrators entering data into the record system accurately and in a timely manner; the examinations office communicating effectively with room bookings and technical support; disabled students receiving the provision they need; managers recognising instructors' commitment to e-learning.

It has sometimes been suggested that e-assessment can make our lives easier, but experience from this project would question this as an over-simplification; it is more a question of improving quality, and this requires an institutional commitment.

Bull, J. and McKenna, C. (2004) *Blueprint for computer-assisted assessment.* London: Routledge-Falmer

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0243

A roadmap for semantic technology adoption in UK higher education

This paper discusses the current use of semantic technologies in the UK higher education, the value of these technologies for learning and teaching and a roadmap for semantic technology adoption by higher education institutions in the next five to ten years. This work is the output of the JISC funded project SemTech (Semantic Technologies for Learning and Teaching — www.semtech.ecs.soton.ac.uk). A survey on the current adoption of semantic technologies in higher education showed that relevant semantic tools and services can be:

- Collaborative authoring and annotation tools, semantic wikis, argumentation tools
- Searching and matching tools
- Repositories and Virtual Learning Environments
- Infrastructural tools and services for information integration

These tools can support pedagogical ends by enabling critical thinking, argumentation, context related recommendation of people and resources. In addition, they can respond to institutional challenges including student retention and support, student progress monitoring and integration of information inside or across institutions.

The project found that there is significant value for higher education institutions in the use of interoperable metadata based on semantic technologies like Resource Description Framework (RDF). This can provide for integration of datasources across higher education and more advanced searches. In addition, linked data can enable the emergence of ontologies to express the meaning of relevant learning and teaching resources and thus support advanced reasoning for pedagogical ends.

The envisaged roadmap involves the following stages:

- Stage one: deployment of a higher education linked data field. Technologies to expose institutional databases in RDF via SPARQL endpoints. Information integration across institutions and advanced searching and matching applications.
- Stage two: applications based on linked data. Mapping linked data to higher ontologies for specific domains. Recommendation of content relevant to teaching and learning activities.
- Stage three: emergence of more pedagogy aware applications. Agreement on ontologies within communities of teaching and learning practitioners and agreement on how linked data can be mapped to those ontologies.

Acknowledgements
- SemTech team: www.semtech.ecs.soton.ac.uk
- JISC CETIS Semantic Technology working group and JISC

Tiropanis, T. Davis, H. Millard, D. and Weal, M. (2009) *Semantic Technologies for Learning and Teaching in the Web 2.0 era — A survey.* In: WebSci'09: Society On-Line, 18–20 March 2009, Athens Greece

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Authors
Dr Thanassis Tiropanis
Dr Hugh Davis
Dr David Millard
Dr Mark Weal
Dr Su White
» University of Southampton

2

Tue
12.00

Quality procedure innovation

Short Paper

Authors

Dr Dave O'Hare
» University of Derby

Dr Judith Kuit
» University of Sunderland

Dr Eileen Webb
» University of Teesside

Prof Peter Chatterton
» Daedalus e-world

Mrs Maria Papaefthimiou
» University of Reading

Dr Magdalena Jara
Dr Harvey Mellar
» Institute of Education

0215

Quality assurance and quality enhancement: the issues for the e-learning community

Universities are moving to a position where learning technology is embedded within standard academic practice. However, there persists a range of issues in terms of the appropriateness of Quality Assurance (QA) processes to support the greater use of such technology. The QA and Quality Enhancement Special Interest Group (www.qe-sig.net) arose from a group of participants of the recent Higher Education Academy Pathfinder Programme. This group aims to disseminate the import of such issues, which have at present not been widely acknowledged within institutions — despite the efforts of external agencies such as the Quality Assurance Agency (QAA). Furthermore, it has been noted that standard QA procedures normally acceptable in face-to-face delivery are not always appropriate to support this mode of delivery. In addition, the roles of the various university stakeholder groups in applying appropriate QA procedures to develop a more quality enhancement approach for e-learning is not always fully understood.

In this paper we aim to:

- Consider the impact of QA procedures on e-learning for each key stakeholder group.
- Identify potential practical approaches to support quality enhancement.
- Via this methodology:
- Highlight the professional tensions within an institution between QA and quality enhancement, raising awareness of stakeholder experiences and expectations.

Jara, M. and Mellar, H. (2007) *Assuring and Enhancing the Quality of Online Courses: Exploring Internal Mechanisms in Higher Education.* European Journal of Open, Distance and E-Learning (EURODL). March 2007. Vol 2007 / I**QAA** (2004) *Code of practice for the assurance of academic quality and standards in higher education.* Section 2: Collaborative provision and flexible and distributed learning (including e-learning)

0309

Quality Assurance in online education: what is it, and do we need it?

The number of students studying partially or wholly net-based courses at Umeå University, Sweden has tripled in the last five years. Parallel with this development there is also an increase in the use of learning technologies in campus-based courses. That interactive, communicative technology (ICT) has had a clear effect on the learning environment in higher education, but what is not as clear is how quality in technology enhanced education can and should be assessed by the institutions themselves and within the framework of a national quality assurance system.

In their report, 'E-learning quality'. Aspects and criteria for evaluation of e-learning in higher education', (2008) the Swedish National Agency for Higher Education (HSV) present a model for evaluating quality in net-based education with the intention of integrating this model into the national Quality Assurance system. The model consists of ten aspects that HSV regard as being central to the assessment of quality in net-based learning: material / content, structure / virtual environment, communication, cooperation and interactivity, student assessment, flexibility and adaptability, support (student and staff), staff qualifications and experience, vision and institutional leadership, resource allocation and finally, a holistic and process aspect. The pharmaceutical science programme at Umeå University is a net-based three-year programme delivered using a Virtual Learning Environment, with an annual intake of around 100 students. From the initiation of the programme in 2003, evaluation and quality assessment has been a prioritised feature of the programme. The individual courses are evaluated using online questionnaires, information on the structure and overarching goal of the programme is collected by means of focus interviews and questionnaires with students and staff and the resulting feedback is continually presented to the programme board and staff responsible for course content, thus ensuring a continual revision and improvement of the programme.

With the pharmacy programme as a starting point, this paper aims to share the results of the existing Quality Assurance system and the benefits and difficulties experienced in applying the model presented by the HSV. And finally, is a separate Quality Assurance model for net-based education necessary?

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Short Paper

Author

Ms Claire Englund
» Umeå University

2

Tue
12.00

Section two: Abstracts | Quality procedure innovation

Active Learning

Short Paper

Author

Mr Andrew Middleton
» Sheffield Hallam University

0229

Harmonious and challenging voices: findings from a creative, audio pervasive module

This paper discusses how digital audio was used as a core, yet flexible, medium to actively engage 230 first year journalism students. Scenarios, models, and case studies offer useful methods for generating, identifying, designing and describing academic innovation. However, their use in educational development can ignore the complexity and dynamic qualities of living, active pedagogy. This became evident when the recorded voice was used extensively in a blended learning environment. The experience demonstrated how audio enables an academic to respond creatively to the emerging module requirements and opportunities. Audio became a supportive, integral, and above all, mediating feature in promoting academic dialogue in the physical, virtual and cognitive domains of the module.

During the module audio was used to: orientate learners; establish principles and illustrate concepts; make announcements; mediate, capture and cross pollinate student discussion; challenge and provoke learners; summarise lectures; share experience through external voices; deliver feedback; and support reflection. Student groups were also required to generate contributions to a podcast 'gallery'. 28 podcast episodes were produced by the module team, and 37 by the student groups. 37 pieces of audio and screencast feedback, 14 audio illustrations for lectures and 5 other online resources were also made available. The publication frequency, duration and purpose of podcast episodes were irregular, contrasting with discussion of educational podcasting in the literature (e.g Salmon & Edirisingha 2008, p.165).

Evaluation is in progress, but initial indications from a survey, student focus groups, and evidence in student's reflective reports, suggest that the pervasive use of asynchronous learning voices has been valued highly, with audio having been accessed directly through the Virtual Learning Environment.

Digital audio is a simple, flexible technology for academic and student producers; useful therefore as a pervasive, provocative and responsive medium, available to address the needs and opportunities of a module as it progresses. Above all, it offers a sense of sustained academic presence, enriching learner experience, whenever and wherever students engage. Our initial understandings of educational podcasting should be developed towards recognising its future, sustained role as a versatile tool with which to enrich our ever changing local learning contexts.

Salmon, G. and Edirisingha, P. (2008) *Podcasting for Learning in Universities.* Open University Press

2

Tue
12.00

0268

MoSAIC: Models for Synchronous Audiographic Interactive Conferencing. Lightweight guides to enhance the portfolio of teaching methods with real-time technologies

The MoSAIC project focuses on synchronous audiographic web conferencing (SAC) as a real-time, multimodal and media-rich teaching tool and communication platform. The project aims to develop a set of research-informed pedagogic templates for the use of this tool in a variety of contexts, including but not limited to distance education. Based on a comprehensive review of existing pedagogic models, the project uses an explorative approach with action-research elements to link pedagogic theory with actual practice by providing succinct, purpose-oriented lightweight guidelines to using a tool that is relatively unknown to the majority of educators.

The development of the pedagogic templates draws on recent work in learning design and pedagogic planning (Masterman, 2008; San Diego et al., 2008) as well as pedagogic theories and models, which have been reviewed for their suitability in this particular context (de Freitas & Neumann, 2009). These theories were linked with session observations and lecturer interviews, supplemented by student surveys to capture the learner experience. The amalgamation of theory and practitioner accounts are used to develop guidelines for helping individuals introduce innovation into their teaching.

Early outputs of this project include a review of current SAC use at the University of London and a review of pedagogic theories and their practical suitability for using SAC technology in educational settings. Interviews showed that the practical application of these theories is challenging, which led to the development of a structured document that aims to equip lecturers with a guide to alert them to pedagogical issues and solutions to selected scenarios derived from observation. The guides are reviewed by an international panel.

The use of SAC is generally highly appreciated by students. Lecturers are, although they see the value of the tool, hesitant because it presents some cognitive challenges, requires technical skills and demands a reflection and a re-think of their pedagogic approach. The templates as the final output of this project aim to ease the engagement with this tool and thus help lecturers explore and enhance their portfolio of teaching methods.

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Author

Mr Tim Neumann
» London Knowledge Lab, Institute of Education

2

Tue
12.00

More staff skills

Long Paper

Authors

Mr David Kay
Mrs Barbara Tabbiner
Mr Bob McGonigle
Mr Walter Patterson
» Sero Consulting

0291

Next generation user skills: possibilities for the digital literacies required in everyday living, learning and working in the United Kingdom in 2013

The world is awash with statistics on the impact of the web on 21st century living, learning and working. They are accompanied by the pronouncements and predictions of experts from every camp, from those heralding a new brave new world of co-creation and choice, to warnings from the dark side in terms of ethics and educational standards, tempered by increasing recognition that 'we' may no longer be in control of such matters.

Meanwhile, surveys report that around 80% of businesses have invested in IT and 60% have websites. Whilst the extent and value of adoption differs significantly across businesses and sectors, the foundations for new ways of working and doing business are broadly in place, with older and static businesses typifying the laggards. It would not be unsafe to project that, by 2013, even more people will be required to use ICT in the workplace and in their everyday lives, increasingly involving online communication and web-based applications.

This represents a scenario to which those responsible for developing curricula and awards must respond – in the primary and secondary phases, vocational and applied learning, work based and adult community provision and higher education.

To ensure the relevance of and to influence the ongoing enhancement of user ICT provision and the associated awards, Digital 2020 and the Scottish Qualifications Authority jointly commissioned Sero Consulting to develop a vision for ICT user skills in 2013 — 'Next Generation User Skills' — taking account of:

- Skills that all employers will need, which they may not currently recognise.
- Skills that people (especially young people) will already have, but which may not be accredited.
- Essential skills for living and learning in a digital age.

This paper is drawn from the resulting public report, 'Next Generation User Skills — Working, Learning & Living Online in 2013' (September 2008), which provides:

- An overview of the current ICT user skills landscape.
- A model representing digital activities and competencies that might constitute the 'Next Generation User Skillscape'.
- A mapping of that activity space onto tools and awards, with a gap analysis identifying weaknesses in provision.
- An overview of the recommendations to the report sponsors.

E-teacher training

Short Paper

Authors
Dr Jessie Paterson
Dr Sara Parvis
Mr Jason Wardley
» University of Edinburgh

0052

Widening peer mentoring among postgraduate tutors using a wiki environment

Studies have found that peer mentoring and social networking are highly effective forms of support[1] with our postgraduate tutors reporting that informal sharing of resources, techniques and experience with fellow tutors is among the most effective teaching support they receive. However, such support can be sporadic and hard to come by.

This project, running over two semesters, sought to test whether collaborative social networking techniques might provide an effective means of filling this gap and also provide a repository of materials for the future. Experienced tutors from eight, first-year undergraduate courses in four subject areas were asked to share resources and/or advice on each week's tutorial topic, using a wiki. Following each tutorial, new tutors were asked to reflect on their teaching experience and post any feedback and further questions, resources or advice. Four subject pages, along with general discussion pages, were provided with a scaffold[2] to offer a start in framing content, although they were free to add or edit these. Course managers and other teaching staff had no access to the wiki, with the tutors encouraged to see it as their "space". As well as analysing the actual content written on the wiki, focus group discussions and questionnaires are being used to evaluate the project.

Early findings from the first semester (four courses) include

- Each group used the wiki differently.
- Level of engagement varied considerably: some tutors embraced the objectives; others were more reticent.
- Whilst most collaborated within their own course, there was little cross-discipline sharing of materials.
- Some had reservations about using a wiki in this structured way having found the time commitment too demanding within their existing schedule of research, marking and teaching.

Conclusions to date suggest that while the wiki clearly provided a cost-effective peer learning/mentoring environment, the engagement of the various students differed considerably. Some groups did not require an online environment, preferring a face-to-face approach, while others did not feel collaboration was advantageous to their tutoring. Might this change as the wiki becomes established within a peer-assisted learning culture?

[1] **Millis, B.J.** (1994) *'Forging the Ties that Bind: Peer Mentoring Part-Time Faculty',* in New Directions for Teaching and Learning 57, 73–80; 'New Faculty who find strong social networks have better chances of survival and success'

[2] **Boice, R.** (1992) '*Lessons Learned about Mentoring'*, NDTL 50, 51–61 at p. 60.2. Flemming Faunch has noted the value of scaffolds, particularly to novice users. Available from www.wikipatterns.com/display/wikipatterns/Scaffold [accessed on December 10th 2008]

Authors

Mrs Grete Oline Hole
Mrs Anne Karin Larsen
Mr Jon Hoem
Mr Xavier Bonete
» Bergen University College

0262

E-teacher training: didactical principles for developing e-teacher competences

This session gives an overview of how experiences from many years of international online courses for European BA have been utilised in developing a blended e-pedagogy course for higher education teachers. The course is developed by the Virtual Classroom for social work in Europe (VIRCLASS) Project with grants from Norway Opening Universities.

Influenced by the situated learning perspective (Lave & Wenger 1991), student-centred teaching and learning methods are used. Inspired by the Community of Inquiry (Garrison & Anderson 2003) we aim to promote the importance of cognitive, teaching and social presence in the Virtual Learning Environment, and that students plan their own courses in accordance with the stages in becoming an e-learner (Salmon 2004).

Using the ecological "Model of Relations between Didactical Categories" (Nordkvelle 2004) as framework, the e-pedagogy course is customised to be "hands-on" learning experiences promoting the desired e-teacher competences. Attention is given to the importance of:

- Aims for the course (intended as well as unplanned)
- Course Contents
- Teaching/Learning Methods
- External Conditions
- Participants' Knowledge,
- How assessment takes place

Decisions taken for each category are crucial for the participants' learning trajectories, and they must be seen in relation to each other. Content, assessment and methods are heavily intertwined; and choices made for one will influence the others.

During the 10 ECTS-credits course students are engaged in interactions, discussions and cooperation through use of different ICT collaborations tools. Tasks are designed to ensure co-operation. Tailor-made screen lectures are developed after the evaluation of the pilot. Transparency ensures that the learning processes, as teachers' and peers' remarks upon assignments, are open for everyone to learn from. Using portfolio assessment, all tasks performed during the course are stored in the e-portfolio and can be further developed. The final assignment is to sketch a course and demonstrate content for its start, middle and end, reflection of didactical considerations taken and their own learning process.

Evaluations by students have demonstrated that this carefully designed hands-on training course ensures that the students get the necessary competences needed to be efficient e-teachers.

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Nordkvelle, Y. (2004) *Technology and didactics: historical mediations of a relation.* Journal of Curriculum Studies, Volume 36, Issue 4 July 2004, pages 427–444

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Technology enhanced feed-forward

0207

Audio and screen visual feedback to support student learning

Feedback has been highlighted as the most powerful influence on student achievement, but students are often less satisfied with feedback than with other aspects of the student experience. It is hence important that ways of offering feedback are found that are useful both for improving learning and for gaining student satisfaction. This ongoing study was designed to explore and to improve feedback in a variety of differing contexts, two of which are reported here: i) audio feedback on a first year undergraduate written assignment in Geography (product-oriented feedback); and ii) video feedback from ongoing laboratory sessions with first-year Biosciences students (process-orie nted feedback). These contexts have been selected as offering different ways of working and for highlighting a number of issues and areas for further development. Student and staff views have been gained via surveys, focus groups, individual interviews and 'stimulated recall' sessions. Findings suggest that students have high expectations in relation to feedback; many anticipate the kinds of individual face-to-face interaction they experienced in school and are not easily satisfied by other ways of working. In addition, offering audio or video feedback that is supportive to learning in both affective and cognitive terms is not necessarily easy. In the context of written assignments there is still much to be learned about appropriateness of length, tone, the register of language, the balance between praise and criticism, and the best contexts and timing for audio feedback. In the context of large classes for laboratory sessions, further research is needed on how lecturers and demonstrators can give ongoing feedback that is useful when captured for replay in video form, and also about how effective video taken in class might be then used for training purposes in order to enable student demonstrators to be more effective and knowledgeable when offering feedback to students.

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Enhancing student experiences

0065

Creating e-assessment dialogues: where are we now and where should we be?

Over the last ten years, learning and teaching in higher education has benefited from advances in social constructivist and situated learning research (Laurillard, 1993). In contrast, assessment has remained largely transmission orientated in both conception and practice (see Knight & Yorke, 2003). This paper examines a number of recent developments, which exhibit innovation in electronic assessment developed at the UK's Open University. This paper argues for the development of new forms of e-assessment that can promote dialogues for learning where the main driver is that of sound pedagogy rather than state of the art technological know-how and where open source products can move the field forward.

There is a recognition that e-assessment accompanied by an appropriate feedback to the student is beneficial for learning (DiBattista et al, 2004; Pitcher et al, 2002). In order to rise to the challenge of students expecting better and quicker feedback, we have built a suite of e-assessments that include feedback to promote dialogue. These aim to reduce the emotional level of feedback in order to allow logical appraisal of advice and which also can provide students with reassurance to take action. Open Comment is one of these systems, built for distance learning students working alone. Other tools such as BuddySpace, BuddyFinder with a SimLink combination have been developed to assist students to work collaboratively, yet remotely, in order to make predictions. Using science simulations, which were embedded in a series of formative assessment tasks.

An analysis of the salient features for all these systems, that can promote a dialogue for learning, revealed that dialogue foregrounds the importance of responsive and flexible approaches to teaching and learning. It involves an active process of interpretation and contingent response, where co-constructed meaning can emerge.

Embracing constructivism and developing new types of e-assessment tools can help us to make individual learning work where there is continued pressure on staff resources. Promoting learning dialogues can provide a vision for designing pedagogical practices in more interactive and participatory ways and open source development offers a new way forward but there is still much work to be done.

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Short Paper

Author

Dr Denise Whitelock
» The Open University

Short Paper

Author

Dr Anne Hewling
» The Open University

0245

Harnessing technology to improve workplace information skills: balancing agendas and expectations

The concept of work-based learning (WBL) — set in opposition to formal classroom interventions — is well established, as is the idea that it provides learning that is relevant to the working environment and is thus of immediate practical use to learners. Government initiatives to raise overall levels of educational attainment during and after formal education, the agenda of employer engagement in lifelong learning, and the development of workplace based foundation degrees underpin and endorse WBL initiatives.

Technology can further enhance this learning by removing barriers of geography and resources and by allowing delivery just in time at the employee's own workstation. Using online delivery of small-scale highly focused learning activities to provide targeted skills development the Information and Knowledge at Work Project (iKnow) aims to empower staff by enhancing their employment-focused information skills. In the broader context the project is a contribution to reducing the losses in productivity in the UK economy reportedly attributable to poor employee information skills (De Saulles, 2007). This will be affected by improving employees' general workplace efficiency, increasing productivity and enhancing their wider employability. iKnow learning activities have been well received in workplace testing. However, individual users also highlighted a number of tensions that need attention to deal with the differences in expectations amongst potential beneficiaries.

These have wider currency for WBL too. In particular, whose skills agenda is it: the manager who wants an assistant to learn how to manage email, or the assistant who believes they are already doing that and wants to learn mind mapping? Should access to this learning be determined by the employee or the employer, should it be dependent on commitment to a foundation degree or completely open access? And, if the latter, should there be formal recognition of achievement? What form should recognition take? Who should balance the employee / company interest account?

This presentation will look at how the iKnow project has addressed these tensions locally in terms of activity design and content, and the potential they may have for success in WBL more widely.

De Saulles, M. (2007) *Information literacy amongst UK SMEs: an information policy gap.* Aslib Proceedings 59, no. 1: 68–79

0261

Developing a transferable learning framework for the use of digital video archives in tertiary education

This paper reports progress around a JISC funded project developing a pedagogical and conceptual framework, along with exemplars, to encourage the adoption of the ITN NewsFilm Online archive (www.nfo.ac.uk) amongst tertiary level academics and teachers in the UK.

The Digital Artefacts for Learner Engagement framework (DiAL-e) is the outcome of this work. It consists of an online matrix featuring teaching and learning spaces, referenced against ten separate learning designs based on the use of digital video clips to engage students. The framework was developed using a socio-cultural perspective on learning with emphasis placed on different varieties of constructivism. The paper itself focuses on the initial user responses to the framework and the ways in which users constructed personal meaning after working with it.

The initial literature review suggested a significant gap in empirical studies around the effective use of digital video in tertiary education, (Young and Arsensio 2002). The framework was developed iteratively using feedback gathered from focus groups and workshops. These were run across the UK and in many international venues. Users participated from various subject disciplines and areas including both further and higher education. Participation included practical and conceptual engagement with the framework and the exemplars.

Approximately 150 users participated. Feedback sessions from each of these events were recorded and subsequently transcribed for closer analysis. The data was analysed using conversational analysis to identify themes and patterns based around user perception of the framework. Initial responses indicate a positive attitude and engagement with the principles designed into the framework. Data also suggests that users need to make a considerable mindset shift in order to engage with digital video most effectively. The model has the potential to assist in the take up of many similar digital collections that are currently beginning to emerge in the tertiary sector. The paper will start to explore the feedback generated from users in these workshops in order to test the validity of the framework as a tool for the design and planning of engaging learning experiences using digital video resources.

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Short Paper

Authors

Dr Kieron Sheehy
Dr Roger Jones,
Mr Paul Herring
» The Open University

0263

Investigating a 'virtual tutor' approach for improving the communication skills of children with autism

Autism is a neuro-developmental disorder estimated to affect 1 in 100 children in the United Kingdom (NAS, 2008). Children with autism have specific difficulties developing verbal and non-verbal communication. A diagnosis of autism is typically given at around three to four years of age. Research suggests that interventions using, for example, a symbol-based form of communication as in the Picture Exchange Communication System (PECS), is most effective when undertaken as early as practical, but this requires the extensive use of limited specialist resources and the training of parents and carers.

Interventions using Computer Assisted Learning (CAL) have shown considerable promise in promoting the development of communication skills for children with autism (Santiois and Powell-Smith, 2008). Being able to present key tasks with consistency and without tutor fatigue (Cromby, 1996) has been shown as beneficial for teaching children with autism. Combining theses features with a tangible interface has been indicated as a promising avenue for those children with autism who have more severe learning difficulties (Sitdhisanguan, 2008). The use of CAL in this way might address the problem of accessing currently limited specialist resources. In particular the use of a virtual tutor has been noted as having potential in this context (Sheridan and Raffield, 2008).

To understand how effectively a CAL based PECS system could support and promote symbol-based communication, and support the generalisation of skills necessary for symbol-based communication, our study has adopted a virtual tutor led teaching system that exploits Radio Frequency Identification (RFID) enabled tokens, similar in look and feel to those used in traditional PECS user-system interactions. The study will include a consideration of the characteristics of the virtual tutor which best facilitate learning.

This paper will look at how a computer-based 'virtual tutor' can be developed to teach early communication skills to young children with autism, who have limited or no speech. The paper will outline the features of this approach, which is currently being developed, and the rationale underpinning this new way of working with non-verbal children with autism.

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The VLE is dead

0286
The Virtual Learning Environment (VLE) is dead

The future success of e-learning depends on appropriate selection of tools and services. This symposium will propose that the Virtual Learning Environment (VLE) as an institutional tool is dead, no more, defunct, expired.

The first panel member will argue that many VLEs are not fit for purpose, and masquerade as solutions for the management of online learning. Some are little more than glorified e-mail systems. They will argue that VLEs provide a negative experience for learners. The second member of the panel believes that the VLE is dead and that the Personal Learning Environment (PLE) is the solution to the needs of diverse learners. PLEs provide opportunities for learners, offering users the ability to develop their own spaces in which to reflect on their learning. The third panel member however, believes that the VLE is not yet dead as a concept, but can be the starting point of a journey for many learners. Creating an online environment involving multiple tools that provides for an enhanced experience for learners can involve a VLE as a hub or centre. The fourth panel member argues for the concept of the institutional VLE as essentially sound. VLEs provide a stable, reliable, self-contained and safe environment in which all teaching and learning activities can be conducted. It provides the best environment for the variety of learners within institutions.

The symposium will begin with an opportunity for attendees to voice their opinions on the future of the VLE. Each member of the panel will then present their case. The panel, with contributions from the audience, will then debate the key issues that have arisen.

By the end of the debate, participants will be able to have a greater understanding of the evolution and possible extinction of the VLE and the impact on learners. A summary of the key points of the discussion will be syndicated on several blogs and other online spaces, and delegates will be encouraged to tweet and live blog the discussion as it happens in real time.

Symposium

Authors

Mr James Clay
» Gloucestershire College

Mr Steve Wheeler
» The University of Plymouth

Mr Graham Attwell
» Pontydysgu

2

Tue
13.40

Turn on, tune in and listen to this

Workshop

Authors

Mr Will Stewart
Dr Chris Dearnley
Dr Claire Surr
» University of Bradford

Mrs Mary Simpson
» University of Hertfordshire

0244

Turn on, tune in and listen to this: engaging learners through audio supported pedagogy

Over the past five years audio has seen something of a resurgence within the higher education sector (Salmon and Nie, 2008). While the use of audio to support learning is not new (Bates, 1981), the widespread ownership of MP3 players and the increasing adoption of Web 2.0 technologies and social networking spaces by students, suggests that audio as a powerful educational tool has come of age, providing exciting opportunities to meet the individual needs of an increasingly diverse range of learners in a cost-effective way.

The JISC-funded Audio Supported Enhanced Learning (ASEL) Project (www.aselactive.com) used action research methodology to examine the use of audio in four key areas of higher education practice, namely: self-reflection, formative and summative feedback, assessment, and collaborative learning. Its findings indicated that the creative use of audio in each of these areas facilitated a more personalised learning experience leading to increased student motivation and engagement, and a redesign of the curriculum in terms of pedagogy and assessment. Six subject disciplines were involved (law, accountancy, computing, health, optometry and business), providing examples of how learners engaged with audio from across a diverse range of subjects, and developing strategies for its effective and innovative use.

This workshop explores ways in which audio can be used to engage learners and bring about changes in practice that will have a significant positive impact on curriculum design, assessment and pedagogy. Working in small groups, participants will listen to an example of audio feedback and compare this to written feedback given by the same lecturer. They will be asked to compare both types of feedback in terms of content, style and likely impact on student learning, and to reflect on the experience of giving and receiving audio feedback from the lecturer and student perspective. Each group will then go on to consider how audio could be used in their own practice in terms of self reflection, formative and summative assessment, and collaborative learning. Feedback from each of these groups will inform a wider discussion on the effectiveness of audio to support teaching and learning in higher education.

Bates, A.W. (1981) *Radio: the forgotten medium? Studies in the use of radio programming and audiocassettes in Open University courses.* Papers on Broadcasting, No. 185. Milton Keynes: Institute of Educational Technology

Salmon, G. and Nie, M. (2008) *Doubling the life of iPods,* in G. Salmon and P. Edirisingha (eds) Podcasting for Learning in Universities. Maidenhead: Open University Press

VLEs and design

0132

We had a dream of replacing our VLE, now begins the responsibility of using these tools to enhance the teaching, learning and assessment experience

This short paper reports on an action research study and still a work in progress, involving replacing an in-house bespoke Virtual Learning Environment (VLE) with an open source VLE. The original VLE was implemented in 1999, and upgraded in 2005. However, there was a feeling of dissatisfaction with the in-house VLE resulting in increasing pressure to replace it with something more current. An evaluation focussed upon these options: enhancing the effectiveness of our VLE, developing the existing system, procuring a proprietary system or implementing an open source VLE. The result was a proposal to replace the existing VLE with the open source VLE 'Moodle'.

The project was accountable to a board representing academic schools and support departments, and implemented by cross-departmental teams of e-learning, IT and student administration staff. The consultation process throughout the university ascertained user requirements for functionality, training and content migration. The method of qualitative data gathering used questionnaires, discussions and focus groups. The questionnaires focussed upon current VLE users. There was also a functional comparison of existing VLEs.

Plans and procedures were implemented ensuring a smooth transition to the new VLE. This included providing training, ensuring appropriate functionality and integration with our IT infrastructure for student records and login procedures.

The Project worked! The official university adoption and implementation of Moodle was in September 2008. Moodle is now seamlessly integrated and used daily throughout our University. A student evaluation of the VLE via online questionnaires is being conducted (with plans for a staff evaluation in the near future).

The dream was to have a more modern VLE, this dream became a reality. The staff received the requested e-learning tools with the latest functionality embedded into the VLE. We continue to provide training and support to enhance the teaching, learning and assessment. The next step is staff responsibility to effectively implement the tools to enhance teaching practices. Moodle adoption has been very successful although there were quite a few lessons learned from the whole process. One important lesson learned is the need for regular communication and the efficient flow of information.

Beckton, J. (2009) *Lumping and Splitting. Rolling out a new VLE at the University of Lincoln*. Durham: Durham University. Available from eprints.lincoln.ac.uk/1756 [accessed on May 12th 2009]

Britain, S. and Liber, O. (2004) *A Framework for the Pedagogical Evaluation of Virtual Learning Environments*. Bolton: JISC. Available from www.jisc.ac.uk/uploaded_documents/ VLE%20Full%20Report%2006.doc [accessed on May 14th 2009]

Konrad, J. (2003) *Review of education research on virtual learning environment s [VLE]—implications for the improvement of teaching and learning and access to formal learning in Europe*. Education-Line. Leeds: Leeds University. Available from www.leeds.ac.uk/educol/ documents/00003192.htm [accessed on May 12th 2009]

Stiles, M. *Paper 05: Pedagogy and Virtual Learning Environment (VLE) Evaluation and Selection*. JISC MLE Information Pack. Joint Information Systems Committee (JISC). Available from www.jisc.ac.uk/uploaded_documents/bp5.pdf [accessed on May 12th 2009]

Short Paper

Authors

Ms Catherine Ogilvie
Ms Jacqui Nicol
Ms Emma Kennedy
» The Robert Gordon University

Authors

Dr Carmel F. de Nahlik
Dr John G. Beech
» Coventry University

0169

When Harry met Sally: can a "bricolage" approach integrate with a systems-informed modular design?

This paper addresses several of the challenges for ALT-C 2009. Systems thinking (Espejo 1997; Checkland and Hollowell 1998) offers a structured approach to debate situations and optimisation or reconfiguration routes in order to improve process outputs, including resolving complex "messy" problems owned by multiple stakeholders within political contexts. Biological systems conceptualise complex adaptive systems as having tension between purposeful design and "bricolage" or piecemeal construction (Wilkins 2007). Analogously, Hamilton et al. (2004) suggest a "theory bricolage", in online distance education.

We consider programme design in the UK higher education sector has a systems-thinking dominant logic, in which the modular approach conceptualises modules as made up of a number of information clusters that may be reconfigured and re-used on other modules, i.e. "content bricolage".

Coventry University needed some e-learning material to support the new research degree framework. Students may be offsite for part of their study and this material would support revisiting difficult "threshold concepts" in research methods and enhance opportunities for deeper and recursive learning during the research degree. The redevelopment of this content also offered the chance to test a "bricolage" approach and examine success, challenges and obstacles. The research design is a single case study exploring the change processes from a combined participant observation and action research perspective, theorised as a more formal change model (Balogun and Hope-Hailey 2003).

This JISC funded project has finished, though it will continue to be updated and the further re-use of project-generated content repackaged as smaller learning objects. Beta-version content is in use but further institutional changes will continue to affect the process. We have evaluated process and content using internal reflection and positive stakeholder feedback.

This paper will discuss process challenges and offer advice to others contemplating internal and external content re-purposing for module development, i.e. the practical issues arising from the intersection of a systems approach with a "bricolage" design in re-purposing content. Using a change model congruent with the research design, it looks at the changing roles and power of stakeholders over time and softer issues in reconciling different perspectives.

Balogun, J. and Hope-Hailey, V. (2003) *Exploring Strategic Change.* 2nd ed., London Financial Times / Prentice Hall

Checkland, P.B. and Hollowell, S. (1998) *Information, Systems and Information Systems.* Chichester: Wiley

Espejo, R. (1997) *Aspects of cohesion, citizenship and performance in recursive organisations.* Inaugural Professorial Lecture, School of Management, University of Lincolnshire and Humberside

Hamilton, D. Dahlgren, E. Hult, A. Roos, B. and Söderström, T. (2004) *When performance is the product: Problems in the analysis of on-line distance education.* British Educational Research Journal 30, no.6: 841–854.Wilkins, A.S. 2007 Between "design" and "bricolage": Genetic networks, levels of selection, and adaptive evolution". Proceedings of the National Academy of Sciences 104, Suppl. no1: 8590–8596

0279

Pedagogy meets ontologies: knowledge representation for creative learning design

Creating learning designs to meet learning objectives on either a daily or longer term basis is both a creative and structured process. The structured part is seen in many common classifications used to outline and define the learning design products. Good examples of these classifications are seen in tools such as Phoebe[3] and LAMS[4]. In the early stages of the creative process the designers may think in ways that might not map easily to the many defined learning design structures. The designer may recognise some of the properties proposed by a particular structure but because of the essentially creative problem solving process of generating a learning design, may feel resistance due to "cognitive overload"[1]. This happens when a person has too many new concepts to think about at the same time.

To reduce "cognitive overload" we are taking a user-centred perspective in building a learning design environment. We employ a knowledge elicitation approach to identify the domain concepts for learning design from experts in the learning sciences field and practitioners. This provides an understanding of the appropriate use of the concepts and theory. We use this knowledge to create an ontological model about learning design and represent the relationships between the different concepts. Another layer operates on top of the ontology to enable the users' "concept" perspective and 'negotiates' alignment with the learning design environment[5]. This is achieved by enabling an overlay of the core ontology with a pedagogy thesaurus. The thesaurus is created by taking the user preferred concepts and their preferred mapping to the learning design ontology.

In our presentation we will present the underlying set of ontologies[2] and show the design of the pedagogy thesaurus from a user-centred approach. While the learning sciences experts and practitioners provide deep insights into the learning design domain, computing and particularly knowledge engineering approaches provide formal representations, reasoning mechanisms and data structures that enable those insights to be captured in a precise and computationally executable form. The initial results enabling this interdisciplinary synthesis by designing from both a learning design perspective and knowledge representation will be provided.

[1] **Chandler, P. and Sweller, J.** (1991) *Cognitive Load Theory and the Format of Instruction.* Cognition & Instruction, 8(4), 293–240

[2] **Noy, N.F. and McGuinness, D.L.** *Ontology Development 101: A Guide to creating your first ontology.* Available from www-ksl.stanford.edu/people/dlm/papers/ontology-tutorial-noy-mcguinness.pdf

[3] **Phoebe** phoebe-project.conted.ox.ac.uk

[4] **LAMS** www.lamsinternational.com/about

[5] **Branigan, H. Pickering, M. Pearson, J. McLean, J. and Nass, C.** (2003) *Syntactic alignment between computers and people: the role of belief about mental states.* In Proceedings of the Twenty-fifth Annual Conference of the Cognitive Science Society

Short Paper

Authors

Dr Patricia Charlton
Dr George Magoulas
» Birkbeck College

Prof Diana Laurillard
» Institute of Education

2

Tue
13.40

Section two: Abstracts | VLEs and design

Short Paper

Authors

Dr Susannah Quinsee
Ms Anise Bullimore
» City University London

0306

From Virtual Learning Environment (VLE) to strategic learning environment: evaluating an institutional VLE to meet new strategic priorities

Most UK universities have invested substantially in developing Virtual Learning Environments (VLEs) over the past five to ten years. However, the rather monolithic nature of VLEs, new Web 2.0 technologies and supplier changes, have made many institutions revisit this investment and question whether they really need a VLE. As Mark Stiles (2007) has identified, VLEs often fail to inspire staff to engage in more innovative learning and teaching techniques. At City University London we have a new learning and teaching strategy including a review of our undergraduate education provision (determined by our recent University strategy). These strategic drivers have led us to ask the question "do we need a VLE?" to kickstart an evaluation process of our VLE with a view to taking a more strategic approach to technology enhanced learning. Over the past five years we have had considerable success in rolling out our VLE across the university and most staff now accept that "CitySpace" is a core part of all teaching activities. However, the system is not particularly well liked, perceptions that it is "clunky" and unresponsive are rife.

Therefore, in September 2008 we started a six-month evaluation process with staff and students with a view to issuing a competitive tender for a new strategic learning environment. The emphasis on the strategic as opposed to virtual was in recognition that we saw the tools of a VLE as core to our University business but as one piece in a jigsaw of solutions, all wrapped up in our new institutional portal. We also stressed the need to work with any supplier as a partner to meet our development needs.

This paper outlines the process we have taken and our lessons learnt — from creating our strategic vision, to engaging staff and learners across the institution, to identification of our requirements and how we have tackled change management. We did not utilise a particular evaluation methodology as we wanted to ensure we remained responsive to our users. Of particular interest will be the approach that we have taken to the tendering process where we have utilised the competitive dialogue process.

Stiles, M. (2007) *Death of the VLE?: a challenge to a neworthodoxy.* Serials 20(1)

Collaborative learning in a free world

0220
Enabling collaborative student learning in a free (Cyber) world

Web 2.0 redefines the way people communicate and connect (Attwell, 2007, Wesch, 2009). At the University of Salford, we are taking on this (r)evolution, adding computer mediated communication for study skills support, meeting the needs of our international students, especially when their not physically present on campus. This workshop examines the tools currently available, looks at bridging divisions between open and proprietary, public and private, offering an interactive opportunity to discuss and test this accessible technology for students.

The workshop is based on a joint project between the Learning Technology Centre, the Research and Graduate College, and Study Skills in Student Life examining the learning needs of international students, especially group work and problem based learning; activities that are often unfamiliar. We regard learning as a process of discovery with students as generators of knowledge. We will facilitate a hands-on session with ample opportunity to test collaborative Web 2.0 tools.

Blogs, podcasts, videos, photosharing, social bookmarking, communal and collaborative spaces, shared chatrooms and easy webpage editors are all possibilities available on the web to students (Abram, 2006), representing an important part learners' formal and informal realities in a global context (Cross, 2007). Software and Web 2.0 advances represent a paradigmatic conceptual shift; traditional Virtual Learning Environments foster traditional, teacher-dominated pedagogic practices, new technologies enable learners to take ownership of their own learning. Participants in this workshop will test the usability of the technology, and evaluate how it applies to their own students' circumstances. We will model good innovative practice by demonstrating how to facilitate a conversation around the pedagogical and collaborative side of Web 2.0 tools.

Participants can share their experiences, ideas and questions, illustrating theory into practice through an active voice in the analysis of new technologies for learning. Highly interactive, according with a general shift in higher education away from a traditional, lecture-oriented "instructional paradigm" to a new "learning paradigm", we offer a workshop on student learning and collaboration needs, anticipating a lively debate on the advantages and disadvantages of the technology and implications for independent and autonomous student learning that is appropriately mentored and supported.

Abram, S. (2006) *Web 2.0, Library 2.0 and Librarian 2.0: preparing for the 2.0 world*

Attwell, G. (2007) *Personal Learning Environments — the future of eLearning?* 1. Vol 2, N° 1 January 2007

Cross, J. (2007) *Informal Learning, Rediscovering the Natural Pathways That Inspire Innovation and Performance.* Pfeiffer

Workshop

Authors

Dr Ela Beaumont
Ms Cristina Mendes da Costa
» University of Salford

Semantic technologies in education

Workshop

Authors

Dr Su White
Dr Thanassis Tiropanis
Dr Hugh Davis
» University of Southampton

Ms Sheila MacNeill
» University of Strathclyde

0255

Semantic technologies in education: exploring the practitioners' perspective

This workshop will collect and share insights into current understandings and future applications of semantic technologies in education.

This workshop will:

- augment the findings of a recent JISC survey on semantic technologies in education;
- calibrate the findings against the experience and understandings of members of the ALT community;
- use feedback to further develop the survey's technology roadmap.

JISC commissioned an investigation into semantic technologies in learning and teaching (SemTech) due for completion early in 2009. The SemTech Project website summarises information about semantic technologies in education and contains an analysis of the technologies and applications thus far identified. Following a brief overview of our investigation of semantic technologies in education the workshop will consist of structured group discussions from a selected perspective (educational, technical and organisational). The workshop structure will be fine-tuned to match the participants, who will work in groups of eight using flip charts to produce a poster for a two-minute poster pitch. A second peer review group activity will comment on each poster. A plenary session will identify next steps. Each participant in the workshop will receive a copy of the SemTech report, plus detailed activity guidance notes which they can also take away and use in their own institution.

Participants will use the workshop to:

1. establish a base level of awareness of current developments in semantic technologies and the way in which they can be used in education;
2. establish a basic understanding of current range and use of semantic technologies in education, as identified by the SemTech study;
3. Identify and share knowledge of semantic technologies in UK education;
4. comment on and add to findings in the JISC report on Semantic Technologies in Education;
5. Identify colleagues at other institutions who share their interest in semantic technologies in education;
6. Discuss and agree future collaborations to further their interest in semantic technologies in education.

A summary record of the discussion will be available for participants after the event, and will be subsequently published electronically, via the SemTech wiki and a workshop blog-post

jisc.ac.uk/whatwedo/projects/semantictechnologies.aspx
www.semtech.ecs.soton.ac.uk/overview/index.php

Curriculum redesign

0061

Representing and supporting curriculum design at task, module and programme levels

Recent years have seen a real interest in the challenge of how to support effective learning design. A useful overview of current learning design activities and associated tools and resources is provided by Lockyer et al. (2008), Beetham and Sharpe (2007), and McAndrew, Goodyear and Dalziel (2006). Yet, despite the growing number of learning design tools such as the Learning Activity Management System (LAMS), the Pheobe Pedagogic Planner (phoebe-project.conted.oc.uk), the London Pedagogy Planner (wle.org.uk/d4l) and DialogPLUS (dialogplus.soton.ac.uk), repositories of case studies and exemplars, and standards and specifications, evidence of widespread uptake and adoption remains scattered and inconclusive. Indeed, as Falconer and Littlejohn (2007) note, to date few representations have succeeded in capturing the essence of a good piece of teaching and there remains a need to find representational forms which show design as dynamic processes, rather than static products.

This innovative, interactive symposium is hosted by three projects funded under the JISC Institutional Approaches to Curriculum Design Programme. This programme seeks to develop enhanced processes to improve the learner experience at multiple levels across the institution, from individual tasks within a module, to the whole programme of study. This work builds on previous curriculum design initiatives but seeks to transcend some of the limitations of previous work to develop processes and activities that will have a recognisably transformative effect on institutions.

This symposium will explore the types of curriculum design representations that offer the most value to academics, support staff and students and examine the variety of purposes that curriculum design representations might serve in improving curriculum design activities in different institutional contexts.

Key session questions include:

- How might representations best support curriculum design processes?
- How might representations improve institutional support, administration and quality processes and make effective use of technology?
- How might students interact with curriculum design processes and their representation?
- How would you assess the value of different representational formats of curriculum design processes?
- Should representations differ according to their different pedagogical or institutional purposes? Do different groups of staff or students need different representations?
- What kind of mediation might best help professionals derive value from representations?

The symposium will:

- Give participants an overview of the work of the three projects
- Stimulate dialogue about curriculum design representations
- Consider the challenges of developing representations that have real utility for different institutional groups including students
- Enable participants to consider how this work can be transferred to their context

The symposium is designed as a round robin, using an 'interactive poster

Symposium

Authors

Prof David Nicol
Ms Catherine Owen
Ms Diane McDonald
» University of Strathclyde

Dr Alan Masson
» University of Ulster

Prof Grainne Conole
Mr Simon Cross
» The Open University

Prof Peter Bullen
» University of Hertfordshire

approach'. Three posters — one from each project, introduce key concepts and initial approaches and provide space for participants to add their own questions, issues and summaries of elements of the design process that are important to them. In the first part of the session, delegates walk round the posters, engaging with each poster in turn. Delegates can add post-it notes on each poster — asking for points of clarification on the research presented, reflections on the work or perhaps indications of related work they are doing. In the first parallel session, delegates choose one poster to go back to and have a more in-depth conversation with the authors. In the second parallel session, they can choose a second poster to go and discuss in more depth. A final plenary will summarise some of the key discussion points that have arisen.

Beetham, H. and Sharpe, R. (2007) (Eds) *Rethinking pedagogy for the digital age: designing and delivering e-learning.* Routledge Falmer, London

Falconer, I. And Littlejohn, A. (2007) *Designing for blended learning, sharing and reuse.* Journal of Further and Higher Education, 31 (1). 41–52

Lockyer, L. Bennett, S. Agostinho, S. and Harper, B. (2008) (Eds) *Handbook of Research on Learning patterns and institutional change.* In Goodyear, P. and Retails, S. Design Patterns

McAndrew, P. Goodyear, P. and Dalziel, J. (2006) *Patterns, designs and activities; unifying description of learning design structures.* International Journal of Learning Technology, 2 (2/3), 216–242

The Agenda of research culture

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0049

Activity Theory: what does it offer e-learning research?

Activity Theory (AT), is an analytical tool which offers a particularly useful perspective to those researching in e-learning because it of its ability to illuminate the context of an implementation of an innovation. It works through examining and exploring conflicts or tensions that arise in any complex situation involving people and organisational processes. It brings to the foreground the cultural, organisational, social and personal factors that affect the adoption of a new tool. In this way it helps to shift the focus from the tools themselves to focus on the tools in use (Benson, Lawler, & Whitworth, 2008).

This short paper will explore AT as conceptualised by Engleström (2001) and Leont'ev (1978). It will discuss how AT can be used as a tool for understanding teachers' adoption of a new technological tool (for example a Web 2.0 tool). It will draw on the e-learning research literature to explore how others have used AT and will provide a critique of the AT as an analytical tool.

Benson, A. Lawler, C. and Whitworth, A. (2008) *Rules, roles and tools: Activity theory and the comparative study of e-learning.* British Journal of Educational Technology, 39(3), 456–467

Engeström, Y. (2001) *Expansive Learning at Work: toward an activity theoretical reconceptualization.* Journal of Education and Work, 14(1), 133–156

Leont'ev, A. N. (1978) *Activity, Consciousness, and Personality.* Englewood Cliffs: Prentice-Hall

Short Paper

Author

Ms Liz Bennett
» University of Huddersfield

0168

A research agenda for emerging technologies in education

A recent definition of emerging technologies (Veletsianos, 2009) delineates implications that forge a path for future research on the topic. These implications enable researchers to thoughtfully engage with "emerging technologies" while avoiding mistakes of the past with respect to relevance and usefulness.

Emerging technologies are defined as tools, concepts, innovations, and advancements utilised in educational settings to serve varied education-related purposes.

Emerging Technologies:

1. May or may not be new technologies;
2. can be described as evolving organisms that exist in a state of "coming into being";
3. experience hype cycles;
4. satisfy the "not yet" criteria of
   a. not yet being fully understood, and
   b. not yet being fully researched or researched in a mature way;
5. are potentially disruptive, but their potential is mostly unfulfilled.

Although practitioners and researchers may consider emerging technologies to be powerful instruments in enhancing teaching, learning, student engagement, and educational systems, we are still learning what is possible to achieve with these technologies. Employing emerging technologies to further educational goals however, may necessitate the development of different theories, pedagogies, and approaches to teaching, learning, assessment, and organisation. If we employ emerging technologies in our work, we should also be prepared to experiment with different lenses

Short Paper

Author

Dr George Veletsianos
» University of Manchester

through which to view the world, with different ways to explore such ideas and practices as knowledge, scholarship, collaboration, and even education.

Additionally, technologies may be emerging in one area while being "emerged" in another area. For example, Geographic Information Systems may already be established tools of trade (i.e. emerged) in real estate agency and agriculture, but they are still considered to be emerging in the teaching of high school geography. Therefore a consideration of context and content needs to be at the core of emerging technologies research.

Finally, emergent theory holds implications for research on emerging technologies in education, on the one hand, technologies developed for purposes other than education find their way into educational institutions and processes (e.g., wikis), while on the other, once such technologies are integrated into educational practice, they both mold and are molded by educational practices such as teaching and learning activities.

Veletsianos, G. (2009) *A Definition of Emerging Technologies for Education*

Short Paper

Authors

Dr Tina Wilson
Dr Patrick McAndrew
» The Open University

Prof Robert Schuwer
» Open University of the Netherlands

0192

Gathering evidence of the design, use, reuse and redesign of Open Educational Resources

Open Educational Resources (OER) are available globally in many OER repositories. (The Massachusetts Institute of Technology (MIT) web.mit.edu was the leader with the OpenCourseWare (OCW) initiative in 2002). With seven years experience in the development of OER it is time to 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 a research project, which started in March 2009. Based on the lessons of experience and evidence, 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 will investigate the best ways to develop new OER and redesign existing OER for reuse worldwide. 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 (in conjunction with drawing on existing OER communities).

This paper starts by discussing progress since the start of the project. The focus then moves to the commonalities and differences in developing OER in two OER repositories (OpenER and OpenLearn). This is followed by consideration of potential and actual adoption of OER from these repositories by the school and further education sector. Questions addressed regarding the potential of OER to the school and further education sector 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?

The findings will be discussed with respect to the African cultural context where research has been undertaken with the higher education sector. Finally the paper discusses two examples of reuse: one of material from OpenER used by a school and the other a contrasting example from OpenLearn.

0270

SCoPE: online community to support individuals interested in educational research and practice. A snapshot of evolution

Simon Fraser University's Community of Practitioners in Education (SCoPE, scope.bccampus.ca) is an international online community launched in autumn 2005 to bring together individuals who share an interest in educational research and practice and to offer opportunities for dialogue across disciplines, geographical borders, professions, levels of expertise, and educational sectors. With this very broad mandate, flexible tools, and an open mind about how to proceed, the members have shaped this online community into a vibrant meeting place for dialogue, collaboration, and sharing. Using Moodle as the core platform we host special interest groups, a monthly seminar series, and online conferences. All community discussions are facilitated by volunteers and community events are free and open to the public.

This short paper explores the evolution of online communities by reviewing SCoPE using the seven principles for cultivating communities of practice as a framework (Wenger et al., 2002):

1. Design for evolution
2. Open a dialogue between inside and outside perspectives
3. Inviting different levels of participation
4. Developing both public and private spaces
5. Focusing on value
6. Combining familiarity with excitement
7. Creating a rhythm

This snapshot of evolution captures progress in attracting members to SCoPE and in shaping the community to suit their needs. It also highlights how design decisions and selection of technologies are based on user feedback and ongoing observations through community participation. Selected examples illustrate how members contribute to planning for future activities, and to refining or reinforcing design decisions.

Wenger, E. McDermott, R. and Snyder, W.M. (2002) *Cultivating Communities of Practice.* Boston, MA: Harvard Business School Press

Building online communities

Workshop

Authors

Mr Tim Cappelli
Mr Alisdair Smithies
» University of Manchester

0048

Building online communities: from social to professional networking

This workshop will explore the use of social networking technologies in higher education and how they can be enhanced and modified to provide an environment to support an effective online community. This builds on work carried out by the University of Manchester to create an online community of teacher-practitioners. The bespoke Web 2.0 based system created provides a space for tutors to network, but also to use those networks to carry out meaningful tasks. Participants will be invited to create and use profiles in an 'offline' environment in order to demonstrate the value and issues of doing so, before carrying out the collaborative review and editing of an online paper. This will allow them to experience the system and how it supports the principles of community development. Participants will be invited to discuss these principles and how Web 2.0 social networking applications can effective support professional networks.

Using a mix of participatory activities and demonstrations, the workshop will explore the value of social networking applications in order to support collaborative working and the exchange of ideas. Participants will take part in activities designed to highlight the benefits of networking, followed by hands-on experience of a new tool created to facilitate community building and professional collaboration. Participants will be invited to discuss how the technologies could be used within their own context.

Participants will be actively involved in the exploration of issues related to social networking and the benefits of collaborative working. From this they will gain an understanding of the problems inherent in using social networking applications in higher education and an insight into how reconfiguration of these applications or provision of additional features can move a community from a social to a professional network.

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Crisis management simulation

0033

Strategic implementation and pedagogical considerations of e-portfolios in further education and higher education

E-portfolios are a current hot topic. The educational potential of e-portfolios by Stefani et al (2007) provides hypothesis as to the impact on learning. This is being drawn upon and researched empirically in further education and higher education institutions through Leap Ahead (Lifelong Learning Network for Nottinghamshire and Derbyshire). Sponsored trials are taking place in 8 further education and higher education institutions with around 1000 learner-centred e-portfolios. Run by the University of Nottingham's Centre for International E-portfolio Development (CIePD), this workstrand is developing e-portfolio experience amongst regional partners across numerous sectors / applications. With an aim to equip partner institutions in taking fully-informed pedagogically-centric decisions about their choices of future technology. Pilots are generally small scale involving Personal Development Plans (PDPs), reflection on progress, action planning, pre-enrolment / transition activities and evidencing. The challenge is how to embed innovative practice, build a community of users, support lifelong learning journeys and influence senior managers within institutions who will ultimately make the decisions on which system(s) to invest in. This demonstration provides background on the project rationale and an overview and discussion of implementation issues including; barriers to adoption, influencing institutional change and recommendations for sustainability.

The session will include examples from the two sponsoring systems along with interim research outcomes and pedagogical and strategic recommendations at a practical level. Lessons learned, particularly in relation to methods of engagement and implementation will be shared. Attendees will have the opportunity to discuss and reflect on their own experiences both within the session and through a real-time blog.

The demonstration itself will include an overview of current e-portfolio theory and the interim research findings from the e-portfolio trials, the main body consisting of demonstration of the range of identified e-portfolio requirements / applications of chosen practical solutions, together with implementation barriers and a demonstration of solutions. Invitation to discuss scalability and drivers for change will take place within the session and via the blog.

Participants will learn:

- How the project has deconstructed the features of e-portfolios to facilitate incremental usage of the systems.
- A wide range of e-portfolio options, issues and solutions, how e-portfolios can support teaching and learning.
- Best practice for engagement and implementation, including use of institutional free systems to aid rapid uptake.

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Demonstration

Authors

Ms Kirstie Coolin
» University of Nottingham

Ms Adele Cushing
» University of Plymouth

2

Tue
15.05

Section two: Abstracts   Crisis management simulation

54

Lessons from student experiences

Short Paper

Authors

Prof Jo Axe
Ms Donna March
» Royal Roads University

0123

When the shoe doesn't fit: supporting students who are challenged by online educational technologies

Taking an action research approach, this paper explores the experiences of graduate level students who found a technology enabled classroom challenging. After taking part in an online orientation activity, the students began their studies in a three week face-to-face residency, followed by two distance learning sessions. At the end of the second session, 15% of the students had either taken a leave of absence, or left the program permanently.

Current literature focuses on several issues that have a negative influence on students' ability to achieve their educational goals in an online environment. These issues include isolation, lack of preparedness, and feeling overwhelmed. Building on this, we explored the following question: How can educational technology be used to increase retention for students enrolled in an online course? Aimed at identifying approaches to overcoming some of the problems associated with studying online, we sought to examine the perceptions of MBA students by asking the participants to take part in a focus group discussion.

This paper will discuss the challenges found by the graduate level students who worked in a computer-mediated educational environment, as well as highlight some of the solutions aimed at increasing student retention by enhancing the online classroom. Findings revealed that technologies aimed at encouraging student presence in the online classroom, as well as those that allow them to interact socially online could positively increase student retention. In addition, employing tools that support the students' desire to repeat and reflect on material serves to improve the experience for those studying online. Finally, instructors who display comfort with the use of technology also have a positive impact on student learning.

By providing a heightened awareness of the issues faced by graduate students working online, as well as spotlighting some key solutions, this study underscores the importance of targeting appropriate technologies when designing the online classroom. Further studies in this area could explore undergraduate engagement, generational differences, as well as learning preferences in the context of online learning.

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Technology dream vs teacher reality

Short Paper

Author

Ms Caroline Steel
» The University of Queensland

0292

The technology dream versus teacher reality: understanding technology practices in relation to beliefs, pedagogical context and affordance theories

Educational technologists dream about the potential for technology to enrich, enhance and extend university student learning. However the reality is quite different. Many universities offer Learning Management Systems (LMS) as the 'one size fits all' encompassing technology solution. In practice, students are dissatisfied with the extent and quality of LMS use (Steel, 2007). There are low levels of LMS integration into teacher practices (Coates, James, & Baldwin, 2005; Conole & Fill, 2005) and these systems are most commonly used for information dissemination (Garrote & Pettersson, 2007). Together, these realities indicate that there are significant barriers to their effective use, especially for teaching and learning purposes.

Research suggests that there are both internal (intrinsic) and external (extrinsic) barriers at work (Ertmer, Addison, Lane, Ross, & Woods, 1999). While LMS technologies themselves may not be pedagogically neutral, it is teachers' internal beliefs and their pedagogical contexts that are highly influential to technology integration. A pedagogical context includes variables associated with teacher and student characteristics and preferences, the pedagogical approach employed, the organisation of the learning environment as well as the omnipresent disciplinary and institutional culture and norms (Kennewell, 2001).

This research is drawn from six qualitative case studies of teachers at different stages of their journey toward technology integration. The study used concept mapping and stimulated recall techniques to investigate teacher beliefs and practices. This presentation focuses on brief examples of how these teachers reconciled their pedagogical beliefs, beliefs about web technologies and their pedagogical contexts to help them identify the potential and constraints of LMS technologies for use in their teaching practices. Affordance theories offer an important way of understanding their decision making. Three categories of affordances that emerged from the data will be discussed. These are pedagogical affordances, social justice affordances and administrative affordances. These findings have implications for university teacher education and development related to technology integration. They clearly show that there are complex and interactive factors at play that can enable or inhibit the educational technologist's dream. These factors must be addressed and negotiated to assist teachers to progress their individual technology practices.

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Virtual midwifery

0183

Developing a virtual clinical experience for midwifery insight placement

In response to EU regulations and Nursing & Midwifery Council guidance (2006) all pre-registration nursing students must undertake insight placements into Midwifery practice (c. 200 each year at University Campus Suffolk). This has previously been based within a classroom for one day, with a "paper" workbook to complete. If nursing students are fortunate enough to receive an actual midwifery practice experience, then it is often based around unusual and abnormal birth, such as Caesarean section. This project strives to meet an EU directive (2006) which states that "childbirth is a normal physiological process".

This project has developed technological solutions to focus on service user engagement and the normal birth process, as well as making the practice environment and professionals 'virtually available' to the student. The initial stages of the project were to negotiate the involvement of clinical practice partners, service users and related agencies, which has been undertaken successfully.

Content includes video and audio with the use of clinical experts, and video tours of maternity environments. Students have given feedback that they would like some interaction with video/audio content, so there is now an interactive video in the "virtual area" with simulated assessment of mothers. This involves role play, with the student prompted to make "decisions" and investigate certain aspects of the discussion further.

An important aspect of all pre registration education is to include Service Users (patients) in curriculum delivery (2004), which has proved difficult due to time/travel. The project has included a wide range of user perspectives, through the use of video interviews, which enhances the student experience by allowing a degree of intimate engagement not readily possible in real world environments.

To meet the growing use of mobile learning by students, the project has ensured all the non-interactive material is usable on mobile devices where possible. An evaluation of the project is prepared and will take place with student groups over the summer, alongside discussions with clinical practice partners, and agreeing copyright permissions with national organisations to incorporate national software resources to help meet the EU requirements for a focus on normality.

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Short Paper

Authors

Mrs Haz Hughes
Mr Tim Goodchild
» University Campus Suffolk

All hands on deck

Research Paper

Author

Dr Carol Russell
» University of New South Wales

0178

All hands on deck: CREWED for technology-enabled learning

The University of New South Wales' (UNSW's) Faculty of Engineering is introducing a new process for designing and developing blended and fully online (distance) courses, as part of action research to support curriculum renewal. The process, referred to as CREWED (Curriculum Renewal and E-learning Workloads: Embedding in Disciplines), is being used to develop key courses that add flexibility to student progression pathways. By integrating the design of learning activities with the planning and organization of teaching and support work, CREWED addresses some of the known barriers to embedding innovative use of learning technologies within disciplines. CREWED incorporates key features of two course development models from the UK, one emphasising team building and the other emphasising pedagogical planning. It has been piloted in priority curriculum development projects, to ensure that the disciplinary organizational context is supportive. One pilot is a fully online distance version of a postgraduate course. The other is a blended version of an undergraduate course. Both are core (required) courses in accredited professional engineering degree programs and were previously available only in face-to-face mode. The UNSW pilots have confirmed the importance of articulating clear pedagogical models, and of planning ahead for the resources required to put these models into practice, as part of departmental capacity building, especially where teaching has primarily been treated as an individual classroom-based activity that competes with disciplinary research for academic staff time and resources.

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Cost effective design

0315

To what extent could Business Process Management Suite (BPMS) contribute positively to e-learning?

The purpose of this paper is to evaluate the effectiveness of Business Process Management Suite (BPMS) as a teaching-learning technology with the lens of the conversational framework (Laurillard 2002). The paper hopes to link commercial technological development with research in teaching-learning technologies and bring about better collaboration between the two. This theoretical evaluation aims to address the preliminary question — could educational communities adopt BPMS, a tool that has evolved from the commercial world to further enhance teaching-learning process? The scope of this paper and its evaluative study will be limited to using the conversational framework. The paper will briefly discuss BPMS and its relation to business process and business process management to provide a brief introduction. The main section of this paper will be a detailed analysis of key BPMS components against the conversational framework. The conclusion will provide a summary of the effectiveness of BPMS as a teaching-learning tool based on the requirements set out by the conversational framework. The results of the conclusion could lead to further empirical research on BPMS as a teaching-learning technology tool and may be the opportunity to request funding to carry out a proof of concept.

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Sponsor sessions

Wimba 6.0: collaborative solutions for the challenges you face.

Wimba is a leading provider of collaborative learning technologies — more than 60 UK universities already enhance their provision with Wimba. Wimba offers applications that join-up the whole university experience, including a virtual classroom for learning, teaching and research; voice tools for podcasting and audio feedback; and Pronto for virtual office hours, online helpdesks, institution-wide alerts and social networking too.

This session explores what sets the **Wimba Collaboration Suite™** apart as a cost-effective solution to the challenges many universities face. Perhaps your university or college wants to repersonalise the student experience, or to develop vibrant, international research networks and communities? Are you looking for a means to ensure continuity or to deliver your programmes during the swine flu pandemic or for other contingencies? Maybe you want to reduce the time staff spend travelling between campuses and to reduce your institution's carbon footprint? Or are you looking to reach out more effectively to employers and to other stakeholders in your region? Wimba is unique in offering a joined-up approach to these challenges, and this sets us apart from other providers.

In this session you will learn about the **Wimba Collaboration Suite™** 6.0 of products and how you can add the power of collaboration to your provision, taking learning beyond the physical classroom and the virtual learning environment too. The **Wimba Collaboration Suite™** supports active and collaborative learning communities and can significantly enhance the quality of the student experience, wherever it occurs, helping to avoid isolation for on-campus students as well as those studying at a distance. By combining interactive technologies students and teachers are empowered with a unique collaborative environment that can enhance learning, improve outcomes, and increase student retention.

Wimba Collaboration Suite™ 6.0 includes:

- Wimba Classroom™ — a robust, virtual classroom — *now with advanced MP4 functionality.*
- Wimba Pronto™ — an academic instant messaging system — *now with a state-of-the-art whiteboard.*
- Wimba Voice™ — for communication skills and audio feedback — *now with an integrated gradebook.*

The Wimba Collaboration Suite was voted Best Education Solution 2009, SIIA CODiE Award:

siia.net/codies/2009/winners.asp#Education

Becta
Generator: how to maximise your investment in technology

This interactive workshop offers delegates the opportunity to trial Generator and find out more about its application to their technology planning process.

Delegates will create a review, analyse the results and compare their data to other results and benchmark their work to national data.

Generator is the technology improvement leadership tool for FE and skills and this session will highlight how Generator identifies areas for improvement that can have a real impact on maximising your investment in technology.

Higher Education Academy Enhancing Learning through Technology (ELT) Programme: supporting institutions in using technology to enhance core activities

The 'Enhancement of Learning through Technology (ELT)' is a new Academy programme building on our work in e-learning. The aim of ELT is to support institutions to use technology for the enhancement of core activities, e.g. Assessment. This session will highlight key ELT activities, including our work with the JISC and will provide an opportunity for questions. Our approach is to leverage the expertise in the sector through a combination of intensive/highly focused activities, a discipline focus through our 24 Subject Centres, supporting communities, SIGs etc and the integration of technology across Academy core programmes and functions.

Desire2Learn: Student-centred learning—learning how to learn

"Learning today is not about acquiring knowledge as much as it is about building networks of distributed learning."—George Siemens

With the proliferation of e-learning, there has been a slow migration to student centred learning, where the control of learning is shifted to the learner. This model has a number of benefits including:

- Engages; increases responsibility & accountability
- Promotes active, just-in-time learning
- Addresses multiple learning styles
- Provides arena for demonstration of knowledge/skills

This session will explore the creation of the personalised learning experience, how students are leading the charge, and how institutions must keep up with changing times. We will also discuss from a vendor point of view, how we build technologies to support both student centred learning and institutional control. We will use e-portfolios as an example.

Elluminate: The Snazzy Maths project—delivering CPD through the Virtual Classroom

The aims of the Snazzy Maths Project were to develop the subject knowledge and confidence of teaching and support staff whilst improving their practice in the teaching of mathematics through a Virtual Learning Environment (VLE) and Live Virtual Classroom (LVC) provision.

This session will share sound and video examples of virtual classroom lessons and direct user feedback demonstrating how the virtual classroom was used to achieve the desired learning and teaching goals.

Participants will leave with an appreciation of the successful and positive outcomes of using a live virtual classroom within CPD. They will also understand how they could use this innovative technology for themselves.

Reverse mentoring

Workshop

Authors

Mr Yoeri Goossens
Mrs Jenny Evans
» Blended Learning Unit, University of
Hertfordshire

0143
How to initiate a successful reverse mentoring programme

This workshop will introduce and discuss the adopted notion of the 'reverse mentoring' scheme at the University of Hertfordshire. Reverse mentoring in this case means that students mentor academics. This is a very creative project idea that came to fruition in 2006 in the Business School, at the University of Hertfordshire, with over 160 lecturers taking advantage of the scheme to better integrate technology in their teaching. The purpose of the project is to help academic staff become more adept at using and integrating different sorts and sources of technology in their teaching.

Participants will explore whether their own universities and/or learning institutions could benefit from a 'reverse mentoring' scheme. Active participation and discussion will come from exploring reverse mentoring and the practicalities of adopting the programme at participants' own institutions. An explanation of how it operated at the University of Hertfordshire, as well as a collaborative and engaging activity to hypothetically plan the student mentor programme at the participants' institution, will take place. Further ideas to be explored will include the advantages of the project, how some of the project's difficulties were dealt with, and further work to help the project evolve.

Participants will understand:

- what reverse mentoring means conceptually;
- what would be needed at participants' institutions in order to be able to instigate reverse mentoring;
- advantages, potential problems, and how these might be addressed;
- how to recruit and manage potential student mentors.

The main aim of this discussion session will be to enable participants to develop a plan to implement a reverse mentoring programme in their own institutions. Here, participants will discuss and explore whether their institution has the infrastructure, needs, demands and capability to take on a project such as this, and whether the factors that are involved can be addressed at their institutions. This will be achieved by asking participants key questions to consider how a project like this might work at their institution, and the extent of the resulting work.

OERs matter

0074
OERs matter: vision, reality and uncertainty

Inspired by initiatives such as Massachusetts Institute of Technology (MIT) OpenCouseWare, the number of Open Educational Resource (OER) programmes has increased rapidly worldwide and has created a considerable pool of educational resources on the Internet, open and free for the educator and learner to use. OERs hold the promise of opening up access and improving the quality of higher education around the world. That said, however, a number of key issues remain to be examined. For example, can OERs help higher education to meet the needs of changes in both society and its students by innovating in the areas of openness, connectedness, participation and personalisation?

In this symposium, a number of hot topics will be explored, including:

- Is it only prestigious institutions that can make a business case for large scale OER initiatives?
- Can OERs help institutions to reach a wider population, provide learners with richer learning experiences and lead more learners to accredited courses, including those learners currently under-represented at a higher education level?
- Are publicly-funded OER programmes necessary if resources are available on Youtube / slideshare / Flickr?

A brief introduction to the issues will set the scene. A panel drawn from academic research groups, funding bodies and e-learning consultancies will then debate different perspectives on OER via role playing. Some panel members will take a negative position, to open up the debate and the panel will then present suggestions and advice from technical, pedagogical and social perspectives. The audience will be invited to participate.

Following the debate, panel members will then summarise and reflect their experiences and views more personally. We envisage that the symposium will help to clarify some of the OER related issues and will challenge the participants to think more deeply about the impacts of OERs in education, as well as further explore and discuss these issues in their own research and OER projects.

Symposium

Authors

Ms Amber Tomas
Mr Liam Earney
» JISC

Dr Li Yuan
» JISC CETIS

Ms Chris Pegler
» The Open University

Prof Mark Stiles
» Staffordshire University

Mr Tom Franklin
» Franklin Consulting

Teaching with Twitter

Workshop

Authors

Mr Steve Wheeler
Dr Tara Alexander
» University of Plymouth

0064

Teaching with Twitter: from tweeting to learning

Over the past year the micro blogging tool Twitter has enjoyed an exponential rise in use and popularity, prompting many teachers and academics to experiment with its potential pedagogical applications. Twitter has the potential to be a powerful tool within formal education and training contexts if used appropriately.

This workshop is aimed at those new or novice users who wish to investigate Twitter as a tool for enhancing and extending the learning experiences of their students. Through a sequence of games, demonstrations and interactive activities, participants will discuss some of the pedagogical principles that can be applied to micro-blogs. We will also explore a number of Twitter related tools such as Tweetdeck, Twittergrader, Twhirl and Twemes and assess their potential. During the workshop Twitter will be used as a backchannel tool to summarise and capture what is said and done, and we will apply a hashtag to tweets, and the delicious tagging of blog posts, recorded images and audio, thereby aggregating a live digital repository of the event on Twemes.

The workshop will cover:

- setting up and maintaining a Twitter account;
- evaluating existing uses of Twitter in teaching and learning;
- exploring and generating new ideas for using Twitter in teaching and learning;
- incorporating Twitter into blogs and other online services.

We will also offer delegates case studies in using Twitter with our own students, and will provide insight into the benefits and limitations experienced. By the end of the workshop participants will have:

- created a Twitter account (if they do not already have one) and will be encouraged to 'follow' other workshop delegates to create a small community of interest;
- gained an appreciation of some of the pedagogical uses of Twitter;
- discussed and shared best teaching practices using Twitter;
- started to evaluate the potential of Twitter as it might be applied in their own professional context;
- begun to consider new teaching uses for Twitter and associated tools.

CRS use for fieldwork

0029

Can Classroom Response Systems be deployed outside to aid the teaching of fieldwork?

In bioscience and earth science subjects fieldwork can provide an interactive, rich and challenging learning environment in which students gain experience of many practical skills that will be vital to them as graduates. However, they can be logistically difficult to manage and tutors can find themselves too busy organising fieldwork activities to engage deeply with students test their understanding and provide meaningful feedback. The use of Classroom Response Systems (CRSs) is increasing in UK higher education. With recent developments in CRS it is now possible to text complete sentences and numerical responses in addition to the more usual selection of options from multiple choice questions. Installing CRS software on a laptop means that it is possible to use it outside of the traditional classroom setting.

In this workshop we will explore the potential of CRS deployment (outside of the classroom) to see if the strengths that are often attributed to their use (e.g. increased interaction with learning tasks, ability to illicit responses from a whole class and consequently to provide rapid feedback) might allow us to enhance learning and the student experience on fieldtrips and / or in practical classes. As far as we are aware a CRS has not been deployed in this way before.

Workshop format
- Classroom
- Short presentation introducing the session and the technology
- 'Mini field trip'
- Participants will be taken outdoors on a mini field trip (simulated indoors if poor weather) and participate in a set of field based activities that demonstrate how a CRS might be deployed in the field to: gain useful and immediate feedback about students' basic knowledge of a subject; demonstrate some of the main problems of field data collection techniques; encourage students to reflect on their understanding of the limitations of the field techniques and data collection methods / methodologies; and, link field activities to student's prior learning.
- Classroom
- We will then move indoors and use the mini field trip activities and the data collected with the CRS to facilitate discussion activities to further explore the potential of this technology for fieldwork, practical classes and in teaching in general.

Workshop

Authors

Dr Rod Cullen
Dr Mark Langan
Dr Robin Sen
» Manchester Metropolitan University

Shared lessons through effective modelling

Workshop

Authors

Mr Tom Franklin
» Franklin Consulting

Dr Hilary Dexter
» University of Manchester

Dr David Millard
Dr Yvonne Howard
» University of Southampton

0095
Workshop on sharing lessons through effective modelling

We have all been involved in projects that have produced not only their final deliverables, such as a piece of software or an instance of organisational change, but have also produced less tangible results, such as experiences, analyses, models and lessons learnt. Often it is these results that are the most useful to others, as guides, exemplars and the foundations for further work. If these outputs are to be useful across different communities, and are to make to sense to pedagogic and technical people, then we need to be able to express them in a consistent way and know that we have created a shared understanding of a situation.

This workshop will start with a brief introduction to an approach to modelling that we have used with a wide variety of groups including learning technologists, curriculum designers and human resources managers, and will be followed with a supported exercise in modelling where participants will work in small groups to model a problem of one member of that group.

The workshop is aimed at anyone who thinks that they might be frightened of modelling, or would like to add a new method of modelling to their repertoire. We have been working with 5 key questions for looking at our systems (projects) that are proving to be useful [Hepp]:

- Where do we fit in the bigger picture? (Domain and Organisation).
- Who is involved? (Role).
- What are they doing and why? (Work and Motivation).
- What things do they use and produce? (Artefacts).
- What controls and supports their work? (Rule and Technology).

Participants will start to build their own model using a simple technique that helps reach across communities. The technique involves using "cards" on which you will represent the domains, organisations, roles, work, motivations, artefacts, rules and technology. These are glued onto paper and appropriate connections made. Models of this nature can be quickly produced and form a useful basis for discussion or more formal modelling.

Participants will

- Learn an approach to modelling which can be used in almost any environment.
- Start to develop a model of a problem that they already have.
- Have a clearer understanding of that problem through the creation of the model.
- Have a method for turning tacit knowledge into explicit knowledge that could be more easily shared with others.

Martin Hepp, M. Dumitru Roman, D. (2007) *An Ontology Framework for Semantic Business Process Management.* Proceedings of Wirtschaftsinformatik 2007, February 28—March 2, Karlsruhe

2

Tue
16.00

Section two: Abstracts **Shared lessons through effective modelling**

0085

Collaborative Observation On-Line (COOL): addressing under-exploitation of the potential of Technology Supported Learning (TSL) by the development of online peer observation processes

Many teaching staff identify Technology Supported Learning (TSL) as something irrelevant to their own practice and, combined with a lack of opportunities to observe TSL in action, they often are not aware of what is possible.

Pilots of Collaborative Observation On-Line (COOL) at the Universities of Hull (Bennett and Barp 2008) and Staffordshire have shown that opportunities for feedback on TSL practice can enhance confidence and self-efficacy even amongst experienced, even skilled, practitioners. Whilst acknowledging the benefits of other forms of social learning such as discussion groups, staff reported added value through the opportunity not only to discuss online experiences, but to focus on the online processes themselves within the context of implementation. Observing aspects of TSL use helped reassure staff that new tools can be utilised in ways consistent with their teaching objectives to complement and enhance their existing pedagogical approaches. Training courses alone cannot effectively ensure understanding of the reality and challenges of the new mode and strategies to address them.

This workshop will show how processes of online peer observation can help to mainstream TSL activity and facilitate transfer beyond isolated pockets of innovation and imagination across varying contexts and disciplines through situated exploration of online practice. It will give participants ideas for implementation in their organisation and a model for consideration.

Participants will discuss processes developed by the Universities of Hull and Staffordshire, and other early implementers for supporting online peer observation, exploring the needs of both experienced and new — perhaps even reluctant — users of TSL, and the challenges and opportunities of going into online environments to observe practice. There will be a chance to experience techniques used at the University of Hull as preparation for the actual observation online and a taste of how the observation and reflection work in practice.

Participants will explore findings from data gathered from interviews with online observers and observees. Through joint reflection on practice workshop participants will discuss strategies to promote engagement across different institutional divides and traditional roles, and help to develop their own responses to the issues, opportunities and challenges which are emerging as involved in implementing collaborative observation online.

Bennett, S. and Barp, D. (2008) *Peer observation — a case for doing it online.* Teaching in Higher Education. 13(5): 559–570

Workshop

Authors

Ms Shirley Bennett
Mr Patrick Lynch
» University of Hull

Ms Sue Lee
» University of Staffordshire

2

Tue
16.00

Section two: Abstracts | **Shared lessons through effective modelling**

Beyond multiple choice questions

Workshop

Author

Prof Geoffrey Crisp
» University of Adelaide

0012

Moving beyond multiple-choice questions: interactivity in e-assessments

It is often difficult for discipline teachers and academic developers to prepare online assessment tasks that require higher order capabilities and skills. The difficulty frequently resides in the conflicting requirements of the online environment for automated marking and the provision of appropriate feedback to students coupled with the amount of time taken to prepare questions that assess the development of relational and extended abstract abilities associated with using higher order capabilities and skills.

This workshop will provide practical opportunities for participants from most discipline areas, including the sciences and engineering, business and economics, as well as humanities and professions, to explore examples of how to readily incorporate interactivity into e-assessment tasks. The tools used for the interactivity will be based predominantly on existing resources such as Excel spreadsheets with embedded macros, simulations based on Java applets and browser plugins (Flash, QuickTime). These educational resources will be linked via a URL but exist separately from the system that delivers the e-assessment questions so that the interactive tools can be used with any Virtual Learning Environment (VLE), Blackboard, Moodle, Sakai etc.

This is the basis of the design principle behind the interactive e-assessment framework, to separate the interactive resource from the actual assessment system. Workshop participants will use an established Moodle website to explore and construct interactive e-assessment tasks using standard question types and interactive tools that enable students to manipulate data or objects to assist in the generation of their responses. Workshop participants can preview some examples at andy.services.adelaide.edu.au/moodle.

Crisp, G. (2007) *The e-Assessment Handbook*. Continuum International Publishing Group Ltd

2

Tue
16.00

Frameworks for developing digitally literate learners

0318
Frameworks for developing digitally literate learners

Despite their pervasive use of social technology, the evidence is that few learners make effective use of technology to support their learning. The JISC Learner Experiences of e-Learning Programme has found that students have relatively conservative expectations and approaches to study, and are looking to their tutors for guidance. A recent digital literacy audit reveals that few institutions are providing such support in a joined-up way. We argue that institutions have a responsibility to develop digitally literate learners, and that this responsibility includes but extends beyond what is usually understood by information literacy to a wider set of critical practices and attitudes.

This workshop examines a number of frameworks for conceptualising digital literacy, and draws on learners' own descriptions of the skills and strategies they use. In the first half of the workshop, participants will consider the educational benefits of these strategies and how they can be enhanced and supported within a developmental framework. The second part of workshop draws on a review of current institutional practice, and an analysis of future requirements and trends.

The Learning Literacies for a Digital Age (LLida) Project has produced a number of recommendations for institutions, from updating checklists of transferable skills to refocusing curricula around the nurturing of digital talent. Using established frameworks such as the SCONUL 7 Pillars as well as recent innovations, participants will consider the role of institutional strategies, central services provision, the curriculum, and peer networks, in helping learners develop their digital capabilities. While introducing highlights of two major research projects, the workshop will centre on participatory activities. The first encourages exploration of strategies used by effective e-learners and application of a developmental framework for understanding learners' different approaches. The second encourages exploration of institutional strategies for digital literacy development, and testing out of a 'framework of frameworks' to address learners' changing needs. Both activities have been tested in previous workshops, and the presenters are experienced staff developers with the confidence to introduce theoretical material in a way that allows for discussion and sharing of expertise.

Workshop

Authors

Dr Rhona Sharpe
Oxford Brookes University

Ms Helen Beetham
Ms Lou McGill
» JISC

Wednesday sessions

Workshop

Author

Dr Carol Russell
» University of New South Wales

0280
Cognitive mapping as a research method

This is a hands on workshop where participants will see and interact with examples of cognitive maps generated in research projects, share their own examples, and/or create new cognitive maps. The workshop will also cover some of the underlying concepts. The main advantage of cognitive mapping over other methods of data collection and analysis is that it represents complex interconnections as a visual map that can be analysed, and is ideal for eliciting tacit knowledge with individuals or groups. It can also be a very quick, efficient and reliable way of gathering data on individuals' thoughts and strategies. Most other qualitative methods result in linear textual representation, or researcher-defined categories. Participants will use Decision Explorer software tools to create and analyse patterns in cognitive maps.

Workshop format

- Introductions
  Sharing and discussion of why participants are interested in cognitive mapping as a method for qualitative research into use of learning technologies. The aim will be to clarify which examples and techniques might be of most interest to the whole group, and to identify where participants have interesting examples to share.
- Examples
  As the workshop facilitator I can provide examples of different ways of using cognitive mapping in research, including:
  - individual maps coded by the researcher after the interview
  - individual maps coded during the interview, following the interviewee's instructions
  - combined maps using analysis tools to identify patterns of linkage
  - maps built over several interviews with one person.

However, I am hoping that at least some of the participants can show their own work.

- Hands-on exercise
  Participants will carry out cognitive mapping interviews with each other in pairs or threes on a common topic and coding scheme. For example the topic might be 'using cognitive mapping for research into use of learning technologies', with interviewees categorising the concepts as about:
  - the technology itself
  - the individual researcher
  - the organisational/educational environment
  - the nature of the learning or knowledge.

By the end of this exercise, the group will have produced a number of cognitive maps on one topic, each with an analysis of linking density between categories.

- Combining maps and next steps
  Begin combining maps to identify patterns of similarity and diversity across the group, and discuss analysis methods. Decide whether:
  - there is scope for, and interest in, further joint work to complete this particular analysis
  - the workshop has brought together sufficient material to produce a joint publication on cognitive mapping as a method for qualitative research on use of learning technologies.

Second Life processes

0248
Responsible approaches to student generated podcasts

During the last eight years, we have been actively involved in harnessing student creativity as a vehicle for developing their learning. This has been most notably in the area of video production, in which students from architecture, english literature, hispanic studies and law have learned film making skills, and produced videos as part of their assessment activities (Allam 2008). The challenges in assessing this type of work for non-vocational (i.e. non film-production) students—has been discussed, and it has been suggested that the most responsible way to grade such work is via reflection on the creative process, rather than on the "craft" of the final product.

We are now seeking to expand this approach, using podcasts. The use of podcasting as a learning technology has been actively promoted at Sheffield during the last few years. As with others, we are seeking to step beyond the instructor led podcast, and to exploit student generated podcasts as a vehicle for the construction of knowledge and understanding by students (Lee, McLoughlin and Chan, 2008). Although a laudable aim, we have a responsibility to evaluate whether this new approach is effective, and to understand what contribution it makes to student learning. In particular we have a responsibility to ensure that where producing podcasts is assessed, we do this in a manner appropriate to the particular students' contexts.

Previous evaluations of student generated podcasts (Stokes and Beck 2008, Cane and Cashmore 2008)), have tended to focus on whether the students learned from listening to their peers' podcasts, or the effect the process had on meta-skills e.g. effective team-working. During this study we are hoping to address whether student generated podcasts had made a contribution to deeper learning by the students (Lee, McLoughlin and Chan, 2008), by conducting focus groups and reflective practice by the students. The podcasts were made about a series of topics relevant to the students' normal disciplinary studies, e.g. aspects of contemporary British law. It is the preliminary results of this action research that we will present in this paper.

Allam, C. (2008) *Creative activity and its impact on student learning—issues of implementation.* Innovation in Education and Teaching International. 45: 281–288

Cane, C. and Cashmore, A. (2008) *Students' podcasts as learning tools.* In G. Salmon and P. Erdirishingha (eds) Podcasting in Learning for Universities. McGraw-Hill, Maidenhead

Lee, M.J.W. McLoughlin, C. and Chan, A. (2008) *Talk the talk: Learner-generated podcasts as catalysts for knowledge creation.* British Journal of Educational Technology. 39: 501–521

Stokes, C and Beck, S.B.M. (2008) *Does podcasting make a difference? An account of podcast use in teacher and student-led teaching in two faculties at the University of Sheffield.* HEA Annual Conference 2008, Harrogate 1–3 July 2008. Available from www.heacademy.ac.uk/assets/York/documents/events/conference/2008/Chris_Stokes.doc

Short Paper

Authors

Dr Graham McElearney
Dr Jennifer Burr
Dr Chris Stokes
Ms Claire Allam
» The University of Sheffield

Short Paper

Authors

Ms Rose Heaney
Dr Stephanie Henderson-Begg
Dr Olivia Corcoran
» University of East London

0300

Bioscience and forensic science students get a Second Life

Large practical classes, limited physical space and competing demands on staff time often conspire to give students only one opportunity to practise a laboratory skill or investigate a crime scene. In addition, there are considerable financial implications associated with running large molecular biology practicals with expensive reagents. To address these real-life problems, the Health and Bioscience E-learning Group (academic bioscience staff and learning technologists) evaluated existing virtual provision of problem-based learning (PBL) and concluded that virtual world (VW) technologies such as Second Life (SL) merited further investigation.

In recent years the adoption of immersive 3D environments such as SL has gained momentum across diverse subject areas in higher education though it is still unclear how effective these environments are and what expertise is needed to develop and maintain them. A building containing a virtual conference room, crime scene house with several scenarios and a laboratory for conducting Polymerase Chain Reaction (PCR) and electrophoresis experiments has been constructed on UEL Island. This facility has recently been unveiled to students on the Level 2 forensic science degree programme, who are able to examine the virtual crime scenes presented using real world methodologies, to learn the principles of forensic evidence gathering and note taking. Level 2 bioscience students are using the laboratory to practise general laboratory skills such as pipette use and molecular biology experiments they usually only get one opportunity to do in the real world.

Data including student learning outcomes from both groups above will be analysed and feedback from surveys and focus groups of staff and students on their experience of the SL environment will be evaluated using established qualitative and quantitative methodologies. Initial findings suggest that the 3D immersive environment clearly has potential to overcome many of the constraints associated with real world teaching of the subjects mentioned above. However the environment itself also imposes its own constraints and is not a full replacement for real world experience. The full results of these two pilot studies will be discussed.

0317

A fusion of mobile technology and Second Life in a learning environment to support the transition from school to university

This paper presents results from the pilot phase of the Economic and Social Research Council / Engineering and Physical Sciences Research Council funded project, InterLife. InterLife represents a unique collaboration between education and computing science research to establish a robust, generic tool to facilitate transitional changes for young people. Importantly, this research is exploiting novel techniques in computing science to link real and virtual worlds seamlessly using mobile technology. In this paper we focus on the school to university transition. Students starting at university reveal a range of emotions experienced when approaching this major life transition. InterLife will provide a structured, safe, anonymous yet realistic introduction to this new world.

Educational research aspects explore how an avatar (virtual representation of self) can support an individual in a new situation and how a virtual environment can facilitate a real life transition. Initial findings reveal important aspects of the affect of an individual's digital identity, e.g. when engaging with activities in-world which could be considered risky or challenging in the real world. The vehicle is a private island in Second Life designed to mimic facets of student life and provide tools to support student progress. A feature of InterLife is the ability to continuously communicate in a seamless way between real and virtual worlds using a mobile device. Peer to peer mobile technology will allow students to communicate with in-world, record diaries, and observe activities.

Students' avatars will participate in induction and development activities monitored by a sophisticated, automatic logging system which records movements and interactions of individuals in world and between participants (in and out of world). This will allow us to visualise emerging patterns of movement and communication. Every participant has a virtual private room for personal reflection and development of a personal portfolio. Personal reflections will be recorded in diary room episodes, facilitated or prompted by the course team. Students are involved throughout the process and developments will respond to their needs. We anticipate that this "light touch" methodology will lead to an effective and engaging tool of genuine benefit to new students which will in time emerge as an important support structure for the whole degree programme.

Australian government, Higher Education Series (1999) *Transition from Secondary to Tertiary: A Performance Study.* Report number 36. Available from www.dest.gov.au/archive/highered/hes/hes36.pdf

Guardian education series (2008) *The transition from school to university.* In How to be a student. Available from www.guardian.co.uk/education/2008/sep/09/students.highereducation

Second Life (2009) Available from secondlife.com.Linden Research Inc

Short Paper

Authors

Dr Jane Magill
Dr Brian Canavan
Dr Alison Devlin
Mr Jonathan Trinder
» University of Glasgow

Prof Evan Magill
» University of Stirling

Dr Michael Pomerantz
» University of Sheffield

Active learning with mobile and Web 2.0

Workshop

Authors

Ms Lilian Soon
» xlearn

Mr David Sugden
» Village e-Learning Consultancy

0297
Active learning with mobile and Web 2.0 technologies

Both presenters are independent e-Learning enthusiasts, well known throughout the further education system and amongst the further and higher education mobile learning community. They work extensively around the country supporting teaching and learning-support colleagues in their development of pedagogically sound 'e' and 'm' learning strategies and resources. This work is now beginning to take hold and changes in the way both learners and teaching staff are using SMS text for instance, is becoming more evident. Both presenters have worked with the Learning and Skills Network (LSN) to support the national MoLeNET projects (www.molenet.org.uk) during 2007–09, with Learning for Living and Work projects (inclusivity.rsc-yh.ac.uk — a JISC RSC initiative) and contributed to JISC Techdis and LSN publications. The ideas presented in this workshop are being used successfully by tutors across the UK.

In this workshop, we will explore the use of mobile devices and services to create learning and assessment opportunities as well as resources. Participants will be given the chance to experience mobile learning with reference to sound theoretical paradigms.

They will consider how to:

- Engage learners using the learner's own skills and awareness
- Encourage learners to be creators of resources
- Maximise the learning and assessment potential of the mobile devices in their learners' pocket.

Furthermore, they will explore Web 2.0 facilities that interface with mobile devices.

Those attending this workshop will experience activities aimed at engaging learners. They will work through a series of tasks, including the creation of podcasts on the fly; correspondence with communities of practice through micro-blogging; using SMS to evaluate prose; creating SMS activities that stimulate higher order thinking; looking at quizzes on mobile devices and exploring other ways of using gadgets and activities to engage and illuminate learners. The use of Quick Response (QR) codes will be explored. Participants are encouraged to use their own mobile phones for the activities. Regular reflection opportunities using Twitter will allow the participants to consider how the ideas and activities could change their own practice and the benefits this would bring.

Pedagogic innovation

Short Paper

Author

Mr Andy Ramsden
» University of Bath

0119

Using QR codes in teaching and learning: delivering the dream

A Quick Response (QR) code is a two dimensional barcode. When scanned on a mobile phone it will enable you to complete a task. The most common tasks include accessing a web resource, sending a pre-written SMS or accessing more text information. The unique selling point is they enable the mobile learner to effectively and efficiently connect to a electronic resource or activity from a physical object.

There has been growing interest in how QR codes might be used to enhance the learning experience in UK higher and further education. Many of these ideas and discussions are being coordinated through a JISC Innovation Grant led by the University of Bath. This paper will develop a number of user case scenarios based on the dreams generated at the initial 'Ideas Factory Workshops' which ran at 6 higher and further education institutions during January 2009 (blogs.bath.ac.uk/qrcode). Some of the dreams include using QR codes in student induction, accessing just in time learning materials in lectures, and closing the feedback loop for design students at their end of a year design show.

After exposing these dreams the discussion will turn to "how to ensure these dreams become a reality?" This will be informed by the lessons learnt from the implementation at the University of Bath, and the results from a student survey (sample = 1800) on QR code awareness and habits (Ramsden & Jordan (2009)). For instance, 1 in 10 students were aware of QR codes but only 1 in 20 had accessed one. So given this exposure to QR codes how do we implement them at the institutional level to ensure success? The outcome is a scalable and sustainable support and development model where responsibilities for key central and local support teams are designed in.

This model includes the coordination of face to face events, online events and the emergence of the 'QR Code Information Hub' (www.bath.ac.uk/barcodes). It will be suggested that this current solution is not perfect. However, by listening to users and implementing through cross-institutional teams, including the Students' Union it will lay the foundations for future success.

Ramsden, A. and Jordan, L. (2009) *Are students ready for QR codes? Findings from a student survey at the University of Bath.* Working Paper. University of Bath. Available from opus.bath.ac.uk/12782

Ramsden, A. (2008) *The use of QR codes in Education: A getting started guide for academics.* Working Paper, University of Bath. Available from opus.bath.ac.uk/11408

Short Paper

Authors

Mr David White
Mrs Marion Manton
» University of Oxford

0125

It's a nice place to visit but I wouldn't want to live there: using the 'Visitor-Resident' principle to guide approaches to the participatory web

The JISC funded Isthmus Project undertook to 'bridge' the perceived divide between institutional e-learning systems and 'user-owned' technologies on the web. The piloting group were adult lifelong distance students studying with the University of Oxford, Department for Continuing Education. The projects data gathering was designed to solicit the student's motivations for engaging or avoiding certain online services. The focus on motivation revealed an intriguing pattern that was counter to the age-related concept of the 'digital native' (Prensky).

This led the project to propose the 'Visitor-Resident' principle: The Resident is an individual who lives a percentage of their life online. The web supports the projection of their identity and facilitates relationships. Residents often use the web in all aspects of their lives; professionally, for study and for recreation. In fact, the Resident considers that a certain portion of their social life takes place online. The web has become a crucial aspect of how Residents present themselves and how they remain part of networks of family, friends or colleagues. The 'Visitor' is an individual who uses the web as a tool in an organised manner whenever the need arises. They always have an appropriate and focused need to use the web but don't 'reside' there. Visitors are often sceptical of services that offer them the ability to put their identity online and don't feel the need to express themselves by participating in online culture in the same manner as a Resident.

A student's perception of 'learning' tends to influence their positioning on the Visitor-Resident continuum. For example, those that consider a form of social constructivism to be central to their pedagogical approach are likely to be receptive to the inclusion of Resident style services as part of a programme of study. Whereas those that favour a more didactic approach tend to see their education as a private undertaking and therefore expect services with more of a 'Visitor' style functionality.

This short paper will discuss the 'Visitor-Resident' concept in relation to online learners and will suggest how this principle can be employed to guide the implementation of online services for teaching and learning.

Prensky, M. (2001) *Digital Natives, Digital Immigrants.* On the Horizon. 9(October): 5
White, D. (2008) *Not 'Natives' & 'Immigrants' but 'Visitors' & 'Residents'*

0271

Beyond 9 to 5: learning and community design to support flexible working

Previously, we presented (Whitehead and Cable 2008) a model for sustainably supporting networked communities of practice (CoPs) offering formal and informal opportunities for learning and collaboration. We now report on our study to extend this model to larger, more diverse communities. Action research is an appropriate methodology for this because its primary focus is on solving real problems. It is based on reflection and collaborative enquiry in a real context in which theory informs practice in a transformative cycle. This enables us as practitioners to develop our model grounded in analysis of best practice and practical experience.

The Beyond 9 to 5 project aims to provide training and support in flexible working practices, for employers and managers, and for workers wishing to create flexible working opportunities for themselves. It supports employers aiming to minimise redundancies and encourages the development of opportunities for individuals, including those from economically disadvantaged groups, seeking flexible working roles.

The project is workplace-based with links to the lifelong learning and vocational education sectors, and offers a choice of face-to-face, blended and entirely online courses plus ongoing peer support, professional development and sharing of best practice. It utilises existing educational technologies (specifically open source) combined with a social media approach to the CoP. This "mega-niche portal" is designed so that each input (e.g. resource or course) from a company or organisation contributes to the whole, available to all, thus providing cost-effective learning and professional development opportunities. We aim to create a sense of belonging and purpose by skilful niching of communities within communities and provision of unique tools and learning opportunities.

The portal was developed with feedback following a conference and workshops on flexible working. Throughout the pilot we will be surveying stakeholders via questionnaires, monitoring of community activity, course evaluations, interviews and case studies, and a community designed to capture the learner voice. Having an impact on changing the working practices of companies benefiting both the business and the employee is a dream indeed—but in this project we are testing and evaluating a practical application of learning technologies, developing a widely applicable model.

Whitehead, H, and Cable, L. (2008) *If you build it will they come? A model for sustainable online community networks for practitioners.* Short paper presented at ALT-C 2008, Rethinking the Digital Divide, September 9–11 in Leeds, UK

Short Paper

Authors

Ms Helen Whitehead
Ms Liz Cable
» Reach Further Ltd

Short Paper

Authors

Dr Brock Craft
Prof Diana Laurillard
» Institute of Education

0203

Sketching interviews: a method to elicit internal representations for the design of learning support systems

Learning design platforms such as Moodle, Blackboard, WebCT, LAMS and others, must rely on abstract representations of the various constituent elements of learning designs in order to be useful and usable. These abstractions range from simple iconic representations of basic activities such as student seminars, group activities, to complex diagrammatic models of 3 year undergraduate courses. One of the problems facing the designers of such systems is deciding upon abstract representations for the various elements within the user interface.

Many researchers within the field of Human-Computer Interaction have shown that sketching designs can be useful for exploring User Interface elements at design time. Goldschmidt (1991), Scaife et al (1997), Buxton (2007), and others have demonstrated the value of sketching for both designers and their informant-practitioner collaborators. But importantly, researchers are beginning to recognise that sketching can also play a valuable role in the elicitation and exploration of design requirements, particularly during the collaborative design of tools that go beyond current practice. The abstractions that learning designers use in their own organisational processes need to be discovered very early in the design process. Incorporating them into the final software interface yields better usability and a system that more accurately reflects the representations that end users are familiar with, and which they already may be using in their learning plans. Moreover, the collaborative exploration of design requirements through sketching enables researchers and practitioners to discover ways of representing aspects of the design process that without technology have not been previously available to them.

During our research to create a learning design support system, we have adopted a method of design requirements gathering that uses personal interviews and sketching. Using simple tools, we engage in sketching-oriented, semi-structured interviews to tease out the representations that practitioners use in their everyday work, but may not be able to identify easily during other types of requirements gathering activities (e.g. surveys, focus groups).

We describe the details of the method, its benefits and drawbacks, and the role of the learner voice in representations. We present examples of learning designers' abstract representations arising from the interviews and discuss the early outcomes from the work.

Buxton, B. (2007) *Sketching User Experiences: Getting the Design Right and the Right Design.* San Francisco: Morgan Kaufman

Goldschmidt, G. (1991) *The dialectics of sketching.* Creativity Research Journal, vol. 4, 1991, pp. 123–143

Scaife, M. Rogers, Y. Aldrich, F. and Davies, M. (1997) *Designing for or Designing With?* Informant Design for Interactive Learning Environments. In CHI'97: Proceedings of Human Factors in Computing Systems, (pp 343–350). New York, NY: ACM Press

Realising dreams, avoiding nightmares

0113
Realising dreams, avoiding nightmares, accepting responsibilities

This workshop will be facilitated by two experienced speakers who have taken an active role in exploiting a variety of Web 2.0 services in an open and participatory way. The session will acknowledge that the dream of the empowered, personalised learner, who is happy to use tools at his/her disposal, uses them in an ethical way and is aware of risks would seem to be achievable. This vision would be supported by an institution which can respond accordingly, addressing risks when needed, providing the flexibility needed to exploit new opportunities and ensures that new media literacy skills are provided.

The workshop will start by setting out the techno-pedagogic utopian vision of the future learner and then seek to explore the practical issues it entails. The workshop will explore the nightmares which could be encountered if naive approaches to realising the vision are taken. It will conclude by exploring the responsibilities which need to be accepted if the shared vision is to be achieved. The workshop will provide an opportunity for participants to outline obstacles and barriers which might be envisaged in deploying innovative e-learning solutions. Approaches to addressing such barriers will be explored.

Possible areas to be explored include:

- Privacy
- Access and the Digital Divide
- Support
- Robustness of IT services
- Technical issues e.g. integration, monitoring
- Pedagogy
- Quality control
- Efficiency

By the end of the workshop participants will:

- Be aware of risks associated with innovative e-learning applications which they may have not considered.
- *Have developed a better understanding of risk and opportunity management approaches which can be used.
- Have considered the responsibilities which the various key stakeholders will need to address.
- Have engaged actively with other participants.
- Provide recommendations on how this work should continue to be addressed.

Users will work in groups to consider two activities. Firstly, working through the issues associated with developing a distributed, personal learning environment style framework and secondly, developing scenarios of future learners in a personalised, informal learning network.

Workshop

Authors

Prof Martin Weller
» The Open University

Mr Brian Kelly
» UKOLN

Institutional change

Symposium

Authors

Mr George Roberts
Ms Patsy Clarke
Dr Rhona Sharpe
» Oxford Brookes University

Mr Paul Bailey
Ms Josie Fraser
Mr Graham Attwell
Mr Joe Rosa
» Independent consultant

Dr Isobel Falconer
» Glasgow Caledonian University

Dr Steven Warburton
» Kings College

0195

Emerging practice and institutional change symposium: a user-centred, learning technology R&D support-community network

The Emerge support project for the JISC Users and Innovation programme asked, 'can the use of social and participatory media (Web 2.0) applications—and attitudes—in learning technology R&D play a role in supporting institutional change processes?' 'Can the use of social media encourage and facilitate greater autonomy and self-direction in the participants on the one hand, as well as increasing collaborative, community-centred development on the other?'

These questions can be re-expressed in terms of shifting centres of control, where greater personal autonomy and self-direction is understood in respect to institutional direction and control. Questions for institutions are to what extent are they comfortable with ceding some control to individuals and to new communities? For individuals the principal issues are to what extent do they subordinate their autonomy and self-direction to communities, how much do they subordinate and to which communities?

This symposium argues these questions from four perspectives:

- R&D programme support.
- Community development.
- Social networking applications and platforms.
- Shifting centres of control.

There will be four short presentations from each of these different perspectives. Each presentation will conclude with a series of open questions and will be followed by opportunities for questions and contributions from participants. Participants will be invited to consider how these issues impact on their practice and the practice of their institutions. Participants will also be invited to comment via a simultaneous online forum which will be projected live at the symposium. A final discussion will summarise the overall conclusions arising from the presentations and discussions

In learning technology R&D projects there can appear to be a focus on outputs rather than outcomes: producing artefacts rather than building capacity; quantitative rather than qualitative measures; easy answers rather than complex institutional change. Emerge adopted an approach which involved initially encouraging knowledge transfer, validation of outputs and take-up within other institutions. Networks develop both in spite of and because of projects and programmes. It is necessary to recognise and value individuals as well as networks. Participants will be invited to consider how far this approach can address the issues raised in the presentations.

Boyd, D. (2007) *Viewing American class divisions through Facebook and MySpace.* Apophenia Blog Essay. Available from www.danah.org/papers/essays/ClassDivisions.html [accessed on February 23rd 2009]

Clarke, P. and Sharpe, R. (2008) *Experiencing Emerge: A summary of interviews with seven community members.* JISC Emerge Project internal report available from reports.jiscemerge.org.uk/Download-document/10-JISC-Emerge-a-user-centred-social-learning-media-hub.html

Dutton, W. (2008) *Through the Network (of Networks): The Fifth Estate.* Inaugural professorial lecture, University of Oxford. Available from webcast.oii.ox.ac.uk/?view=Webcast&ID=20071015_208 [accessed on February 26th 2009]

McQuillan, D. (2006) *web2.0 & human rights: the benefits & threats of an architecture of participation.* internet.artizans: Tracking the Internet, Human Rights & Social Change. Available from www.internetartizans.co.uk/web2.0-and-human-rights

2

Wed
09.00

Ramanau, R. Sharpe, R. et al. (2008). *Exploring Patterns of Student Learning Technology Use in their Relationship to Self-Regulation and Perceptions of Learning Community Networked Learning.* Halkidiki, Greece, Lancaster University. Available from www.networkedlearningconference.org.uk/abstracts/Ramanau.htm

Salmon, G. (2002). *Pedagogical Requirements of Virtual Learning Environments (VLEs): PETS & PLANETS.* The 24 hour University: Stretching the Limits UCISA TLIG-SDG User Support Conference. Leeds. Available from www.atimod.com/research/presentations/Salmonleeds.htm

Wenger, E. (1998) *Communities of practice: Learning, meaning, and identity.* Cambridge: Cambridge University Press

2

Wed
09.00

Section two: Abstracts | **Institutional change**

Curriculum challenges

Symposium

Authors

Dr Gill Ferrell
» JISC Services

Prof Stephen Brown
» De Montfort University

Prof Peter Bullen
» University of Hertfordshire

Mr Eddie Gulc
» Higher Education Academy

Ms Marianne Sheppard
» JISC infoNet

0196
Curriculum challenges: 'big words which make us so unhappy?'

The various drivers for change in the education sector create diverse challenges for institutions in realising their vision. At the heart of these issues is the need to create more dynamic and agile curriculum design processes and better meet the needs of diverse groups of learners through more student-centred methods of delivery. Institutions are exploring how technology can help them address the challenges to achieve strategic agendas such as 'employer engagement' and 'enriching the student experience'. But, whilst being positive aspirations, we can 'fear those big words that make us so unhappy'[1].

Focusing on the theme of 'learner engagement', the aim of this session is to draw contributions from the audience in unpacking these 'big words' to gain a common understanding of the issues facing institutions and providers in designing and delivering their curricula. The session will begin with an overview highlighting some of the common challenges facing the post-compulsory education sector. This will be followed by a panel discussion involving representatives from three institutions who will outline their approach to the challenge of learner engagement in the curriculum design process and how technology is enhancing the student experience. The audience will then be invited to break out into smaller discussion groups to explore the support and resources needed to help them manage this challenge more effectively. The session will be facilitated by staff from JISC Advisory Services who are looking to provide a range of support mechanisms to help institutions with these issues.

Participants will:

- Gain an understanding of some common challenges around technology supported curriculum design and delivery
- Explore the meaning of some of the challenges around learner engagement in different institutional contexts
- Identify the areas of support they need in developing and implementing technology based systems for curriculum development and delivery within their context
- Input into the development of support resources from agencies such as the JISC and the Higher Education Academy

[1] **Joyce, J.** (1922) *Ulysses*

Redesigning pedagogy

0060
The e-Xpanded classroom

The paper presents an experience based study of the introduction of Information and Communication Technology (ICT) enhanced networked learning settings to provide learning opportunities to students and citizens, who can not access the traditional learning environments. The study is focused on a work in progress learning model started with a project promoted by the Italian Ministry of Education (SCOLA). The initial experience has continued spreading the experimental setting to further networks of schools. The conceptual framework integrates elements from different collaborative online learning models (Roerts, 2004, Talamo and Zuchermaglio, 2003) and the problem based learning approaches (De Vecchi, 1998).

The learning setting is based on the integration of teacher-led classroom activities, web conference systems, online learning environments, networked Interactive White Boards (IWBs) and Web 2.0 applications to extend learning beyond the traditional classroom. Through the provided solution students living in different areas can participate in daily lessons led by teachers located in fully equipped metropolitan schools. The approach aims to further develop the potential of settings experimented in other contexts such as Ireland, France, Quebec, Vermont (US) and to apply elements from different ICT enhanced educational settings (John and Wheeler, 2008).

During the first pilot project the work has been carried out through an action-research approach with several difficulties related to the use of new tools in daily activities. Teachers managed to break the school year curriculum into small modules to find a balance between obligatory knowledge and transversal competences through active learning. Videos taken from school year lessons were presented to show evidence of the structure of the learning setting and the implementation of specific learning pathways.

Although traditional classroom-based education remains the core of national education systems it is not feasible to expand education systems in the traditional pattern to meet all demands. New approaches and new models are needed if education for all is to be achieved. The presentation aims to discuss solutions for different categories of citizens and students that have limited or none access to the traditional learning opportunities (such as students and professionals living on isolated contexts, prison or hospital inmates…).

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0190

Enhancing curriculum delivery for postgraduate distance learning through new technologies

This paper reports on the integration of podcasting, Second Life (SL) and e-book readers into curriculum delivery to enhance the work-based experience of learners studying at a distance. The study is part of a JISC-

Short Paper

Author

Mr Leonardo Tosi
» Agenzia Nazionale por lo Sviluppo dell'Autonomia Scolastica

Short Paper

Authors

Dr Ming Nie
Dr Alejandro Armellini
Dr Ray Randall
Dr Pamela Rogerson-Revell
» University of Leicester

funded research project, Delivery University Curricula: Knowledge, Learning and INnovation Gains (DUCKLING, www.le.ac.uk/beyonddistance/duckling).

The University of Leicester currently has more than 7000 distance learning students, mainly on work-related Masters' degrees. The DUCKLING project runs within three distance learning masters' programmes in applied linguistics & teachers of english to speakers of other languages (TESOL), occupational psychology and psychology of work during 2009 and 2010. Both disciplines face challenges such as increasing flexibility and mobility, enhancing student-student and teacher-student interaction through collaborative learning activities and improving the relevance of the content and activities to learners' contexts. To address these challenges, three technologies are being used and researched: podcasting, SL and e-book readers. In psychology, podcasts have been developed to offer dissertation guidance, assessment feedback, insights into research methodology and threshold concepts. In applied linguistics, podcasts illustrate how english was spoken in different periods in history and in different parts of the world. Additional podcasts are being developed for the three programmes.

DUCKLING makes use of an action research methodology that involves the 'action-reflection' cycle (McNiff & Whitehead, 2006 p.9). Data is collected from course teams, students and employers via interviews, observation, online questionnaires and through the artefacts themselves (i.e. the actual podcasts, e-book materials and SL activities). Methods for data analysis include descriptive statistics, traditional qualitative data analysis and cognitive mapping. Cognitive mapping is a technique used to capture a unique 'map' of an individual and his or her change in views, perceptions and experiences over the two-year period. The methodology is grounded in Kelly's theories of personal constructs (Kelly, 1955) and supported by software called Decision Explorer (www.banxia.com/demain.html).

The DUCKLING project is currently in progress. The delivery of the first technology enhanced curriculum started in March 2009. This presentation summarises the main challenges identified and key interim findings in terms of how the three particular technologies have addressed the challenges in curriculum delivery.

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Short Paper

Author

Dr Maria Zenios
» Lancaster University

0260

Wiki use versus online discussion forums in collaborative knowledge construction: a learner perspective

Although the pedagogic potential of structured online discussion in higher education has been realised, the promise of rapidly developing wiki technology in terms of teaching and learning needs to be examined. Recent research on wiki technology as a tool for promoting user-created content suggests mixed outcomes about their use in education (Wheeler, Yeomans and Wheeler 2008; Cole 2009).

This small-scale study aims to explore the ways in which knowledge can be shared and jointly created among geographically dispersed communities of developing researchers through networked technology. We focus on the role online discussion spaces and wikis can play in the collaborative creation of knowledge by looking at participation processes as they occur online and collaboratively. The study is conceived in the broader context of socio-constructivist approach using concepts around the notion of

epistemic fluency (Goodyear and Zenios 2007). A qualitative approach has been adopted in collecting data from online discussions organised as part of a doctoral programme offered by Lancaster University. Interview data with seven course participants was triangulated with evidence from online discussions and collaborative wiki spaces which have been used as part of assessment with limited tutor involvement.

Early findings suggest that different kinds of networked technologies can support users in multiple and complementary ways when it comes to sharing experiences, exploring concepts and developing new forms of knowledge around a problem. As such, qualitative differences seem to exist in the perceived affordances of online discussion forums and wikis as tools to promote collaborative advancement of knowledge.

Directions for future research are proposed, one involves the investigation of online structured discussion forums as a key tool for probing, interrogating and posing arguments among groups of learners working collaboratively in knowledge creation. The other involves switching attention away from educational wikis as a standalone collaboration tool and turning it on to their functionality as repository spaces for storing and sustaining shared information and collaboratively created knowledge. Future research on the conditions for successful use of educational wikis needs to unpack the role of parallel use of synchronous technologies as mediating tools in supporting collaborative wiki-based activity.

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0308
Dreams into [virtual] reality

This presentation demonstrates a typology of thinking about virtual world learning scenario design. It is based on case studies developed from projects undertaken in Second Life during the academic session 2008–09.

The potential of virtual worlds in learning and teaching has begun to be commonly accepted, subject to the development of appropriate activities and scenarios. There are many staff who have ideas about projects for development and these are often very detailed. However, they are text-based and one of the main benefits of a virtual world is its nature as a visual environment. Translating textual ideas into visual [virtual] reality is proving much more difficult than expected, because in a written scenario the reader is given all the required information but can then recreate the scene mentally in their own way whilst in a virtual world it is necessary to create that world, and what the world looks like can impact on the learning experience.

The case studies discussed here cover a range of expectations of academic staff in written scenarios and the impact they will have. Key to efficient and appropriate development is to identify the level of detail required to engage a student in a visual scenario, and the extent to which an inappropriately developed scenario can bias, positively or negatively, the learning outcomes of the activity.

Short Paper

Author

Ms Kate Boardman
» University of Teesside

It's still a Web 2.0 world out there

Workshop

Author

Mr James Clay
» Gloucestershire College

0221
Hood 2.1: it's still a Web 2.0 world out there

Web 2.0 is exciting and innovative, with new services appearing almost daily. These services can incorporate social networking, video and audio production, sharing, collaboration and user-created content. Some will be useful for providing information and entertainment, some will allow us to create innovative learning activities. This stimulating and interactive workshop will explore new Web 2.0 services that can be used to solve some of the issues facing learners.

During the workshop participants will be shown different learning scenarios and activities that utilise a range of new and exciting Web 2.0 services. It is expected that the workshop will utilise the newest and most exciting Web 2.0 services out there, but could include the use of; Audioboo.fm for fieldwork, Jing to create learning resources and web reviews, and ipadio to allow learners to create a series of work-based podcasts. Participants will discuss and debate the Web 2.0 service and the scenarios in small groups, covering how they could be utilised within their own institutions.

The groups will also discuss how the pedagogy needs to drive the scenarios and not the technology, and address how Web 2.0 can empower learners to take responsibility for their own learning. Each group will provide feedback through either a blog entry, an audio podcast or a video presentation. These will then be made available online to allow further comment and discussion beyond the workshop, and also allow other conference delegates to participate.

The participants will have a greater understanding of the innovative role of Web 2.0 to support. They will have considered how Web 2.0 can be used to redesign the pedagogy, the curriculum, and assessment methods to secure a substantial positive impact on learning. The participants will have presented the results of their discussion to other participants and to other delegates through the use of a variety of learning technologies and Web 2.0 services. This will allow them to understand which services are innovations of true value, rather than mere fads.

Redesigning administrative systems

0081
PortisHEad: portfolios in successful higher education admissions

The PortisHEad project developed tools to support applications to UK higher education through learner-owned e-portfolios; including the ability to target unique e-portfolios to different institutions. The original demonstration tool helped address the recommendations of the Schwartz report for fairer admissions to higher education. However, despite good learner feedback and a strong sectoral imperative, the tool was not implemented by UCAS, the application service. Despite the withdrawal of UCAS from the project the remaining partners developed a generic application toolkit which allows any e-portfolio user to auto-complete educational or employment-related 'application-type' forms using learner-owned data from their e-portfolio. The toolkit is consistent with the 'thin e-portfolio model' propounded by the JISC-funded e-Portfolio Reference Model project. It uses an 'open standard' web-service which is easily implementable by 'form-owners'; access to data is managed by the learners and remains secure. The toolkit is easy to deploy and has already generated significant interest not only from admissions tutors but also for its utility to teachers and staff developers. This paper points to how learner-controlled technologies, and learner-owned data, can be meaningfully utilized to engage with intra and extra-institutional systems using open standards and web services. It also illustrates that technological difficulties are less critical than organisational ones.

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0164
The learning technologies of the future: technologies that learn?

Higher Education Institutions (HEIs) operate in a borderless and complex environment, abundant in potentially useful information. The Creating Academic Learning Futures (CALF) research project, carried out in partnership by the University of Leicester and University College Falmouth in the UK, involves the development of approaches and tools for structuring and filtering information, in order to facilitate institutional decision-making in participative and creative ways.

One of the aims of the CALF project is to involve students in creating and exploring a variety of plausible 'alternative futures' for learning and teaching technologies in higher education. This paper discusses some of the issues that are emerging in the course of the research process and presents ideas for the future, grounded in and emergent from 'student voices' from

Short Paper

Authors

Mr Alan Paull
» APS Ltd

Mr Shane Sutherland
» Pebble Learning Ltd

Short Paper

Author

Ms Sandra Romenska
» University of Leicester

the CALF research project. Students expected the technologies of the near future to enable them to become co-creators in their own education processes. The future scenarios imagined the rise of learning technologies which instead of becoming outdated with use, become more valuable as more user-generated content is invested, technologies which are truly learning in that they learn about their users and constantly morph/adapt to their users' needs. Finally, increasing virtualisation was a recurrent theme across most student-generated scenarios.

The paper concludes with a discussion of some of the strengths and limitations of using technologies for involving students in creative activities for generating future scenarios for higher education. The technologies used by the project enabled collaborative creative thinking across a broader spectrum of possibilities about the relationship between the present and the future of higher education.

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Section two: Abstracts   **Redesigning administrative systems**

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0310

Out of necessity and efficiency: models of shared service in education

In the current environment institutions are asked to do more with less, while maintaining or increasing quality. Institutions of all forms are under similar constraints and yet need to demonstrate leadership, conviction and vision to be successful in optimising an online learning environment. To date, institutions have for the most part faced these challenges in silos. This paper will introduce the concept of e-learning shared services to the group as well as articulate models, in particular technology models, that have been successful from the US, Canada, and UK. The presentation will be given by Simon Tindall.

Attendees will come out of the session understanding:

- Why they might pursue a shared services model
- What types of models exist — with a focus on technology
- What the cost savings are
- How difficult they are to set up
- In what ways the particular institution could collaborate with others.

A sample of the references include

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Short Paper

Authors

Mr Simon Tindall
Mrs Charlene Douglas
» University of Wisconsin

Ms Kristin Greene
» Desire2Learn

Student focus

Short Paper

Author

Dr Bob Barrett
» American Public University

0067

An appreciative inquiry perspective on the creation and implementation of E-Portfolios as a strategic tool for learning and evaluation

Cooperrider and Srivastva (1987) developed the theory of Appreciative Inquiry (AI) in the 1980s. Their approach was based on the premise that "organisations change in the direction in which they inquire" (p. 102). Further, they contrasted the view that "organising is a problem to be solved" with their appreciative proposition that "organising is a miracle to embrace" (New-Paradigm, 2009, para. 3). As defined by the Corporation for PostiveChange, AI is "the study and exploration of what gives life to human systems when they are at their best. It is an organisation development methodology based on the assumption that inquiry into dialogue about strengths, successes, values, hopes and dreams is itself transformational" (2009, para. 1). Cooperrider and Srivastva (1987) noted that inquiry into organisation life should have four characteristics: Appreciative; Applicable; Provocative; and Collaborative.

This paper takes an appreciative inquiry approach with the design and creation of e-portfolios. In this approach, the student and instructor will work together in a "collaborative" effort to embrace the process of organising the student's key assignments and applicable academic work to help produce a positive reflection of the student's academic efforts into a portable electronic portfolio, known as an e-portfolio. This "revised" or "fresh" approach to e-portfolio creation has several advantages in the business context, as well as the academic perspective. First, rather than having the student follow a mandated listing of academic documents to select, edit or create; the student will be given more leverage in selecting appropriate documents for the e-portfolio. Second, the instructor can focus the e-portfolio creation in terms of student career development and potential employer inquiries.

While many universities have purchased commercially designed e-portfolio programs to collect, disseminate, and analyse various student academic documents for accreditation reporting efforts, this particular university has taken a different approach. The students create their own e-portfolio within the classroom, but it is tangible for them to use as a marketing tool in their job hunting efforts. This particular course has been offered during the 2008–2009 academic year, and students have demonstrated a variety of approaches to their e-portfolios.

Short Paper

Authors

Dr Paul Prinsloo
» University of South Africa

Dr Sharon Slade
Ms Fenella Galpin
» The Open University

0213

In the eye of the storm: preliminary evidence on the use of online learning diaries

The surprising lack of pressure and speed in the centre of the vortex of a storm are in stark contrast to the force and destruction often experienced at its periphery. Many spectators watching a developing storm will be caught between fear and a desire to escape. The metaphor of a storm has been applied here to the emotions experienced by many students enrolling in online learning courses. Not only do the requirements of studying online collide with personal and professional commitments, the experience of learning online (often in groups) results in many students feeling displaced, scared or out of control. Learning diaries, especially in an online environment, present students with an opportunity to reach the centre of the

vortex, though this may not be as quiet and safe as we may have presumed.

This paper reports on students' reflections in their learning diaries as a prescriptive part of the Professional Certificate in Management offered by the Open University. The research focused on the unstructured learning diary entries of 12 students from one tutor group over an 18 day period of a short compulsory online course. This phenomenographic study used grounded theory as methodology to analyse and describe students' use of their learning diaries. The research found ample evidence that online learning diaries provide students with a safe space to reflect on the vortex around them. Without a quiet and reflective centre, students may be overwhelmed by the wider forces impacting on them. Students' postings provided rich descriptions of the vortex of studying online and the function of having a centre to which to withdraw. There is, however, also evidence that posting reflections in learning diaries can itself be a dislocating and uncomfortable experience for some learners, while others question its usefulness.

The work provides practical and useful information for managers of online learning experiences, instructional designers and curriculum developers.

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Short Paper

Authors

Ms Alice Jones
Ms Carol Comer
Ms Charlotte Gleeson
» University of Chester

0232

Exploring an implementation of a Personal Learning Environment (PLE)

This short paper will explore the implementation of a Personal Learning Environment (PLE) at our institution which looked at the PLE Centre for Educational Technology Interoperability Standards (CETIS) Reference Report and other current research and attempted to implement the PLE concept into a practical solution for our learners. This session will allow participants to see how we have begun to develop services and support for our learners to have the choice of using a PLE.

The PLE covers all sorts of user owned technologies which can be defined as being owned, managed and manipulated by the learner. At our Institution, we have implemented a PLE model to see if we can motivate and empower learners to take more control over their learning. Through the development and support of the PLE, we hope to highlight the importance of lifelong learning. However, we have recognised and found through the project that additional support and development is needed in asking learners to manage and 'own' a PLE in a distributed environment. There are many issues such as; barriers to technology, naive technologies, integration of work, life and study, educational culture, usability, accessibility concerns and student motivation. The project has taken an action learning approach in order to manage these many challenges. As part of this approach, we have needed to continuously review how we develop for and support the PLE model, and what tools, skills and resources the institution, academic and learner need to support this model.

This paper will begin with a short practical demonstration of our implementation of a PLE so that participants can visualise the concept and how we implemented it. Then, we will discuss with participants the opportunities and challenges of our implementation of the PLE.

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Redesigning teaching

0153
Navigating the mine field: mobile devices in education

This demonstration will look at the problems associated with mobile learning and will suggest some potential solutions. We shall show how interactive mobile content can be created easily using a bespoke graphical Flash-based interface and then distributed to mobile devices.

Traditionally, e-learning has been developed for use on PCs; increasingly though, students do have personal devices that are powerful enough to run resources that support e-learning. Once the technological hurdles have been surmounted, however, reservations remain around the acceptance of this style of learning. Do students perceive these devices as separate from their learning experience? Would they insist on "negotiating" how and when a university can ask them to use their phones for learning? Would they prefer the mobile phone to act as a memory stick only or is there a distinct interest in using learning material on the phone itself? In brief, will they accept the use of a hitherto personal device for education?

Large scale pedagogic research in this area has been limited to pilot projects with controlled platforms (often with substantial budgets); broad scale studies have been scarce. These limitations are also exacerbated by the difficulty in developing material for mobile devices and by the logistical problems in deploying high quality materials. These are some of the hurdles we face if we are to research and exploit learning on these emerging technologies.

Demonstration format
- Introduction
- The need to make the step up to interactive learning objects for mobiles.
- Latency in demand for mobile learning.
- Demonstration of how to create mobile interactive content using a bespoke creation application
- Also during this period we will simultaneously Bluetooth a few examples out for the audience to have 'hands on' experience using their own mobile devices.
- Looking at mobile devices as platforms
- Covering development for mobile phones (what languages, what systems). What decisions we made when developing this system. Ways of deploying content to devices.
- Look at our findings from our use of the system and the next steps we plan to take with the system

Authors

Mr Patrick Lockley
Ms Claire Chambers,
Dr Gary Priestnall
» University of Nottingham

Demonstration

Author

Dr Tony Lowe
» Webducate

0188

Developing a class room response system for drag and drop activities

Classroom response systems are a proven tool for enhancing the ability of teachers to engage their students and also tailor the classroom activities to maximise their learning. Most existing systems require students to use dedicated devices to engage in simple voting or text response activities. Low cost netbooks increasingly make it feasible for each student in the classroom to have access to a fully functional, internet enabled PC. As a result it would appear that there is now scope to develop more sophisticated activities which can be used in a classroom setting, where in a similar manner to classroom response systems, the tools gather and offer basic visualisations of the responses to aid the teacher in directing further learning.

This presentation will start with a brief review of the Webducate Dragster system and the aims behind this new functionality development. The main portion of the session will be dedicated to a hands-on demonstration of the functionality including the tools for gaining an overview of responses, viewing individual responses, and identifying and addressing problem areas etc. The three examples used will be a labelling activity, a creative exercise and a concept brainstorm. The presentation will conclude with a period for discussion, questions and suggestions. The audience will gain an overview of the system and hands on experience from a students' perspective. They will also have an opportunity influence the direction of future developments through the issues and suggestions that they raise.

Attendees will be encouraged to participate by undertaking the example activities (using their laptops / netbooks etc), the activities themselves will encourage discussion with other attendees. Finally the discussion / questions section of the presentation will be open to all to participate.

New experiences

0127

Comparing departmental 'baseline' and 'opt-in' strategies for e-learning adoption across an institution: which works best?

This paper reflects on different departmental modes of engagement with e-learning, contrasting baseline requirements for e-tools usage with project-based initiatives, where staff 'opt-in' to deliver blended modules. We discuss the impact and effectiveness of these methods, drawing upon survey data and qualitative feedback to reflect on departmental experiences to date.

Within the context of the University of York's Learning and Teaching Strategy, departments have been encouraged to develop their own strategies for e-learning, encompassing staff development and quality assurance measures. A group of departments have employed 'baseline' approaches to module development for all taught undergraduate programmes, requiring staff to maintain a minimum presence for their modules within the institutional Virtual Learning Environment (VLE). For other departments, staff have been given a free-hand to decide whether e-learning tools are appropriate for their teaching, with the central e-learning team offering tailored training and support activities to foster innovative instructional approaches.

Feedback and statistical evidence emerging from an institutional audit of e-learning activity confirm findings by Sharpe, Benfield and Francis (2006) that local strategies can achieve an element of buy-in within departments; the baseline approach has indeed raised the profile of the institutional VLE within these departments, principally as a delivery location for lecture notes and resources. However, there is little evidence to suggest that this approach has been effective in influencing and transforming staff teaching strategies. Quality assurance problems have occurred where departments have chosen to mandate VLE usage across study programmes, with staff not attending training or following approved guidelines for module development, in contrast to elective modules where staff have opted in to the module design process.

Our preliminary findings concur with other research reports (e.g. Elgort, 2005) which show that by establishing minimum requirements, there is no direct enhancement to the learning culture in terms of the way that staff review their teaching to take full advantage of e-learning tools, although this approach can provide consistency in the way that content is presented to students across study programmes.

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Short Paper

Authors

Dr Richard Walker
Mr Wayne Britcliffe
» University of York

Authors

Mr Christopher Murray
Ms Nancy Davies
Mr Gareth Frith
Dr Pat Harkin
Mrs Helen Mistry
Mr James Rone
Dr John Sandars
» University of Leeds

Mr Dave Waller
» MyKnowledgeMap

0201

An e-portfolio with two definitions and one aim: engagement

This paper presents the student view of an e-portfolio system introduced to support reflections and achievements on a vocational degree.

In 2005 we dreamt of a technology which would facilitate the reflective process and encourage the development of a new army of qualified, professional practitioners. The reality of low student usage and the impending launch of a new curriculum have driven the need for change and a re-evaluation of the way in which the e-portfolio tool is designed, used, marketed and positioned within the course.

A questionnaire was sent to all students and tutors who have access to the e-portfolio. Quantative and qualitative questions attempted to not only measure the student view of the current e-portfolio but also draw out what they wanted from an e-portfolio tool.

The findings to date highlight

- The concept that the e-portfolio not only has to be student-centred but also tutor-centred
- That e-portfolios cannot be used in isolation and have to be firmly embedded at the centre of the course and not situated as a peripheral tool
- Usage needs to be encouraged on a daily basis not only at key points where summative assessment occurs
- Curriculum outcomes and competency frameworks need to be explicitly linked and encompass the collection of both academic and non-academic achievements
- That an audience of all key staff ranging from personal and academic tutors to careers advisers and student support personnel is required. Reflection does not occur through the mere collection of artefacts but in 'making sense' of these artefacts through dialogue.

The wider concept of e-portfolio will not only support the collection of evidence but also intelligently mapping evidence against curriculum and competency frameworks. It will prompt students to use their e-portfolio space, supply tutors with records of student progression and link into the institutional virtual learning environment.

A low-stakes, peripheral e-portfolio does not work for our students, only through centrally embedding, marketing widely and training all staff to use the technology, practically and pedagogically, will we be able to produce the professional and reflective practitioners we once dreamed of.

0216

Formal learning in an informal seting: the first semester student learning experience outside the classroom

In recent years there has been a growing interest in the study of the learning experience and listening to the student voice. A number of JISC funded projects reported on various aspects of the learner experience and suggested that there is a disparity between students' expectations and institutional provision of technologies and facilities for learning. (Creanor et al 2006, Conole et al 2006).

This short paper reports on an action research project carried out jointly between the Universities of Worcester and Gloucestershire which aimed to investigate the learning journey of new students during their first semester and compare their expectations for studying in higher education with their actual experience.

The study focused on students' engagement with the learning process outside the classroom specifically:

- where students undertake learning activities;
- when and how often these activities are carried out;
- why particular methods / approaches / resources are used;
- who the students interact with in order to enhance / facilitate their learning;
- what technologies are used to assist their learning.

A questionnaire was distributed to students on large mandatory undergraduate modules at each institution early in the first semester of their studies and focused on their expectations of learning in a higher education environment and how they would approach their first assignment. This was followed up by a focus group at each site and was timed to take place after they had been given their assignment brief. The topics chosen for discussion centred on how the students would approach their first assignment and what tools and technologies they would use. A second questionnaire is to be delivered to the same groups of students after their assignments have been marked and returned in March 2009. Second focus group will discuss the students' reflections on the actual experience of completing an assignment and the impact of tutor feedback.

The outcomes of this study will identify students' preferred ways of learning and evaluate the appropriateness of support currently provided to them at each institution it is also hoped to inform planning for the future in terms of the provision of learning environments and technologies for supporting learning.

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Short Paper

Authors

Ms Elizabeth Symonds
Mrs Sarah Kennedy
» University of Worcester

Mrs Allison Davies
» University of Gloucestershire

Methodological innovation

Short Paper

Authors

Ms Lisa Carrier
Mr Dominic Pollard
Ms Julie Voce
» Imperial College London

0185
Student perceptions of the value of lecture recordings as a learning resource

Using recorded presentations as a learning and teaching resource has become popular in higher education and a number of large scale studies (e.g. Brotherton and Abowd, 2004) have looked into the pedagogical value of the resource, the impact on both student performance and lecture attendance (Carrick Institute Project 2007), and the reasons why students are, or are not, using recorded lectures in their learning (Bell et al. 2001).

This presentation reports on an evidence-based study of the introduction of lecture recordings into the learning and teaching process across two very different masters programmes. Firstly a management course using a fixed, fully integrated lecture capture system installed in several large lecture theatres. It was run almost fully automated with blanket recording of all lectures, subsequently made available to 160 full-time students. Secondly a medicine based course using only one mobile capture station which was set up at various locations to record week-long blocks of teaching as part of a modular part-time blended MSc, subsequently made available to 235 students.

We will report on the challenges of setting up a lecture recording system within two different departments, and student perception of the value of the recordings. We will report on the first stage of our lecture recording project and view this study as part of an ongoing investigation. Our results are based on student surveys carried out in the first year of using the recordings. We investigated trends of student use with reference to their demographic profile and programme structure. We will also report on the technical issues encountered when setting up and running the system. Although lecture recordings were initially offered as an additional extra it became extremely popular with both groups of students and they quickly complained when access to the recordings was briefly disrupted for technical reasons. Students reported the main uses of the recordings were to review difficult concepts and for revision prior to final assessment. Based on the popularity and pedagogical value of the service we deem its benefits to be such that we propose to recommend expanding the scope of the project to other programmes.

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Brotherton, J. A. and Abowd. G.D. (2004) *Lessons Learned From eClass: Assessing Automated Capture and Access in the Classroom.* ACM Transactions on Computer-Human Interaction Vol. 11, No. 2: 121–155.Carrick Institute Project. 2006–2007. The Impact of Web-based Lecture Technologies on Current and Future Practices in Learning and Teaching

Short Paper

Authors

Dr Philip Alberts
Dr Kate Dunton
Dr Linda Murray
» Brunel University

0199
Using an e-portfolio to assist first year students through their transition into higher education

The transition into higher education is known to be difficult for many students and those who have non-traditional qualifications seem to find it particularly so (Hayward et al. 2008). Smooth transition is thought to have a positive effect on progression (Yorke 2000). In addition to the e-activities provided prior to the start of their university programmes at Brunel University, additional e-learning support is being offered to specified target

groups of students as they progress through the first year. This support is provided within the framework of the availability of an e-portfolio building tool.

The specific aim of the 'e-Transition and e-Portfolio Project' at Brunel University is to develop an e-learning experience that extends the notion of a 'bridging course', extending it both before and after entry into higher education. The project implements a model for the support of student engagement with e-portfolio creation throughout their first year and evaluates the impact of the support mechanism by comparison with no additional support, in relation to student experience and achievement.

The e-portfolio facility 'GetProgressive' was developed as the project progressed. The supporting Virtual Learning Environment (VLE) section, which is adviser-supported, contains many features to assist the student:

- a Toolbox (step-by-step guides),
- a Brainbox (creative and strategic thinking tools),
- a Workbox (regular 'personal development planning' activities to encourage students to reflect on their own learning and progress and to gather formal evidence of their achievements),
- a Chatterbox (discussion tools and topics), and
- a Ning binder (which links to the collaborative learning network www.ning. com).

GetPROGRESSive was designed for students to improve their confidence, maintain their motivation, acquire new skills, build an e-portfolio / record of achievements, reflect on learning, work smarter not harder, and write a better CV. Research interviews were undertaken to reveal the factors that are impinging on the students and their progress, making use of the 'life grid' technique to collect retrospective data. Quantitative evidence of student engagement was constantly reviewed, such as size of the e-portfolios.

Indications to date are that retention has been positively affected. Further analysis is being undertaken on first year performance and progression into second year and this will be reported.

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Short Paper

Authors

Mr David Kay
Dr Ian Chowcat
» Sero Consulting

Mrs Julia Duggleby
Mr Dave Pickersgill
» The Sheffield College

0284

New modes, new minds: use of CAMEL collaborative methodology to develop a multi-disciplinary community of practice around mobile learning in The Sheffield College

During 2008–09, The Sheffield College has undertaken a Mobile Learning Network (MoLeNET) project which has provided the springboard for the implementation of mobile learning across its large and diverse educational community. As in any general further education college, technology enhanced pedagogical developments need to be tested and understood across learning, teaching and support settings which range from the Foundation Learning Tier to Foundation Degrees, from work based learning and Apprenticeships to the new Diplomas to traditional academic awards. Therein lies a huge challenge for scaling the assessment and appropriation of any new mode. At the same time that diversity offers the opportunity of leveraging enormous breadth and richness of experience (from lecturers, support staff, employers and not least learners) to address, rapidly test and refine new possibilities.

That opportunity to crack open possibility, to draw on experience, to share successes and learn from failures requires a channel — a way of bringing people together, of breaking down barriers of subject or client specialisms. Previous experience (2007–08 — the South Yorkshire e-Inclusion Projects) suggested that the CAMEL methodology works well across institutions, bringing together likeminded practitioners from diverse settings. The Sheffield College M-learning A Tool for Transformation (MATTS) Project team took the view that CAMEL could equally work within a single institution in cohering the experiences of practitioners involved in disparate forms of delivery and support around a shared theme — in this case, the selection, appropriation and deployment of mobile technology. This short paper recounts the experience of the college team though a collaboratively authored assessment of how learning and change is taking place.

Visual redesign

0155
Designing engaging visualisations to support history learning

As part of our JISC funded project, we have created a visualisation of the Pompeii Court of the 1854 Sydenham Crystal Palace within Second Life (SL). The original court was a life size model of an ancient Pompeian house that presented a collection of copies of paintings from recent excavations. It was designed both to entertain and educate visitors by providing an immersive environment which they explored with the aid of a printed guidebook.

Our aims are:

1. to make the collection and immersive experience once again accessible to learners; and
2. to explore how their educational value can be enhanced by exploiting the possibilities of modern virtual world technology.

This paper presents innovative approaches to building an engaging visualisation for identified user groups in the education sector. Our approaches are informed by ongoing consultations with the user groups, which have enabled us better to meet needs and expectations and to provide an enriched user experience.

Within the model we have created structured learning activities that map onto KS2, GCSE and undergraduate curriculum learning objectives both in terms of content and skills. Students complete these activities during a class held in a computer lab. The class offers an experience that might be thought of as a 'virtual field trip'. In designing the activities, we have combined social constructivist principles with game theory to take advantage of the enjoyable, stimulating and out of the ordinary nature of the field trip, reflecting the 'edutainment' environment that Salmon has credited to virtual world technology.

The activities exploit the motivational advantages and unique possibilities this technology provides students such as exploring spaces that no longer exist and experiencing different learning styles. This is achieved by making metadata accessible in a variety of media such as text, image and audio and in formats unique to the 3D virtual environment; students learn through spatial sequencing and observation of and interaction with (ro)bot avatars in Victorian dress. By these means, we are able to express difficult concepts about the present's relation to the past in an engaging, stimulating and accessible way.

Short Paper

Authors

Dr Nic Earle
Dr Shelley Hales
» University of Bristol

Author

Mr Alex Moseley
» University of Leicester

0163

A case of high engagement: applying immersive online gaming to history research skills

This paper will present a case study for the use of features derived from immersive online games within a core academic course. The underlying pedagogic theory will be briefly outlined, with the main focus of the paper describing the case study and reflecting on the results and feedback. Particular emphasis will be placed on the innovative assessment methods used.

Responding to a need within a first-year undergraduate history module to improve take-up and engagement by students of the critical analysis and filtering of internet-based historical resources, the innovative Great History Conundrum project used paradigms from online social networks and immersive online alternative reality games to create a four-week long activity based in problem solving, collaboration and competitive play. Through the solution of a number of puzzles of varying difficulty, high level searching, filtering and criticism skills were taught. Collaboration and reflection were encouraged through the use of discussion forums and the construction of a collective wiki (a resource the students will be able to use throughout the rest of their degree), and carefully constructed assessment criteria encouraged and assessed engagement with the activity and concepts. The activity additionally served to develop a community of practice early in the undergraduate course, hence improving engagement and performance in the wider academic context.

Following the first successful iteration of the course where detailed data and feedback was collected, these results and feedback will be presented, along with reflection on the course's successes and failures, changes planned for the coming year, and plans for wider distribution across the institution. Implications for wider applicability will hopefully be discussed within resulting questions from the audience. This project has been generously supported by the Fund for New Teaching Initiatives, University of Leicester.

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2

Wed
10.50

0313

Moving in 3D: The X, Y, Z of learning through doing in immersive, virtual environments

It seems ironic that, given the promise of 3D virtual worlds such as Second Life and Twinity, movement is mediated in two dimensions through a keyboard or mouse moving. These movements to direct activities in faux-Cartesian space do not replicate movement in real-life environments that require more tactile precision in three dimensions. Yet in some educational contexts, it would seem more appropriate that movement in virtual environments should more closely mimic real-life movement in order for participants to learn by doing; something not always practical in the real world for financial, ethical or accessibility reasons.

In this paper, we review past empirical research studies on the use of tactile precision in three dimensional immersive learning environments. A number of questions guided our review:

1. What is the potential for tactile precision in 3D multimodal environments (drawing on literature from range of disciplines including IT, gaming, engineering, health sciences and education)?
2. How is this being imagined and explored for education-related purposes in different disciplines?
3. How have learners responded to the potential for more tactile / kinaesthetic learning?
4. What are the gaps in the research?

Research relevant to these questions was identified through a systematic search and selection process. A constant comparative method or grounded approach (Lincoln and Guba, 1985) was applied to generate categories that enabled a thorough exploration of the research landscape. This approach was complemented by the use of Leximancer™, a program that mines text documents to produce a concept map that illustrates the visual-conceptual structure of the documents. Further, this paper explores the potential of technologies that may be recruited to overcome difficulties associated with replicating human movement in virtual environments, proposing some promising avenues of research. Potential technologies include Nintendo Wii consoles, wiimotes and balance boards, and the development of software such as CamSpace—which potentially turns any object into a 3D controller.

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Authors

Dr Helen Farley
Ms Caroline Steel
» The University of Queensland

2

Wed
10.50

Learning innovation

Research Paper

Authors

Dr Judy Hardy
Prof Jeff Haywood
Mrs Denise Haywood
Prof Simon Bates
Dr Jessie Paterson
Prof Susan Rhind
Dr Hamish Macleod
» University of Edinburgh

0114

Taking the lead: learners' experiences across the disciplines

The first year at university is a time of significant flux for students, as they adjust to unfamiliar environments, encounter new approaches to teaching and develop fresh learning strategies on the road to becoming self-directed learners. This sense of uncertainty may be compounded by the need to interact with unfamiliar and frequently complex online systems and technologies, possibly even before arrival. Furthermore, although technology is embedded seamlessly into the personal lives of many of today's students, recent reports have questioned the widespread assumption that young adults have the sophisticated information skills and digital literacy needed to become autonomous learners.

In this paper we present findings from a recently-completed study addressing these important issues. We investigated the utilisation of ICT and learning technologies by first-year undergraduates from a variety of different entry routes and academic disciplines, including Physics, Divinity and Veterinary Medicine, at the University of Edinburgh. The focus of the work was on the impact of technology on students' transition to university and how this changed as they progressed through their first year. The overall shape of the research was based on a student-centred approach, with students' own views and opinions placed central to the study; and used a holistic approach in which students' use of e-learning and technology was set within the context of their learning experiences as a whole. To capture the breadth and complexity of their experiences we used a mixed-mode approach, including a series of reflective diaries recorded by learners (in video, audio or text format) together with surveys and focus groups.

Students do not form a homogenous group, and findings in this area are inevitably complex. They have high expectations and are generally confident with technology; however, they may not always recognise technology's potential to support and enhance learning. The term e-learning does not mean much to them; there is simply learning with strands of technology running through. This is reflected in a strong desire for face-to-face contact, with technology used to supplement and enhance this. Students are social, with informal group learning often facilitated by technology. They find their comfort zones and ways of working that are personal to them, and use technology to suit their own way of learning.

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0299

Is there a Net generation coming to university?

This paper reports the first phase of an ESRC funded research project to investigate first year students' use of technology in relation to the idea of young people born after 1983 forming a distinct age cohort described variously as the Net generation or Digital Natives. The research took place in five English universities in the spring of 2008. The research found a far more complex picture than that suggested by the rhetoric with student use of new technologies varying between different universities and courses. Some of the more discussed new technologies such as blogs, wikis and virtual worlds were shown to be less used by students than might have been expected. The Net generation appears if anything to be a collection of minorities with a small number of technophobic students and larger numbers of others making use of new technologies but in ways that did not fully correspond with many of the expectations built into the Net generation and Digital Natives theses.

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Research Paper

Authors

Dr Chris Jones
Dr Simon Cross
» The Open University

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2

Wed
10.50

Section two: Abstracts   **Learning innovation**

Learner technology

0101
WordPress multi-user: BuddyPress and beyond

'BuddyPress' is a new social networking layer for WordPress Multi-User (WPMU) blogs. It provides familiar, easy to use social networking features in addition to a high-quality and popular blogging platform. The University of Lincoln have been trailing WPMU since May 2008 and have been using BuddyPress since February 2009 to develop an institutional social networking community built around personalised and collaborative web publishing.

This session will demonstrate the versatility of the WPMU platform. We'll look at an installation that is enhanced with BuddyPress, Lightweight Directory Access Protocal (LDAP) authentication, mobile phone support and advanced privacy controls. You'll see how simple it is to set up site-wide RSS syndication and aggregation, enhance your blog with semantic web tools, publish mathematical formulae with LaTeX, send real-time notifications to Facebook, Twitter and IM, publish podcasts to iTunes, and embed GPX and KML mapping files. We'll also look at how to embed WordPress content in your Virtual Learning Environment and other institutional websites. The use of a temporary 'ALT-C 2009 BuddyPress' installation will be encouraged.

There will be opportunities throughout for questions and answers and participants will leave with a good understanding of the advantages and disadvantages of WordPress and the resources and skills required to provide a social networking and blogging platform in your institution.

Demonstration

Author

Mr Joss Winn
» University of Lincoln

Demonstration

Author

Mr Adam Blackwood
» JISC RSC South East

0238

Getting ready for learning, pencil case, pen, ruler, rubber, High Speed Downlink Pack Access (HSPDA) GPS mobile phone, lucky bear key fob

To many in education, the mobile phone is viewed as a minor irritation. A source of distraction and a technology of unlikely learning benefit with little place in the learning environment. Why that is incorrect and some practical evidence of this point is the intention of this demonstration and you should have more to reflect upon than just your choice of ring tone.

The barrier here is not the technology; it is simply an awareness of how to use the potential of what is already there. This is a brief examination of that potential and a look at how real learners view their use of these technologies through real case examples. The recent explosion of educationally related applications on iPhone and Android platforms will only serve to increase the student's desire and the teacher's potential for making every course a richer learning experience both inside and outside the 'classroom'.

Consider enhancing a course by providing students with topic review cards, reference materials for assignments, key course information, all of which they can view at any time in any location without any additional resources or equipment. This is one small way of improving a learning experience using the standard features on a mobile phone and basic IT skills. This new learning tool is a conduit to a wider, more dynamic learning experience. As yesterday's science fiction becomes today's science fact, are we still saying, "We are learning now, please turn off your mobile phone?" Should we not be saying," Come along to the lesson and remember to bring your charged mobile phone, a pen and paper may be useful and the lucky bear key fob is optional.

In today's lesson we might be doing some interactive quizzes; recording and annotating evidence of achievement; creating instructional videos; providing portable learning guides; referring to encyclopaedias, collaborating with students in other establishments; or having an augmented reality field trip. And we will do all of that and more, using the phone.

Kroski, E. (2008) *On the Move with the Mobile Web: Libraries and Mobile Technologies.* Published in Library Technology Reports (vol. 44, n. 5, pp. 1–48)

Tools for building research culture

0039
No internet? No problem!

Virtual Learning Environments (VLEs) often rely on students having access to the internet when working off-campus. However, many part-time students engaged in distance learning find internet access is either prohibited or spasmodic and thus are unable to access the VLE. Students in most UK prisons and members of the armed forces studying in war-torn regions are two groups who will continue to find internet access difficult, despite the government's goal of broadband access throughout Britain for 2012 (DCMS/BERR 2009). E-learning opens up new opportunities for offender learners (Levy 2004) who are discouraged by traditional learning (Irwin 2008). Yet a 2005 recommendation that internet access be provided across the prison estate (House of Commons Education and Skills Committee 2005) has not been widely implemented.

To ensure continued support for all students, not just those with internet access, alternative approaches must be developed for VLE activities requiring internet access. This paper describes an ongoing action research project that will identify alternative approaches used by Open University lecturers who have students in prison. The project supports sharing of best practice through a lecturer forum and wiki. Over seven months, fifteen lecturers related their experiences on which aspects of study were challenging without internet access. Student forum discussions, internet searches and assignment submissions were amongst the activities considered. Content analysis of the lecturer forum identified that most problem activities occur across disciplines and are not subject-specific. The findings highlighted the need to disseminate alternative approaches to lecturers new to teaching in a prison environment.

The approaches are being trialled with eleven lecturers and eighteen students on an area of study that was previously barred in prison. Both lecturers and students will evaluate the effectiveness of the different approaches at the end of the study period. Further research aims to produce guidance that can be utilised in the design of any VLE delivered course. Integrating internet accessibility issues into course design will lead to economies of scale and consistent standards, resulting in an improved learning experience for students. This paper will be of interest to anyone wishing to widen participation in technologically enabled education.

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Authors

Dr Marcia Johnson
Dr Bronwen Cowie
» University of Waikato

0162

Dream-catcher in Information and Communication Technology (ICT): creating a web of collaboration

In New Zealand the tertiary sector is experiencing a number of challenges to current teaching and learning practice through the increased diversity of the student body, issues relating to student retention and completion, and student satisfaction with learning opportunities. This presentation will describe a newly funded, two-year project to determine how different lecturers / groups are exploiting the potential of ICT / e-learning to support student learning. Using an activity theory framework, it has the overall goal of documenting, developing, and disseminating effective and innovative practice in the use of tertiary level ICT / e-learning to contribute to a research culture that informs practice and a culture of practice that uses research evidence — a major conference theme.

The project has been designed to facilitate collaboration between practitioners and researchers in four case studies, based in different disciplines, with students from varying levels of study and from diverse backgrounds and learning experiences. There is one major guiding research question — how are different lecturers / groups exploiting the potential of ICT / e-learning to support tertiary-level student learning? The first year case studies include a pre-degree bridging programme for indigenous students, two separate undergraduate degree programmes in earth sciences and finance, and a post-graduate degree course in education. Qualitative and quantitative data are being collected from students through key informant interviews, focus group discussions, a common online student survey, and other online surveys. Data will be analysed paying particular attention to key pedagogical and practice features, such as the major tools used by lecturers and students' perceptions of the impact of instructional technology on their learning, affect, and attitude.

Preliminary findings from three of the four case studies will be reported at the conference. Findings will be used to discern and distil pedagogical practices to support and build e-learning capacity during the second year of the project. It is anticipated that research findings from both years will be used to leverage pedagogical change, close participatory gaps for students and lecturers, and develop a cross-university, educational research culture that informs practice.

2

0296

A case study of the effectiveness of the electronic survey as a research tool for measuring students' experience of e-learning

This paper uses a case study approach to consider the effectiveness of the electronic survey as a research tool to measure the learner voice about experiences of e-learning in a particular institutional case. Two large scale electronic surveys were carried out for the Student Experience of e-Learning (SEEL) project at the University of Greenwich in 2007 and 2008, funded by the UK Higher Education Academy (HEA). The paper considers the case to argue that, although the electronic web-based survey is a convenient method of quantitative and qualitative data collection, enabling higher education institutions swiftly to capture multiple views of large numbers of students regarding experiences of e-learning, for more robust analysis, electronic survey research is best combined with other methods of in-depth qualitative data collection.

The advantages and disadvantages of the electronic survey as a research method to capture student experiences of e-learning are the focus of analysis in this short paper, which reports an overview of large-scale data collection (over 1,000 responses) from two electronic surveys administered to students using SurveyMonkey as a web-based survey tool as part of the SEEL research project. Advantages of web-based electronic survey design include flexibility, ease of design, high degree of designer control, convenience, low costs, data security, and ease of access and guarantee of confidentiality combined with researcher ability to identify users through email addresses. Disadvantages of electronic survey design include the self-selecting nature of web-enabled respondent participation, which tends to skew data collection towards students who respond effectively to email invitations. The relative inadequacy of electronic surveys to capture in-depth qualitative views of students is discussed with regard to prior recommendations from the JISC-funded Learners' Experiences of e-Learning (LEX) project, in consideration of the results from SEEL in-depth interviews with students. The paper considers the literature on web-based and email electronic survey design, summing up the relative advantages and disadvantages of electronic surveys as a tool for student experience of e-learning research. The paper concludes with a range of recommendations for designing future electronic surveys to capture the learner voice on e-learning, contributing to evidence-based learning technology research development in higher education.

Author

Dr Jill Jameson
» The University of Greenwich

Strategic software

Demonstration

Authors

Prof John Carroll
Mr David Cameron
» Charles Sturt University

0137
Learning to respond: a crisis management simulation

The ability of any large corporation or public institution to handle a crisis can have major economic, environmental, social or cultural consequences. One challenge that confronts educators in the area of crisis communication is how to provide cost-effective scenarios that simulate real-world events within a controlled educational environment.

This demonstration will outline computer-based simulation and role-play tools being developed to enhance the learning and planning activities of Australian Defence Force (ADF) public affairs personnel. The tool is also being used with students studying journalism and public relations, and potentially has broader educational application across a range of first response organisations such as ambulance, fire, and police.

This project aims to merge established educational drama techniques and conventions with principles drawn from the technologies of digital games, Virtual Learning Environments (VLEs) and social media. The prototype, a distributed role-based simulation application, delivers mixed media scenario content through a browser-based Flash client and Java server, allowing role-based peer-to-peer and learner-facilitator communication.

The demonstration will begin with a short contextual introduction to the project and its research aims. This will be followed by a demonstration of key design features of the system, illustrating the processes of scenario creation and delivery. The learner voice will be heard through research evidence gathered from trials to date. These interactions will be explicitly demonstrated to the participants, and the unfolding of a sample scenario will depend on their participatory decision-making. Brief concluding remarks will point participants to further information and opportunities for discussion.

A poster session proposal to supplement this demonstration has been submitted. Participants in this session will be involved in an example of cross-disciplinary applied research that aims to explore and evaluate the use of distributed role-based simulation to transform both professional practice and curricula. Participants will gain understanding of the innovations that may develop from a synthesis of well-established pedagogies such as educational drama and emerging forms such as digital games and VLEs. The participants will also be able to reflect on the potential application of such an approach to their own practice and research contexts.

0145

Dream or nightmare: Metaverse now or Web 3D v2 in a decade?

Neal Stephenson's "Snow Crash" features the Metaverse where a road connects virtual estates; a concept that inspired Linden Lab to create Second Life (SL). But SL in it's current state is a single town. No roads lead into it, no roads lead out so the Metaverse isn't a Metaverse yet. Interfaces, appliances, user attitude or adaptability evolved the Internet as we know it today into something called Web 2.0 while underlying technology, protocols hardly changed. Web 2.0 is an artificial distinction; the internet didn't change that much, we did in the way we look at it, and use it. Virtual worlds on the internet are on the rise, Linden Lab's SL currently being the foremost used in education but the Open Simulator Virtual World Server is rapidly gaining ground. Hypergrid technology allows for a Metaverse of interconnected virtual worlds, like the protocols of the internet allowed for Web 2.0 from the beginning. Open Simulator is related to SL, not something completely different and will be connected to it. Content can already be exchanged; avatars have teleported between the services. But Open Simulator allows for completely isolated, individual virtual worlds as well or hybrid solutions where parts are open to the public and other parts are not.

Hosting a virtual world within your institution has many advantages like connection speed, maintenance schedule, security and even costs. People are working on other towns, and roads between them. A Metaverse is about to be established, as the internet was two decades back. Now we have the opportunity to embrace the technology, understand it in an early stage so we can incorporate it in teaching and learning and distribute the knowledge far and wide.

This demonstration will show how to download and install Open Simulator, which is remarkably easy. It will show you some general commands and how to connect to it with the standard SL viewer. This will enable you to host your own virtual world server or your desktop, laptop or even on a USB memory stick so every student can get one.

Author

Mr Ferdinand Francino
» Glasgow Caledonian University

2

Wed
13.55

Strategic software

Section two: Abstracts

114

More institutional lessons from history

Authors

Dr Hugh Davis
Dr Leslie Carr
Dr Jessie Hey
Mr Sebastien Francois
Dr Tim Miles-Board
Dr Su White
Ms Debra Morris
» University of Southampton

0258
Sharing and the institution: choosing, changing and engaging

The JISC-funded EdSpace Project ran from October 2007 to March 2009. The Project built an institutional learning and teaching repository — EdShare. The work is a collaboration with key stakeholders, to understand and explore processes and practices within the university for the sharing of learning and teaching resources within the university. For over 10 years the teaching community has been developing the infrastructure, standards and specifications to improve practices for sharing, re-use and re-purposing.

Despite enthusiasm and determination for this work, take-up has been low. In reality, practitioners have not added their resources to repositories, nor made them visible and available, in the volume required for uptake. We have followed developments in the UK national repository, Jorum. This service has announced significant policy departures for presenting open resources. EdShare has focussed on extending sharing. This work has been aligned with institutional strategies, and change processes. We have worked with academic groups in: chemistry, computer science, geography, nursing, oceanography and art. Disciplines identified to include hard / soft; vocational / non-vocational as well as different locations across the university campuses. In seeking to increase sharing of everyday resources for learning and teaching, EdSpace has learned it is important to demonstrate respect and understanding for individuals' resources.

We have developed approaches to support contributors to EdShare in making the transition to share their resources more widely and eventually to make resources available to the whole world. We have collaborated with a rapidly expanding community of academics, teachers and specialist staff supporting teaching rising from 6 contributors during early pilot stages, to 65 distinct contributors in May 2009. In May 2009, there were 1848 separate "shares" presenting a total of 6972 separate files. Of this total, 1310 were visible to the university or the "World" and 538 restricted more narrowly.

In future research, we will explore statistical analysis of how the visibility of shares changes over time — the rate of growth in quantity of materials. All of the issues reported concern the supply of resources and the teachers' perspective, we welcome debate and discussion on the learners' / students' perspective and the questions in this area most fruitful to pursue.

Davis, H. Carr, L. Hey, J. Howard, Y. Millard, D. Morris, D. and White, S. (forthcoming) *Bootstrapping a culture of sharing to facilitate open educational resources.* IEEE Transactions on Learning Technologies

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0294

Tread softly: making secure steps towards wider adoption of pedagogically-focussed e-learning at Brighton Business School

Brighton Business School has been using e-learning for over a decade (Flowers, Newton et al. 1998). During this period, staff enthusiasm and pedagogic interest have been the principle drivers for adoption (Newton and Rospigliosi 2002; Greener, Rospigliosi et al. 2007). This has led to a widely divergent rate of adoption. Under a funded research programme, the Business e-learning Group (BeL 2003) have worked with the school's Quality Assurance director to support a more consistent and widespread adoption of e-learning as part of the school's learning and teaching strategy. The research has comprised three phases: initiation, support and feedback. During the initiation stage a series of workshops raised areas of concern that might lead to support for adoption. These workshops were both local and national, including one at ALT-C 2008 (Rospigliosi and Greener 2008). The support stage consisted of face-to-face sessions with colleagues wishing to adopt e-learning. The feedback stage was a round of interviews, in which those colleagues who tried e-learning reflected on the impact of changes.

If "innovation" is an over-used term (Wolff 2008), how can we gain the attention of academics who do not favour technology in learning? Local communities of practice can offer us a way forward, coupled with some personal entrepreneurship (Drent & Meelissen 2008) working first with teachers who are open to change (Baylor & Ritchie 2002). We have put these ideas into practice and offer in this paper a thematic analysis of the reflections of these late adopters of e-learning using Bourner's "questions as tools for critical thinking" (Bourner 2003) as a framework for evaluating reflection. The research question was: how do experienced and new academics begin to fit e-learning into their personal pedagogies, and how does this offer us insight into wider technology adoption strategies. Much of the literature is written and consumed by early adopters; will their dreams be broken by mainstreaming e-learning? Do we need a different institutional approach to encourage the mainstream? As higher education institutions in the UK and beyond mature in their access to and use of e-learning, we will all face the responsibility of sustaining its pedagogically secure use.

Baylor, A.L. and Ritchie, D. (2002) *What factors facilitate teacher skill, teacher morale, and perceived student learning in technology-using classrooms?* Computers in Education, 39 (4) 395–414

Bourner, T. (2003) *Assessing reflective learning.* Education+ training 45(5): 267–72.

Drent, M. and Meelissen, M. (2008) *Which factors obstruct or stimulate teacher educators to use ICT innovatively?* Computers and Education. 51 (1) 187–199

Flowers, S. Newton, B. et al. (1998). *Creating a faculty intranet: a case study in change.* Education+ Training 40

Wolff, W.I. (2008) *"A chimera of sorts"* Rethinking educational technology grant programs, courseware innovation, and the language of educational change. Computers and Education. 51 (3) 1184–1197

Authors

Mr Asher Rospigliosi
Dr Sue Greener
» Brighton Business School

Authors

Prof Susan McKnight
Dr Angela Trikic,
Dr Elaine Swift
» Nottingham Trent University

0314
Embedding structures for e-learning change

Nottingham Trent University (NTU) recently implemented a new enterprise level Virtual Learning Environment (VLE), moving from an existing bespoke solution that has been used at the university for the last five plus years. The challenges that face an institution wishing to adopt such an enterprise level system are many-fold. From the multiplicity of cultural attitudes existent in different areas of the institution to the mind-set that can accompany prolonged use with one particular e-learning application. (Morgan, 2003).

This short paper describes how through harnessing the customer value discovery (LibQUAL Survey 2006) methodology combined with best practice in project governance NTU established a methodology of engagement that embedded top-down and bottom-up engagement with cross-institutional stakeholders, from senior management through to practicing academics and students. The benefits of embedding such a methodology of engagement are applicable on many levels. Learners and tutors can have insight and influence over the process of e-learning development, raising issues that may need to be addressed to facilitate enhanced learning and teaching. Senior management can engage the community in developing strategic objectives that focus on institutional strengths enabling developments to progress in a sustainable manner and be more responsive to changing student requirements.

By utilising data from NTU's participation in the Higher Education Academy's Phase 1 Benchmarking Exercise (Trikic, 2008), in conjunction with early post project evaluation data and quantitative statistics, the authors aim to show that employing this methodology with a broad group of institutional stakeholders has facilitated greater engagement with blended learning and e-learning throughout all areas of the university; in academic schools, the library and central support services. The authors will describe how the methodology used throughout the implementation of the project has been further embedded within the structures of the university, for example aiding the development of minimum standards for online learning and teaching provision, an outcome of the NTU benchmarking exercise. Furthermore, adopting such a methodology of engagement can accelerate and augment a change management process, a methodology and process that is applicable for a variety of e-learning developments not merely VLEs.

Morgan, G. (2003) *Key findings: Faculty use of course management systems.* Boulder, Colorado: EDUCAUSE Center for Applied Research. Available from www.educause.edu/ir/library/pdf/ecar_so/ers/ERS0302/ekf0302.pdf [accessed on March 2nd 2009]

LibQUAL Survey (2006) Available from www.library.qmul.ac.uk/surveys/libqual/index.htm [accessed on March 2nd 2009]

Trikic, A. (2008) *Benchmarking of e-Learning at Nottingham Trent University: November 2006—April 2007.* Available from elearning.heacademy.ac.uk/weblogs/benchmarking/wp-content/uploads/NTU%20eLearning%20benchmarking%20report%20%20Final%20Version.pdf [accessed on March 2nd 2009]

Curriculum redesign

0116

Conceptualising the design of a blended learning programme for language teachers in provincial Uruguay

This paper describes the interim conclusions drawn from an action research study in which technology is being introduced as part of a blended in-service programme for english language teachers in provincial areas of Uruguay.

In a country where opportunities for teacher training and development are remote outside the capital city of Montevideo, providing access to teachers who are geographically distributed is of paramount importance. In addition, the project aims at challenging the assumption that EFL teachers should be guided by experts in the implementation of certain 'best' methods, and favours the creation of a community of self-reliant and autonomous English as a Foreign Language (EFL) practitioners.

In the light of these guiding principles, this project is informed by two main theoretical frameworks. Firstly, Kumaravadivelu's post-method framework (2006), whereby an increased understanding of situated realities can lead to changes in what is envisaged as 'possible'. Secondly, Garrison, Anderson and Archer's (2000) Community of Inquiry model, according to which successful online learning relies on the interaction between teaching, social and cognitive 'presences'.

In this project, both frameworks inform the design and implementation of the face-to-face and online components of the programme, which emerge through continuous action research cycles. A seven-month pilot study was conducted in 2008, consisting of a face-to-face programme supported by email contact, as a step in preparation for the introduction of a Virtual Learning Environment (VLE) in early 2009. Data is being gathered through journals, interviews, questionnaires and both face-to-face and online interactions among participants and with the tutor, and it is being analysed through inductive and deductive thematic analysis.

This paper focuses on the challenges involved in such analysis: first, on the trustworthy identification of teaching, social and cognitive 'presences' in participants' discourse, and second, on the usefulness of such analysis in the understanding and furthering of the processes involved in easing the transition from a face-to-face to a blended teacher development programme which will provide thinking tools to last beyond methodological fads, and assist teachers in the process of becoming autonomous and confident professionals.

Kumaravadivelu, B. (2006b) *Understanding Language Teaching: From Method to Postmethod.* London, Lawrence Erlbaum Associates

Garrison, R., Anderson, T. and Archer, W. (2000) *Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education.* The Internet and Higher Education, 2, 87–105

Short Paper

Author

Mrs Magdalena De Stefani
» University of Manchester

Author

Ms Helen Keegan
» University of Salford

0259

Social media, digital literacy and curriculum (re)design

This is an action research study of cross-disciplinary perspectives on the development of learners' digital identity and digital literacy practices in the curriculum. 21st Century skills, including multiple literacies, are recognised as being core to lifelong learning in a networked society, and there is a web of support for the development of these competencies, particularly in terms of study skills support. However, it is also recognised that learner competencies could be further enhanced by the development of new pedagogies which embed digital literacies into mainstream curriculum.

Following on from earlier work (Keegan, 2009) which described the development of the 'digital self' through the use of Web 2.0 technologies in a specific curriculum context, the author explores the pedagogical, technological and institutional challenges to be considered when introducing digital identity development, using a range of social media, into the higher education curriculum across a diverse range of disciplines. Using a combination of semi-structured interviews, questionnaires and focus groups, a series of approaches and experiences have been explored, including: attitudes towards 'soft' vs. 'hard' skills, continuing professional development, digital citizenship and industry-specific requirements. A wide range of staff including academics, educational developers, learning technologists and senior management have been interviewed in order to arrive at a deep situational understanding through identifying the perceived benefits of / barriers towards introducing digital identity / digital literacies across a range of disciplines. The learner voice is crucial, and student attitudes and perceptions have been measured using qualitative and quantitative data including participant observation, focus groups and questionnaires.

The results of the study have informed strategic curriculum development both within the author's discipline group and also at the broader university level. Pedagogical and technological considerations have enabled us to identify specific elements which are generic and transferable across disciplines (study skills), while discipline-specific practices have also been recognised and developed. The benefit of taking an action research approach to this study of digital identity, literacy and social media, is that the process of data collection has resulted in moving thinking forward (Somekh, 1995) through involving a range of stakeholders in re-thinking digital literacies and social media across the curriculum.

Keegan, H. (2009) *Digital identity, Communication and Collaboration through Web 2.0.* In The Effective Use of Social Software in Education (JISC report) p.95–99. Available from www. jisc.ac.uk/publications/publications/effectivesocialsoftwarefinalreport.aspx [accessed on February 28th 2009]

Somekh, B. (1995) *The Contribution of Action Research to Development in Social Endeavours: a position paper on action research methodology.* In British Educational Research Journal, Vol. 21, No.3, p.339–355

0312
Conflict in the virtual learning community

The concept of the virtual learning community offers an emancipated learning culture in educational research. Through its basis in liberal and democratic pedagogic values, communitarian notions such as negotiation, shared goals, historicity, identity, plurality, autonomy and participation lie at the basis of the concept. In contrast to the learning abilities of the community, there is often the potential for conflict in the attainment of the learning experience, as here defined as a blockage in reaching consensus in a decision making process either overtly or covertly. This learning community idea, as it aids and hinders learning, is not new in education, but the explicit involvement of technology has led to a focus on the influence of technical matters, which has been empirically addressed.

To address conflict in a technology-enabled learning community, a pilot study was conducted on third year undergraduate students enrolled in a computer education and instructional technology programme. This followed an action research methodology. A four week lecture was designed according to learning community principles, and students were introduced with their respective learning communities. At the end of the study, a focus group was conducted with students, an interview was done with the academic tutor, and students who did not participate in the study were asked to write an essay.

It is found that conformism, power relations and feelings among members such as anxiety, satisfaction, happiness and security play crucial role in experiencing conflict. This research contributes to the virtual learning community concept through an empirically-based conceptualisation of conflict issues as they arise in a virtual context. The implications for theory and practice are discussed.

Authors

Mrs Hayriye Tugba Ozturk
Mr Alberto Ramirez Martinell
» Lancaster University

2

Wed
13.55

Innovative technology

Demonstration

Authors

Dr Michael Vallance
» Future University, Hakodate

Mr Stewart Martin
Prof Paul van Schaik
» Teesside University

Mr Charles Wiz
» Yokohama National University

0027

Mindstorms: communication in Second Life

Researchers have demonstrated interest in using virtual worlds for science education. They provide a number of benefits, such as making science relevant to the learner and providing a means to present opportunities to engage students in authentic scientific inquiry (Niemitz et al., 2008).

Virtual worlds have the added advantage of allowing geographically separate groups of learners to interact and work together. However, de Freitas (2008) in her study of virtual worlds confirmed the need for, "developing better metrics for evaluating virtual world learning experiences" (p.11). Effective tasks must lead to specific and measurable outcomes. Students working together to program a robot to execute a specific number of discrete physical movements within a specified amount of time is one example of a measurable outcome. In a virtual world, a robot's design and program can be communicated and taught through direct manipulation of virtual objects to other students located in different geographic locations. The degree of success in the transfer of process and information can be measured by the number of physical movements of the 'taught' robot as compared to the original program. It is posited that this knowledge transfer represents a move from the commonly seen replication of existing practice towards the exploitation of the unique pedagogical affordances offered by emerging technologies—a move from first to second order change (Cuban, 1992).

Remotely located participating students in Japan communicate via Second Life (SL) in programming LEGO robots to navigate pre-determined courses. All communication is digitally captured. Personalised 'meaning' of data is analysed from follow-up interviews.

After introducing the research aims, we will login to the designed SL space and demonstrate how students utilised SL tools for communication and collaboration in the programming of a LEGO robot. The unique representation of Mindstorms blocks in SL will be manipulated and replicated. The block variables will be altered and the outcome replicated in the NXT Mindstorms software. The outcome will be a comparison of two programmed robots.

Cuban, L. (1992) *Curriculum Stability and Change.* In P.W. Jackson (Ed.) Handbook of Research on Curriculum (pp. 216–247). New York

Macmillan de Freitas, S. (2008) *Serious virtual worlds: a scoping study.* JISC publications. Available from www.jisc.ac.uk/publications/publications/seriousvirtualworldsreport.aspx [accessed on March 14th 2009]

Niemitz, M. Slough, S. Peart, L. Klaus, A. D. Leckie, R. M. and St. John, K. (2008) *Interactive virtual expeditions as a learning tool: the school of rock expedition case study.* Journal of multimedia and hypermedia,17(4), 561–580.

0037

Xerte online toolkits: content creation and distributed repositories

The University of Nottingham is working with a number of partner institutions 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 open-access repositories, and show how many of the issues involved in the creation and distribution 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 produce rich, interactive and highly accessible content quickly and easily and to seamlessly publish that content online. Collaboration with other content developers is facilitated, 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. The content is exposed to the repository through an RSS feed bearing the necessary metadata, allowing the repository to add value to the content through the provision of functionality allowing, for example, learning resources to be rated and shared. 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 — such as allowing users to rate and share the repository's content — are able to add value. We will also show how we enable content to be easily re-purposed and re-used. 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.

The demonstration will be a straightforward show-and-tell format. The demonstration relates to a JISC funded project that is about to commence, so progress over the next six months will be included in, and influence the presentation. I'd like to pose some initial questions for the audience to consider during the presentation, and to provide an opportunity for Q & A at the end.

Authors

Mr Julian Tenney
Mr Andy Beggan
» University of Nottingham

2

Wed
13.55

Second Life technology

Short Paper

Authors

Ms Maria Toro-Troconis
Prof Martyn Partridge
» Imperial College London

0075

Designing game-based learning activities in Second Life

This short paper will discuss the instructional framework implemented in the design of virtual patients in the Imperial College London region, highlighting the benefits of having frameworks and guidelines to support the design and development process of game-based learning activities (Toro-Troconis, et al 2009).

A virtual teaching hospital was created on a region developed in Second Life (SL). One group was exposed to a virtual patient in SL and the other group to an e-module. Initial data about gaming competence was obtained from 118 full time undergraduate medical students of average age (22 years). A stratified sample (n=42) was selected according to gender and high and low gamer categories and one group (n=23) was given access to the game based learning activities in SL and the second group (n=19) was given access to the same content covering the same virtual patient but delivered as an interactive e-module. Both groups completed a questionnaire which involved twenty one statements related to affective components, perceived control, perceived usefulness and behavioural components which they scored on a five point Likert Scale.

The scores for each statement related to the various attitudinal components presented were summed forming four computed variables. There was no evidence of a difference in general attitude for SL (P = 0.66) or the e-module (P = 0.86) between gender. However, the SL group shows weak evidence of a difference in perceived usefulness between genders (P = 0.0751). Females show higher medians 14 (12–15), compared to males 11.5 (10.5–13), demonstrating a more-positive attitude overall for the perceived usefulness component. This involves behaviours arising from beliefs about the advantages of using SL for learning.

This study shows interesting findings which does not highlight significant differences in attitude between boys and girls when following a game-based learning approach in SL. Learning using this delivery mode is perceived by males and females as an enjoyable activity with actually females demonstrating a more positive attitude overall for the perceived usefulness component.

Toro-Troconis, M. Mellstrom, U. Meeran, K. Higham, J. and Partridge, M. (2009). *Design and Delivery of game-based learning for virtual patients in Second Life: initial findings* in Researching Learning in Virtual Worlds (Eds: Peachey, A., Gillen, J., Livingstone, D. & Robbins, S.) Springer: UK. (In press)

Short Paper

Authors

Mr David Moffat
Ms Kathryn Trinder
» Glasgow Caledonian University

0206

If we dream it, will they come? The self-efficacy of students new to Second Life learning

Multi-user virtual environments (MUVEs) offer much potential for teaching and learning, but also present challenges. The most popular 3D MUVE today is Second Life (SL), because it is so rich in features for the manipulation of 3D objects, the design of virtual environments, and its social and communication tools. MUVES such as SL however, are merely tool kits—if they are to be useful for teaching and learning they will have to be developed for our specific purposes. Content and learning activities have to be designed and constructed to support the curriculum. This has implications for development time and the skills required by staff.

It unfortunately also imposes a greater challenge on students who have to learn to negotiate a new, complex environment before they can begin to benefit from the learning opportunities. The cost of initial acquaintance could be prohibitive. Either a significant investment in training students how to use MUVEs as a basic IT skill is required; or waiting several years until students already know how to negotiate MUVEs when they arrive at university.

We report a study in which an environment was built within SL, intending to simulate and support lecture materials and allow students to manipulate virtual objects within it to experiment. If successful, it was hoped that this activity would support their learning of an otherwise rather dry and abstract subject matter. We attempted to track the learners' sense of confidence in dealing with the whole system by means of questionnaires designed to elicit "self-efficacy," in the sense of the psychologist Albert Bandura. Questionnaires were administered pre, during and post semester to track student progress. After teaching we held a focus group and 2 interviews.

Initial exploratory coding and analysis on all 3 sets of data has been carried out. More detailed analysis is ongoing. Initial results give us an insight into how students cope with this environment. In addition, there are observations on the students' behaviour that we had not expected, and which may be of interest to other teachers intending to deploy SL as a learning environment.

0251

Virtual reality: designing learning environments in Second Life

The University of Nottingham has recently been developing a Web Campus (WC) in Second Life (SL) as an exploration of the 3D web and how it can help in teaching and learning. Based on the university's experiences in SL to date, the presentation will focus on the question of whether it is necessary or beneficial to recreate recognisable, realistic and structured settings in which learning can take place or whether more flexible and 'unrealistic' spaces can also provide immersive learning environments.

A key factor in the spread of educational content in the SL world is that the virtual classroom enables geographic barriers to be broken down and senses of community to be built amongst disperse students. As a global university this offered the University of Nottingham exciting possibilities for making students and teachers feel connected and as such the first project undertaken was to build a replica of the Trent Building, the most recognisable building from the university campuses. The creation of the building raised questions regarding whether real world replicas were of any value to a virtual 3D environment and how far real world constraints and conventions should be brought into SL.

Since then the WC has been developed further with several specific teaching areas. These range from photorealistic landscapes to less traditional areas where visitors are encouraged to explore and discover information in a less structured manner. The presentation will draw on these experiences from our first few months in a virtual world and discuss whether it is important to bring a recognisable environment into a virtual teaching world and whether it is possible to become immersed and explore an environment if it is less related to reality.

Author

Mrs Fay Cross
» University of Nottingham

Student engagement

Short Paper

Author

Mr Manish Malik
» University of Portsmouth

0016

Supporting collaborative exam revision via Google Talk and Examopedia wiki

Exams can cause anxiety in students. This may lead to reduced performance and psychological problems in students (Neuderth, Jabs and Schmidtk 2008). This paper describes a constructivist approach where students collaboratively solve past papers and tutors provide guidance and formative feedback. This is done using a wiki combined with Google Talk—a service the author calls 'Examopedia'.

This work demonstrates how to encourage deeper learning and improve performance by using Examopedia and addresses student anxiety associated with exams. So far up to 250 undergraduate and post graduate students have used Examopedia successfully. Today's students see themselves as consumers and the university as a provider of service (Higgins, Hartley and Skelton 2002). Many universities have set generic guidelines with regards to exam revision strategies and study skills. Providing support for exam revision may be seen as necessary in the current climate of 'top-up' fees. In a survey, level 2 engineering students were asked about their beliefs and strategies for exam revision. It was found that more than 95% (N=60) use past exam papers for exam revision. This was the single most dominant strategy used, but by no means the only strategy used (see Van Etten, Freebern and Presley 1997). The 'contentious learner' is not happy with just the 'correct answers' to past papers (Higgins, Hartley and Skelton 2002) and tends to value feedback on their work. Formative feedback can help foster deeper student learning (Higgins, Hartley and Skelton 2002). Thus it makes sense to use collaborative tools like Examopedia as described above. Van Meter, Yokoi and Presley's (1994) previous success with a multi-cycle, open-ended qualitative approach, followed by a quantitative check will be the basis of the methodological plan adopted here. In particular, it is expected this approach will yield a great deal of information about students' experience of Examopedia and its use in meeting the aims of this work. We only focus on past exam papers as a student strategy. A study that links the results from this and other studies relating to the impact of strategies used by students for exam revision will help in understanding the wider issues here.

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Mobile microblogging and the student experience: a study in 140 characters (or less)

We investigated the use and implications of a mobile microblogging system for recording the student experience. iPod touch devices obtained through the JISC / TechDis Higher Education Assistive Technology (HEAT3) scheme were used by two different groups of students. The first group were campus-based first year undergraduate science students, all 18–19 years old. The second group were campus-based postgraduate masters level arts students who ranged in age from 21–41. Mobile devices score highly on flexibility but other than for video and audio are poor input devices, e.g. for large amounts of text, the use of a microblogging service enabled us to assess the flexibility of a limited text based system on these devices (maximum message of 140 characters). Participants were asked to use the Twitter microblogging system regularly to record short messages describing where and what they were studying, and request or respond to support needs. Participants were recruited by a combination of face to face and online contacts, and used the device for four weeks. Student messages were tracked by RSS from a designated tag which they added to their messages and the data aggregated centrally for analysis. Participating students were required to post messages ('tweet') at least four times per day. Data was analysed with content analysis and automated services such as tweetstats.com to aggregate information relating to the interfaces used to access twitter and timelines of twitter activity by hour and day of the week.

Outcomes of this work include the following:

1. The students' broadening of the affordances technology offered them.
2. The range of technology utilised to facilitate these affordances.
3. Other related benefits — for example, in the postgraduate group, a tutor used Twitter to communicate their availability to the group, offer additional links, etc.
4. Peer support emerged as a feature of the student generated network, with students using the service not just to report on their status but to arrange meetings, share resources and revise.

As a result, the potential for a wider rollout of the approach is high; we can already provide evidence for real benefits to student groups and tutors sharing a common subject / location.

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Authors

Dr Joanne Badge
Dr Alan Cann
Mr Alex Moseley
Mr Stuart Johnson
» University of Leicester

2

Wed
13.55

Short Paper

Authors

Mr Stuart Hepplestone
Ms Helen Lyons
Mrs Louise Thorpe
Dr Graham Holden
» Sheffield Hallam University

0057

Findings from 'Technology, Feedback, Action!': the impact of technology on student engagement with feedback

This short paper shares the methodology and discusses outcomes of a 12-month research study at Sheffield Hallam University funded by the Higher Education Academy e-Learning Observatory to explore the potential of technology-enabled feedback.

This project aims to develop a deeper understanding of how the appropriate use of learning technologies can support efficient and effective feedback strategies including encouraging students to engage with their feedback and formulate actions to improve future learning.

Technical interventions explored in this study include: the use of the Blackboard Grade Centre for online publication of student feedback and marks; the adaptive release of marks through the use of a bespoke assignment handler tool which encourages students to engage with their feedback and identify key learning points in order to activate the release of their mark; and an electronic feedback wizard tool linking feedback to learning outcomes to generate consistent individual feedback documents.

Key headlines from the review of current literature into the application of technology to support both delivery and use of feedback will be outlined and key findings from the analysis of student interview data exploring how the characteristics of the application of technology described above impact upon students' engagement with their feedback will be shared. We will be looking specifically at the potential logistical benefits of convenience, ease of access and legibility of feedback delivered this way, and most importantly the potential learning benefits of directly aligning feedback to learning outcomes, fostering deep reflection and action planning for further personal improvement.

Beyond the session, the audience will be encouraged to contribute to the project wiki containing a well-developed literature review and to submit voluntary case studies of using technology to engage and encourage students to learn from their feedback. The audience will also have access to a series of good practice guides for the application of technology to deliver actionable feedback aimed at different audiences including senior managers, academic staff, learning technologists, support staff and students, developed as part of the project outcomes.

Assessment innovation

0090

Mobile assessment of work-based learning: evaluation in progress

The ALPS CETL[1] aims to develop and improve assessment, and thereby learning, in practice/work based settings for health and social care students. ALPS is an ambitious and innovative programme, aiming to implement the infrastructure to develop, deliver and manage learning content and assessments on mobile devices to students on a large scale across the 5 partner higher education institions[2] and sixteen health and social care professions.The unique aspect of the ALPS programme is that it not only delivers reusable learning objects via mobile technology, but it is designed to deliver the complete process of learning, assessment feedback and action planning; for students in practice/work based settings via mobile technology.

The evaluation of this work emphasises the student perception of their learning and assessment, in addition to their view of mobile technology to enable this process. Over a three year period, ALPS has accumulated a vast amount of knowledge and experience related to the development and delivery of mobile learning.

The focus of this short paper will be a critique of the challenges we have faced and an exploration of the true values in relation to redesigning the curriculum that have emerged to date. It will be based on the initial outcomes of the ongoing program of evaluation that is currently being undertaken.The evaluation program draws on data collected by focus groups and diaries, which reflect the student voice, in addition to a larger scale survey of user experiences delivered as a web-based questionnaire, on Bristol Online Survey. The survey data will be analysed using the SPSS programme, to determine the correlation between demographic details, general exposure to e-learning and quality of engagement with the mobile device. The qualitative data will be analysed thematically and is being undertaken in two stages, at site level and then at centre level, thus ensuring a robust validation process.

[1] Assessment & Learning in Practice Settings is a Centre for Excellence in Teaching & Learning (CETL) funded by the Higher Education Funding Council for England www.alps-cetl.ac.uk

[2] Universities of Bradford, Leeds, Huddersfield, Leeds Metropolitan and York St John University College

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Short Paper

Authors

Dr Christine Dearnley
» University of Bradford

Ms Julie Laxton
» University of Leeds

Dr Jill Taylor
» Leeds Metropolitan University

Authors

Dr Mark Kerrigan
Dr Mark Clements
Dr Andrew Bond
Mrs Yanitsa Nedelcheva
Mrs Federica Oradini
Prof Gunter Saunders
» University of Westminster

0094

University of Westminster, Making Assessment Count: a JISC funded project.

The School of Bioscience at the University of Westminster comprises 900 undergraduates taught by 50 academics. Responses from final year undergraduates in the 2007/8 National Student Survey (NSS) determined that additional emphasis should be placed on supporting students with their assessment and feedback. Initial data showed that 59% students felt they needed more feedback on individual coursework, 80% felt that feedback was essential to improving performance and encouragingly 79% used feedback to inform their studies. Interestingly, following student interviews, it was found that students' approaches for 'action on feedback' amounted to little more than simply remembering staffs' comments on their work, rather than deploying active strategies for using the feedback to improve their performance. This led the instigation of a project called 'Making Assessment Count'; funded by JISC.

The aim of the project is to facilitate more effective use of assessment feedback by students and is based on the university's Virtual Learning Environment (VLE) and our personal tutoring scheme. Current activity involves the trialling of an on-line tool ('eReflect') as a pilot with a group of 80 bioscience students and their personal tutors. Following the return of their coursework and their written feedback, students complete a reflective, diagnostic questionnaire for each piece, which automatically generates a personalised feedback sheet suggesting further actions to improve subsequent performances. Students then complete a reflective blog using the questionnaire-generated feedback as a prompt, which is commented on by their personal tutors. The tutor's comments provide another piece of feedback and are designed to direct and support students based on their individual reflections.

The pilot will be evaluated using a questionnaire and interviews of staff and students as well as usage statistics and comparisons to baseline data. The first evaluation data will be available in July. Through this process we hope that students develop skills in reflection and better understand their own learning approaches, hence equipping them for future lifelong learning within employment. Staff benefit by being able to get information on learners needs and adapt teaching practice based on actual individual student information. This didactic approach will inform the design and delivery of the curriculum thus focusing attention on the individual student.

2

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0131

Evaluating the use of the formative assessment through the virtual learning environment: the Sussex experience

'Education is not the filling of a pail, but the lighting of a fire.' W. B. Yeats

Theories of learning emphasising cognitive acquisition are being replaced by sociocultural theories. This shift in understanding foregrounds formative assessment as a method to facilitate student learning. Virtual Learning Environments (VLEs) are increasingly recognised as a vehicle to make formative assessment a viable teaching method even in larger teaching groups. Within our institution a number of tutors are taking up the gauntlet to provide formative assessments through the VLE. This is a study of such endeavours.

This short paper derives from research conducted in a research-intensive university that is increasingly recognising the importance of embedding VLE technology to improve the quality of learning and student satisfaction. The project gives an overview of VLE use for formative assessment through the institution and uses an exemplary course as a case study within which the documentation and VLE 'text' are interrogated and interviews and focus groups are conducted with tutors and students. The study will use cultural historic activity theory (CHAT) as a framework for analysing and theorising the learning practices used within the course (Engestrom, 1987). This enables the formative assessment facilitated through the VLE to be studied in detail as one element of an interlinked activity system. Thus the sociocultural context remains strongly present in the analysis.

The case study will suggest how the VLE mediates formative assessment within the course, how successful it is in contributing to learning as perceived by teachers and students, how this usage of the VLE affects the level and type of learning, and the extent to which the VLE fosters equity and inclusion.

Engestrom, Y. (1987) *Learning by expanding: an activity-theoretical approach to developmental research.* Helsinki, Orienta-Konsultit

Short Paper

Authors

Mr Paolo Oprandi
Dr Carol Shergold
» University of Sussex

2

Wed
13.55

Redesigning design

Research Paper

Author

Mr John Dickinson
» University of Northumbria

0031

Technology enhanced learning in 21st century mass higher education. Aspects of design, practice and strategy for a necessary step change

Modern day mass higher education presents challenges for both learners and teachers. Whilst digital resources, Web 2.0 technologies and online connectivity can add significantly to the learning opportunities of 21st century students, many cross programme Virtual Learning Environment (VLE) provisions remain collections of somewhat disconnected and basic materials.

In its early development, organised e-learning has generally been the province of specialist programmes and individuals championing the new technologies. However along with the adoption of technology enhanced learning, there is a growing need to develop, design and embed more fundamental and far reaching strategic approaches that embrace the core of traditional university learning and teaching programmes.

This paper focuses upon a large undergraduate core module and discusses the implications of a practice based case study which explored how traditional campus based undergraduate learning and teaching could be redesigned and enhanced by the addition of online technology and e-pedagogy. It considers aspects of both pedagogical and technological design and examines how a VLE can support learners and teaching teams. Findings showed that students were extremely positive about the mix of onsite and online learning. They saw anytime, anywhere access as fundamental, and valued the flexible access and collaborative opportunities offered by Web 2.0 and mobile resources. Considerable operational benefits arose in supporting teaching teams and student marks increased. Drawing upon lessons learned from practice, and feedback gained from students and teachers, the paper examines how the approach may inform future curriculum delivery and programme specification. It considers the contribution that blended learning may make in addressing the needs of 21st century learners in mass higher education, and reflects on the implications of the case study in terms of aspects of design, practice and strategy.

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Students, wikis and blogs

Short Paper

Authors

Dr Karen Kear
Dr Helen Donelan
Ms Judith Williams
» The Open University

0240

Students' experiences of wikis for a collaborative project: technology choice, evidence and change

In recent years there has been considerable interest in 'Web 2.0' or social technologies for education (e.g. Redecker 2009). These technologies can make learning more collaborative and attuned to students' online activities outside their studies (Mason & Rennie 2008, 5).

Wikis are one such technology, enabling groups of students to develop their own web resources (West & West 2009). Based on social constructivist theories of learning, wikis should offer many benefits; students can work together on shared documents, see each other's progress (Hemmi, Bayn & Land 2009) and help improve each other's work (Lundin 2008). This paper reports on use of wikis in a part-time course at the Open University. As part of the course, which has more than 500 students per year, students undertake a collaborative project to create a web site. In previous years the project was supported via discussion forums. Although forums are valuable for communication, they are less effective for creating shared documents (Trentin, 2009). Therefore, in 2008 a number of student groups were offered the choice between using a wiki and collaborating solely via a forum.

Quantitative and qualitative data were collected via an online survey to 167 students, to which 74 students responded. The quantitative data illustrates the proportion of students using the wiki for specific tasks, and the benefits and problems encountered. The qualitative data allows these issues to be explored in greater depth, identifying themes related to students' choices, approaches and perceptions. Particularly illuminating were students' reactions to using a new tool, and the protocols they adopted. It was found that most groups used the wiki for developing content, and the forum for communication. Students valued the wiki as a central, visible area for organising and reviewing their work. However, some students were wary of editing each other's contributions, so groups developed their own 'norms' for working in the wiki.

By evaluating an educational use of wikis from the student perspective, this paper:

- explores students' choices of technologies;
- presents evidence about these choices;
- considers how a change in technology affects students' experiences.

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2

Wed
15.45

Redesigning discipline learning

0058

"Information is the oxygen of the modern age" Integrating information technologies into politics and international relations courses

This paper reflects the experience of MA course teams in the Department of Politics and International Relations, based at the University of Leicester, after they had redesigned their curriculum and assessment methods by integrating new technologies and pedagogies into their distance learning programmes, with the aim of improving the student and staff experiences. This paper also provides an early insight into student feedback and attainment, plus staff reflections on how the new innovative approaches have impacted upon their experiences as online tutors.

In recent years there has been a significant institutional strategy at the University of Leicester to effectively integrate learning technologies into teaching and learning practices — a move that is based on a transference of research knowledge into practice — and in recent months a drive to improve the efficiency in distance learning provision. Approaches such as the Media Zoo (Salmon & Wheeler, 2006; Wheeler, 2006) and the Carpe Diem workshops (Armellini & Jones, 2008), and techniques like E-tivities (Salmon, 2002), have enabled the course teams in politics and international relations to effectively and efficiently redesign their curriculum based on sound pedagogies and innovative assessment methods.

It could be argued assessment is often the driver for redesigning curriculum. It was no different in this case as the close interweaving of new assessment modes into curriculum design was classed as important. Therefore assessed and non-assessed E-tivities sit alongside each other in the delivery of the course. The feedback from learners on these programmes shows a rating above 95% of Excellent or Very Good.

With the integration of these new technologies, building on the support of the Media Zoo and Carpe Diem strategies, the politics and international relations programmes have seen E-tivities as the driving force of learning. It is why these models of design, development and delivery are being showcased at ALT-C this year to demonstrate how simple innovations that have true value can be shared and integrated into other scenarios and settings.

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Short Paper

Authors

Mr Matthew Wheeler
Dr Simon Rofe
» University of Leicester

Author

Dr Alexander Caspar
» Eidgenössische Technische Hochschule
  Zürich

0072

LEMUREN: technology enhanced lectures in mathematics

The LEMUREN project was launched in 2007 as part of a strategic initiative of the Swiss Federal Institute of Technology Zurich to develop a blended learning approach for its mathematical undergraduate courses. Within the project, new media and technology support the modernisation, redesign and improvement of traditional mathematical lectures. Features include the illustration of processes and models for deeper understanding, modules for experimental interactive learning, and support for student exercises that take into account the individual needs of the learner.

The LEMUREN team provides substantial additional assistance that is devoted to didactical aspects and it develops tools that are essential for the use at our department, e.g. LaTeX-support in authoring systems.

The various components benefit students and teachers in different ways.

- Multiple choice tests. Students receive immediate feedback on their answers, enabling them to evaluate their performance (provided that the feedback is sufficient) and to plan further learning steps. Teachers obtain information on student misconceptions.
- Interactive visualisations. Different types of learners are supported. Beginners who are not at a high level of abstraction obtain access to advanced mathematical topics including visual insight. Stronger students can verify and deepen their knowledge in a visual way. Teachers can easily use interactive and dynamic demonstrations in class.
- Interactive exercises. Students practice personalised exercises repeatedly at an individual pace and get feedback. Teachers are relieved from the correction of routine exercises. Our approaches draw upon known concepts, for example (Bransford and Brown and Cocking 1999), (Nicol 2007), (Pellegrino and Chudowsky and Glaser 2001).

The project is evaluated at the end of every semester, with reports showing that students and teachers are satisfied overall. The acceptance is correlated primarily with how helpful the user found the components. The experience gained in applying multimedia in mathematical education in a profitable and efficient way is fundamental for the curricular embedding of multimedia into all undergraduate courses offered by our department.

Moreover, we are intensifying and expanding co-operations with respect to the technical basis of LEMUREN (i.e. the open source communities MUMIE and Moodle) as well as to other european universities.

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Pellegrino, J.W. Chudowsky, N. Glaser, R. (2001) (eds) *Knowing What Students Know: The Science and Design of Educational Assessment.* Board on Testing and Assessment. Center of Education. Division of Behavioral and Social Sciences and Education. National Academy Press, Washington, D.C., 2001

Redesigning assessment

0218

The use of scoring rubrics to assist in the management of increased student assessment choice

As the JISC 'Re-engineering Assessment Practices in Scottish Higher Education' (REAP) Project points out, maximising student assessment choice brings important learning benefits; however, giving students choice necessarily means that academic staff have to deal with a wider range of formats, topics and even submission times. For this reason academic staff are often reluctant to give students choice in their assessment because of the difficulties they face in maintaining consistency within and between markers. Increased assessment choice, while beneficial to student learning, can also increase anxiety for students. Our paper suggests that using scored rubrics in conjunction with self and peer evaluation can assist with reducing these problems.

While there has been considerable research and debate about the use of rubrics for assessment purposes in K-12 and further education, rubrics in general, and scored rubrics in particular, are not widely used in the higher education sector (see Popham, 1997; Meier et al, 2006). Research shows that scored rubrics can be beneficial in increasing intra and inter rater reliability (Jonsson & Svingby, 2007). We argue that this is particularly beneficial when assessment formats and topics are widely varied due to students having been given increased choice over what they submit and how. We show how a scored rubric can increase the level of transparency for students, and as such can offer richer and more useful formative feedback and decrease anxiety levels.

This paper presents results from the use of a scored rubric in practice on a third year literature module which aimed to maximise student assessment choice in terms of method, subject, criteria and result. The model harnesses the 'shareability' of online assessment outputs in conjunction with peer and self evaluation strategies using the Turnitin Rubric Scorecard embedded in Blackboard to manage the assessment process. The findings show that the model provides valuable efficiencies, instructional benefits and rich data which can be used for diagnostic and formative purposes. The pilot study had the unintended outcome of highlighting any of the criteria where students were consistently underperforming, information which can be fed back to improve future teaching. We suggest that this model can provide beneficial outcomes for students resulting in assessment for rather than of learning.

Jonsson, A. and Svingby, G. (2007) *The use of scoring rubrics: Reliability, validity and educational consequences.* Educational Research Review 2(2): 130–144

Meier, S. Rich, B. and Cady, J. (2006) *Teachers' use of rubrics to score non-traditional tasks: factors related to discrepancies in scoring.* Assessment in Education: Principles, Policy & Practice 13(1): 69–95

Nicol, D. (2007) *Re-engineering Assessment Practices in Scottish Higher Education.* JISC

Popham, W. J. (1997) *Special Topic / What's Wrong — and What's Right — with Rubric Schools as Safe Havens.* 55(2): 72–75

Authors

Mrs Geraldine Jones
Mrs Gabriele Edwards
» University of Bath

0305
Student digital media productions, take 2: assessment choices

Easy access to digital media and a plethora of tools for creating digital productions (e.g. 50+ Web 2.0 ways to tell a story (Levine 2007)) now make it possible for almost any student to create their own content for study purposes. Reduction in technological barriers arguably provides more opportunity for tutors to incorporate pedagogies of production (e.g. Digital Storytelling (McDrury & Alterio 2003)) into their teaching thus diversifying predominantly text based assessment practices. While the benefits of these pedagogies have been extolled and theorised (e.g. Holmes et al. 2001) there is little research that focuses on the problems of assessing learning associated with digital production activities particularly in formal settings.

This paper uses case study methodology to explore the effect of assessment approaches on student learning through a digital storytelling activity aiming to develop metacognitive skills in first year undergraduates. Students (n=18) use the voicethread website (voicethread.com) to author a story and exchange formative feedback. This contributes 40% to the summative assessment of a unit designed to stimulate engagement with ideas and practices associated with effective learning. Grounded in a socio-constructivist view of assessment (Rust et al. 2005) the design includes self, peer and tutor contributions to formative and summative components. A critical evaluation of the assessment process and outcomes is presented through an analysis of student survey and interview data, story scripts and reflective commentaries.

This 'work in progress' seeks to illuminate the following issues:

- The efficacy of the assessment process in promoting both individual and peer learning through authoring and sharing digital story productions.
- The impact on the student experience including the benefits and challenges to students making judgements about each other's digital productions.
- The extent to which the technology enabled or constrained the assessment.
- Lessons learned about designing and supporting the assessment of student digital media production activities will be discussed.

We will reflect upon what might constitute appropriate assessment for digital production activities and how this aligns (or not) with traditional higher education assessment practices. Finally we will discuss and invite comment on implications of digital productions for the student experience of assessment.

Holmes, B. Tangney, B. FitzGibbon, A. Savage, T. and Meehan, S. (2001) *Communal Constructivism: Students constructing learning for as well as with others.* Proceedings of SITE 2001, Florida

Levine, J. (2007) 50+ Web 2.0 ways to tell a story. cogdogroo.wikispaces.com/50+Ways

McDrury, J. and Alterio, M. (2003) *Learning Through StoryTelling in Higher Education: using reflection and experience to improve learning.* London:Kogan Page

Rust, C. O'Donovan, B. and Price, M. (2005) *A social constructivist assessment process model: how the research literature shows us this could be best practice.* Assessment and Evaluation in Higher Education 30(3) 233–241

Spreading resources

0172
fOUndIt? Sharing online resources to support subject communities

This paper reports the work in progress of an interview and questionnaire survey investigating students' participation in subject communities via fOUndIt, a tool for sharing links to online resources.

fOUndIt is a social bookmarking website which allows users to collect and rate online resources. Other users can then vote for the stories they find most interesting or useful. The views of around 500 Level 1 technology students are being gathered on their use of fOUndIt as part of integral course activities, focusing on their thoughts on whether the facility supports them as part of a community, and if they would continue using the facility.

The findings to date indicate that students are motivated to continue using such a facility as part of a community, or group, typically when they have a particular goal to work towards, such as an assessment. There are indications however, that a facility that allows students to share (and store) links to online resources has longevity beyond the limit of the assessment period.

Some of the key observations identified to date have raised interesting issues which encourage the authors to continue with further research. Students tend to regard their subject category as the limit of what they will read. They felt part of the community for their subject and were not inclined to read or submit resources to other categories. Furthermore, the means by which students label the resources they submit is informative. Students tend to use very specific tags to identify a resource which will be meaningful to the others in the community, but most likely meaningless to anyone outside it. This raises issues about identity and boundaries and confirms that some level of community is assumed by the participants. Many students have stated that they are more likely to read others' submissions than to submit links themselves. This has implications for course developers who may need to allocate staff to submit links at quiet times to maintain positive perceptions about the facility. Students working in smaller groups sharing resources have also indicated that they would find fOUndIt useful for future group work.

Authors

Dr Dave O'Hare
Dr Sarah Malone
Ms Sarah Darley
» University of Derby

0276

The POCKET Project: overcoming barriers to open content production

Following a range of successful international initiatives (e.g. OpenLearn, Carnegie Mellon Open Learning Initiative, MIT OpenCourseWare, Stanford Engineering Everywhere, Open Yale Courses and Rice Connexions) the Higher Education Funding Council, JISC and the Higher Education Academy initiated a £5.7 million open content funding programme to encourage the growth of open content in UK higher education. Prior to release of this call, the JISC funded POCKET Project was a UK-based initiative (funded under the Repositories and Preservation Programme) that aimed to address the technical and operational issues surrounding the production of high quality open content learning resources. The project has encouraged collaboration on the creation of Open Content between higher education Institutions and has involved transforming new and existing module material into open content that is freely available from the Open University's OpenLearn platform. This paper reflects on the processes and tools used in POCKET to create educational open content with Extensible Markup Language (XML).

This includes the creation of a template that enables the rapid prototyping of open content, and also covers knowledge gained on interoperability to facilitate the seamless transfer of content between repositories and a range of different Virtual Learning Environments. In addition we will also consider the legal, pedagogic and other barriers to engaging in open content production within higher education institutions and offer an insight for the wider e-learning community into the affordances offered by the POCKET Project approach to open content production to surmount such barriers.

Darley, M. O'Hare, D. and Malone, S. (2009) *Developing Open Content: The POCKET experience.* ALISS Quarterly 4 (2) 23–26 ISSN 17479258

Conole, G. de Laat, M. Dillon, T. and Darby, J. (2006) *JISC LXP Student expe-riences of technologies: Final report*

2

Wed
15.45

Spreading institutional innovation

0035
Transforming curriculum through development-based research and a Teaching Fellowship Scheme

This is a development-based research study which focuses on the redesign of courses / degree programs using blended learning and a Teaching Fellowship Scheme (TFS). The TFS is applicable to any university seeking to instigate pedagogical change with academics and learning technology.

In this development-based research project (Reeves, 2000), academics in diverse discipline areas participated in a TFS to transform courses / subjects using blended learning. It was focussed on curricular change and the infusion of innovation using learning technology to enhance pedagogy. It was an institutional approach to encouraging academics to utilise flexible and blended learning. It was essential that each fellow remained within their school for the fellowship as organisational transformation as an "organisational learning process extends incrementally across all levels of the organization, from the individual staff member to groups" (Roche, 2001, p. 121).

Overall, the TFS (an ongoing two-year project) has transformed teaching and learning using flexible and blended learning. It focussed on redesigning subjects and courses and has demonstrated a range of benefits at different levels. These include benefits to the teaching fellows; benefits to schools and faculties and benefits to the university community. Fellows have a number of outputs including; presentations, publications and professional development in the scholarship of teaching and learning. Schools and faculties have enhanced their understanding of blended learning through the Fellowship project. Teaching fellows have also influenced the language of flexible and blended learning through discussion, presentation, informal and formal dialogue. The first year of the action research project is almost complete and fellows have articulated the importance of having space to focus on the redesign of curricular, access and equity issues and the influence of beliefs on teaching.

The university has benefited from the development of design principles which will guide future developments in the provision of innovative and sustainable practice in flexible learning. The second year of the TFS will commence in July 2009. The learning community at the university is also benefiting from the implementation and provision of a diverse range of learning options.

Reeves T. C. (2000, April 27) *Enhancing the worth of instructional technology research through design experiments and other development research strategies.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA, USA

Roche, V. (2001) *Professional development models and transformative change: A case study of indicators of effective practice in higher education.* The International Journal for Academic Development, 6 (2), 121–129

Tierney, W.G. (1999) *Building the responsive campus: Creating high performance colleges and universities.* Sage, Thousand Oaks

Short Paper

Author

Prof Mike Keppell
» Charles Sturt University

Short Paper

Authors

Mrs Anne George
» University College Falmouth

Mr Roger Dence
Dr Alejandro Armellini
» University of Leicester

0112

Institutional partnering for effective e-learning capability development in higher education

Research projects provide important opportunities for collaboration between higher education institutions (HEIs). This paper examines the experience of two UK HEI partners with origins in Higher Education Academy (HEA) funded projects.

University College Falmouth (UCF) is an arts institution of university status with specialisms in art, design, media and culture, at an early stage of integrated e-learning development. The University of Leicester (UoL) is a traditional university with distance learning (DL) provision, a more developed e-learning capability, and an e-learning benchmarking and pathfinder pilot institution. Both institutions collaborated in an HEA Network project. UCF's focus was the reversioning of a full-time, campus-based course to part-time, DL delivery, initiated through a workshop in mid-2008 run by UoL. The new course was launched with the first students in January 2009, and comparison of the pilot DL and campus presentations will identify parameters for future course/curriculum design.

Key issues included the development/delivery process, the role and skills of associate tutors in an online setting, intellectual property rights in teacher-produced materials, dual-mode crossover benefits, and leveraging existing materials into online activities. Pedagogical innovation is a non-linear process involving different stakeholders and forms of knowledge, self-determination and ownership being critical aspects[1].Partnership benefits include the testing and adjustment of models, interventions and innovations and their likely transferability and sustainability. In a knowledge-based economy, effective, adaptive and interactive collaborations generate more sustainable change with less strategic intervention by governments[2]. In this case, the change process enabled UCF to implement a new, technology-enhanced DL programme, and provided evidence for the transferability of the model, which is central to UoL's research.

Benefits depend upon project choice and partner selection. Pedagogical change must be evidence-based if it is to be successful and point to clear improvements in student learning and to change as a means of survival[3]. Credibility, trust and commitment are key factors, together with a shared understanding of desirable changes and means to achieve them, and acknowledgement of the partners' needs, abilities and limitations. A shared belief in a 'win-win' partnership should benefit all and result in a virtuous spiral of continuous e-learning capability development.

[1] **Velho, L.** (2004) *Research capacity building for development: from old to new assumptions.* Science, Technology & Society, 9:2, 171–207

[2] **Sizer, J.** (2001) *Research and the knowledge age.* Tertiary Education and Management, 7, 227–242

[3] **Hannan, A. English, S. and Silver, H.** (1999) *Why innovate? Some preliminary findings from a research project on innovations in teaching and learning in higher education.* Studies in Higher Education, 24:3, 279–289

Spreading virtuality

0171

PREVIEW Immersive Virtual Training Environment (PIVOTE): bringing standards into virtual worlds

Virtual worlds have the potential to offer an enhanced learning experience, with high levels of engagement, immersion and collaboration. These characteristics make them an ideal medium for delivering collaborative, scenario-based learning. However, developing educational content in virtual worlds is traditionally perceived as expensive and time consuming, resulting in a resistance to the take-up of the technology and the limited availability of such content. The extra level of complexity and the additional skills needed to implement tools in these environments could make their use impractical and beyond the reach of many educators, despite the clear benefits that they offer.

The JISC-funded Problem-based Learning in Virtual Interactive Educational Worlds (PREVIEW) project has developed a system to embed educational content such as Virtual Patients (VPs) in Second Life. A key design requirement for this system, the PREVIEW Immersive Virtual Training Environment (PIVOTE), was that the tools developed should be of practical use in a learning context, and as such it should be simple to create and implement additional cases. The PIVOTE system architecture is structured so that the content of the exercises is held and created independently of the virtual world. This allows for new, similarly structured scenarios to be created without the need to write bespoke code, a set of PIVOTE objects being placed in-world without modification. By storing the content in an external web application it becomes easier to use the same content in alternative virtual worlds, reducing the dependence on a solitary platform for delivery of the exercises.

The VP content conforms to the emerging MedBiquitous Virtual Patient (MVP) standard, which is designed to facilitate the exchange and reuse of VPs between different MVP-compliant systems. The PIVOTE code is open-source, and is being trialled by a number of organisations for the delivery of training content across a range of disciplines. Five paramedic scenarios have been implemented using the system and the results of sessions with students have been positively evaluated. This presentation will describe the technical principles behind the system and how these permit multiple VPs to be implemented with greater ease than custom scripting would allow.

Short Paper

Authors

Dr Terry Poulton
Ms Sheetal Kavia
Mr Luke Woodham
» St. George's, University of London

Mr David Burden
» Daden Limited

Authors

Dr Trevor Barker
Mr Steve Bennett
» University of Hertfordshire

0194

Developing an interaction model for learning in virtual worlds

This short paper describes work in progress at our university in developing and testing an interaction model for learning in virtual worlds. We have established a virtual campus within the Second Life system where a broad range of learning and teaching activities take place. These include presenting textual, audio and video learning and teaching materials, delivering virtual lectures, providing simulations and group working areas. It has been important therefore to understand the pedagogical issues related to working and learning in this way.

My own past research in this area, over several years has related to an estimation of the cognitive load imposed by desktop virtual environments and how this affected learning (Haik et al. 2004). Several important variables were identified in many years of research and their effects measured. In the study described here, a group of 80 final year computer science students used the Second Life virtual environment in order to support their practical project work. Groups of four learners used a modified campus area in order to hold group meetings and to manage their own project work. The study reports on how the group areas were established and used by the learners, and the types of activities that took place.

Quantitative and qualitative evidence, including comparisons with other systems such as Eluminate is provided in the paper. We were able to show in this way that there were benefits to be had from the use of virtual environments for learning. Also discussed are the potential dangers inherent in this initiative related to individual differences and the cognitive burden imposed on learners.

An important focus of our research was the development of interaction models related to the affordances of working and learning in such spaces. We present our model and describe how we intend to evaluate it in future.

Haik, E. Barker, T. Sapsford, J. and Trainis, S. (2004). *Supporting users in virtual environments: augmented navigation and task performance.* Proceedings of the Virtual Reality Design and Evaluation Workshop. Nottingham, UK: University of Nottingham

Infrastructure technologies

0092
Effective technology for effective reading: innovative use of hyperlinks in online readings for low prior knowledge learners

This paper reports new research evidence exploring effective use of hypertext links when constructing online readings intended for learners with low prior knowledge. Evidence related to online reading suggests that hypertext links can often prove unhelpful for learners who do not have prior knowledge of the domain in question (Müller-Kalthoff and Möller 2006).

Evidence related to reading styles from both eye tracking data and verbal reports has been used to study student reading styles with expository texts. These have found that the reading style corresponding to most effective comprehension may best be termed 'topic structure processing' in which readers look back strategically to headings and other summary information within the text whilst reading.(Hyönä and Nurminen 2006, Hyönä, Lorch and Kaakinen 2002).These studies imply a question: Could innovative online text be constructed in which hyperlinks function to encourage topic structure processing and as a consequence aid comprehension for low prior knowledge learners?

In this study, students interact with a main text broken down into sections and presented electronically. Students are able to access summaries of each section through links supplied alongside the main text, and can navigate through summaries and main text as desired. The question of interest is whether providing linked summaries will encourage a greater level of topic-structure processing than that observed in previous studies of reading style. Topic structure processing is identified by a previously validated questionnaire.

Results of pilot work suggest that learners:

1. enjoy reading on screen;
2. in contrast to the experience of web research, appreciate the simple presentation of material; and
3. make use of the linked summaries provided.

Results to be reported will indicate whether or not the level of topic structure processing is significantly different from the level reported by studies investigating reading without linked summaries. The work is currently informing the construction of a set of readings in psychological research methods as part of a body of learning materials to be disseminated nationally through the Jorum repository which will also be briefly discussed.

Hyönä, J, and Nurminen, A.M. (2006) *Do adult readers know how they read? Evidence from eye movement patterns and verbal reports.* British Journal of Psychology 97: 31–50

Hyönä, J. Lorch, R.F. and Kaakinen, J.K. (2002) *Individual differences in reading to summarize expository text: Evidence from eye fixation patterns.* Journal of Educational Psychology 94 : 44–55

Müller-Kalthoff, T, and Möller. J (2006) *Browsing while reading: effects of instructional design and learners' prior knowledge.* ALT-J: 183–198

Authors

Dr Philip Bradley
Ms Carol Summerside
Mr Mark Agar
Dr Phil Ansell
Dr Robin Humphrey
Dr Julian Knight
Mr Az Mohammed
Mr John Moss
Dr Carys Watts
Mrs Janet Wheeler
Mr Dave Wolfendale
» Newcastle University

0152

Large scale implementation of a lecture capture system: a value added initiative?

As part of its strategy to enhance student experience Newcastle University decided that the educational benefits of event capture systems were so well articulated in literature [www.cpd.mq.edu.au/teaching/wblt/dissemination. htm] that this technology should be made available across all disciplines and degree levels within the institution.

In this presentation we focus on the educational value of the system to students and thus to the institution. Following a successful pilot, the event capture system (known locally as ReCap) was installed in 20 venues across the campus for the academic year 2008/9. In the first full semester of usage there were a total of 564 recordings and these received a total of 30,001 viewings. In order to ensure that this wide scale implementation offered true value to staff and students an educational steering group has monitored and evaluated all aspects of the process. Questionnaires were sent to all students who had had experience of the ReCap system and a small sample of staff users (6) underwent a semi-structured interview. 741 students responded to the survey and their reaction to the introduction of ReCap has been universally positive with 94% rating it as 'useful' or 'very useful'. 81% of students accessed recordings to make additional notes or revisit difficult concepts. 70% of students surveyed also used the ReCap material for revision purposes. 92% of students reported that ReCap did not affect lecture attendance though 60% had used it catch up on a missed lecture. Free text comments indicate that many students regard ReCap as the most useful technological innovation the university has provided. Staff perceptions were also positive though concerns were raised about attendance, copyright and intellectual property.

The large scale implementation of an event capture system has been seen to offer added value by the students of Newcastle University. A key feature of the system is that it is scalable with limited additional resource. The early positive feedback has encouraged the institution to consider further installations which will make the system available within 90% of taught sessions across the university. Additional institutional gains in recruitment and retention are anticipated.

www.cpd.mq.edu.au/teaching/wblt/dissemination.htm

2

Wed
15.45

Section two: Abstracts   **Infrastructure technologies**

Redesigning technology

0181
Podcasting student voices to support transition from school to university

This presentation is based on research that investigates how student-created podcasts can support new undergraduates' transition into higher education. Studies of undergraduates' satisfaction, academic performance and retention in higher education identify the critical importance of the first year for shaping their attitudes and approaches to learning (Hultberg et al 2008, Lowe and Cook 2003). Most interventions to support transition from school to university are institutionally-driven, such as courses on learning and study skills (e.g., Knox 2005). The knowledge and experience of students who have already made the transition have rarely been exploited. Such informal knowledge is known as 'hot knowledge' (Ball and Vincent 1998), 'embedded' in informal social networks (Hutchings 2003, 110). Potential HE applicants consider 'hot knowledge' to be more trustworthy than information from 'official' sources (Hutchings 2003).

Our project, Informal Mobile Podcasting and Learning Adaption for Transition (IMPALA4T) uses podcast technology to capture this 'hot knowledge' and make it available to higher education entrants. Despite the interest in and links between informal and mobile learning (Sharples, Taylor, and Vavoula 2007), little attention has been given to exploiting technology to improve peer-supported transition into higher education. IMPALA4T taps into the knowledge and experience of students who recently made their own transition. Second and third year biological sciences students were involved in developing two types of podcasts: Type A for the benefit of learners about to start their first higher education course, and Type B for those well into their first year.

Semi-structured interviews were carried with eight students who listened to Type A podcasts. Data analysis show that students' transition occurs at three levels: into higher education, into teaching and learning environment and into a new socio-cultural environment, and that Type A podcasts can assist transition by helping with re(orientation), integration, and managing teaching and learning processes. A key challenge involved in developing podcasts and using them was getting students to engage with a new form of literacy.

The presentation discusses the above findings, and will draw on data related to Type B podcasts. It offers a model to capture 'hot knowledge' to help undergraduates' transition process through podcasts.

Ball, S.J. and Vincent, C. (1998) *"I heard it on the grapevine": "hot" knowledge and school choice.* British Journal of Sociology of Education. 19: 377–400

Hutchings, M. (2003) *Information, advice and cultural discourses of higher education.* In L. Archer, M. Hutchings and A. Ross (Eds.). Higher Education and Social Class: Issues of exclusion and inclusion. London: RoutledgeFalmer, pp. 97–118

Hultberg, J. Plos, K. Hendry, G. D. and Kjellgren, K. I. (2008) *Scaffolding students' transition to higher education: parallel introductory courses for students and teachers.* Journal of Further and Higher Education, 23(1): 47–57

Knox, H. (2005) *Making the transition from further to higher education: the impact of a preparatory module on retention, progression and performance.* Journal of Further and Higher Education. 29(2): 103–10

Lowe, H. and Cook, A. (2003) *Mind the Gap: are students prepared for higher education?* Journal of Further and Higher Education. 27(1): 53–76

Sharples, M. Taylor, J. and Vavoula, G. (2007) *A Theory of Learning for the Mobile Age.* In R. Andrews and C. Haythornthwaite (Eds.). The Sage Handbook of Elearning Research. London: Sage, pp. 221–47

Short Paper

Authors
Dr Palitha Edirisingha
Dr Samuel Nikoi
Dr Chris Cane
» University of Leicester

2

Wed
15.45

Authors

Mr Peter Ruthven-Stuart
» Future University-Hakodate

0211

Free online machine translation web sites: is it time for language teachers to embrace them? An attempt to integrate FOMT into a university course

This paper describes why and how the use of Free Online Machine Translation (FOMT) websites is being integrated into two communication classes in a Japanese university. The decision to do this is controversial because the use of FOMT is argued by some to be akin to plagiarism (Somers et al. 2006, McCarthy 2004). However, the experience of the presenter with his students' often blatant use of FOMT, and the results of two experiments convinced him that teaching students about the advantages and pitfalls of FOMT is a more realistic strategy that trying to ban its use.

In the first experiment, english language teachers (n=79) misidentified 30% of the sixteen short texts shown to them: human written texts were judged to be machine translation (MT), and MT created texts were thought to be human. In a second experiment, thirteen english teachers graded a machine-translated paragraph higher than texts written by students. Thus, whilst the quality of FOMT may not have reached the levels predicted by some (Kurzweil 2000), it is capable of getting a passing grade (Somers 2006). Exacerbating this problem of identification is the ease of access that students have to a profusion of FOMT web sites, some of which can display the results of multiple translation engines all on one page.

As a pilot study, forty non-english language majors in two first-year university courses are now learning about the appropriate use of FOMT via a blended learning course. This course material includes the following topics about FOMT: how it works, its limitations, novel uses, common errors, and pre and post editing. The program is now being evaluated via a survey and interviews with students. Should the material be deemed a success, it is possible that all first year students in the university will be required to participate in the course. Although the primary focus of this research has been the use of FOMT by Japanese university students when writing english, it is believed that both the findings and learning material that have been made could provide a useful reference and template for educators in other institutions and countries.

Kurzweil, R. (2000) *The Age of spiritual machines: When computers exceed human intelligence.* New York: Penguin

McCarthy, B.N. (2004) *Does Online Machine Translation Spell the End of Take-Home Translation Assignments?* CALL-EJ Online (June) 6, no. 1. Available from www.tell.is.ritsumei.ac.jp/callejonline/journal/6-1/mccarthy.html

Somers, H. Gaspari, F. and Niño, A. (2006) *Detecting Inappropriate Use of Free Online Machine Translation by Language Students—A Special Case of Plagiarism Detection.* Paper presented at the 11th Annual Conference of the European Association for Machine Translation—Proceedings, Oslo, Norway. Available from www.mt-archive.info/EAMT-2006-Somers.pdf

2

Wed
15.45

Sponsor sessions

Blackboard: bring campus life to students on the go with Blackboard MobilEdu

Institutions are looking for new and innovative ways to bring campus activities to their students on the go. With students connecting with each other and with their schools through mobile devices, you can now give them constant access to campus life through Blackboard MobilEdu.

Blackboard is a leading provider of enterprise learning software applications and related services, enabling educational innovations everywhere by connecting people and technology and now connecting on the go through MobilEdu. The platform helps engage your students, alumni, community and prospective students with innovative mobile applications.

With a growing client base, including Stanford and Duke Universities, MobilEdu is reaching thousands of students every day. These institutions have customized the platform to meet the needs of their students and are delivering easy mobile access to campus life activities. **Key benefits of the MobilEdu platform** include:

- Ability to deliver a rich set of campus life services and content to mobile devices
- Reach on-the-go millennial students and keep alumni in the know
- Brand and customize the mobile platform for your institution
- Providing quick access to the platform with a short implementation and set-up schedule

Huddle: web 2.0 in education

Interested in web 2.0? Learn how web 2.0 technologies are enhancing the teaching and learning experience and how you can engage students in learning by encouraging social networking and collaboration with their peers and tutors.

Ufi/Learndirect: Why e-learning is more than the sum of the parts

A look at the inside of learndirect, the worlds largest e-learning platform, some results form practical research on learner identity assurance and an incite on into why we believe that it is the magic of people, process and technology that can transform the educational landscape.

Thursday sessions

E-learning sustainability

Symposium

Authors

Dr Cathy Gunn
» University of Auckland

Ms Linda Creanor
» Glasgow Caledonian University

Prof Mike Keppell
» Deakin University

Dr Richard Hall
» De Montfort University

0176
Who is responsible for e-learning sustainability?

Completion of a study of factors that challenge and enable the sustainability of e-learning initiatives within New Zealand tertiary institutions coincided with publication of the Ithaka Report: Sustainability and Revenue Models for Online Academic Resources (Guthrie et al 2008). Prominence in the literature identifies sustainability of such initiatives as a common challenge across the tertiary sectors in many countries.

The challenge is a complex one that is context specific at the level of implementation, although a common raft of barriers and enabling factors apply to most situations. A growing body of knowledge features strategies that have proved successful in various institutional contexts to guide action planning in others. However, a major point of difference arises in opinions about where responsibility for action to achieve sustainability lies. Is this an additional role for practitioners and project managers as suggested by Guthrie et al (2008)? Is it a management responsibility as part of the e-learning strategy implementation agenda? Or does the current debate point to an emergent, hybrid role of learning technologist, manager and practitioner that remains unclaimed and is regarded by all stakeholders as someone else's remit?

A lively symposium at ALT-C 2008 addressed different perspectives on the value of centrally driven e-learning initiatives versus those arising from the grass roots experience of individuals or small groups of discipline based practitioners. The proposal for 2009 seeks to broaden discussion of this topical area by addressing the question: whose responsibility is it to drive the e-learning sustainability agenda?

High attendance and positive feedback from the 2008 event support the use of a similar format to further the debate. Panellists will represent three different cases; the practitioner/project manager role; institutional management responsibility; and the hybrid role of learning technologist and 'broker' of other stakeholder interests. Those attending the session will be invited to contribute their own experience and opinions to the debate. The outcome of the discussion will be summed up with a vote on proposed answers to the opening question, and collation of key points raised during the debate.

Guthrie, K. Griffiths, R. et al. (2008). *Sustainability and revenue models for online academic resources: An Ithaka report*. Strategic Content Alliance. Available from www.ithaka.org/strategic-services/sca_ithaka_sustainability_report-final.pdf [accessed on January 22nd 2008]

Inclusive blended learning design in higher education

0236

Inclusive blended learning design in higher education: a problem-based learning workshop putting theory into practice from a teaching perspective

In 2006 Rainger and Draffan produced "A model for the identification of challenges to blended learning", which modelled two perspectives or experiences, that of the learner and that of the teacher. The Disabled Learners' Experiences of E-learning (LExDis) Project championed research into the learner experience using a participatory research method. Rainger continued his work and design-based research supporting and developing the teaching perspective.

The workshop builds upon past research and forms part of a doctoral research project investigating the teaching of inclusion and accessibility within the context of blended learning in higher education. A short presentation from E.A. Draffan will set the context and demonstrate the need for inclusive learning design based upon evidence from the LExDis project. The majority of the workshop will consist of a hands-on learning experience (facilitated by Peter Rainger) for the participant that explores the issues through the use of 'tools' within the context of a problem-based learning activity. This workshop will concentrate on discussion relating to the usefulness of the tools, models, conceptions and learning experiences that impact on technology enhanced learning during the design, development and delivery stages.

By participating in the workshop attendees will gain a basic understanding of principles of 'inclusive learning design' and gain awareness of strategies employed by learners thereby gaining experience and understanding of both sides or perspectives of the model (that of the learner and that of the teacher).

Draffan, E. A. and Rainger, P. (2006) *A model for the identification of challenges to blended learning.* ALT-J, 14 (1). pp. 55–67

Rainger, P. (2007) *Key2Access Ltd, Inclusive Curriulum Design Framework.* Available from www.inclusivelearningdesign.com

Draffan, E. A. et al. (2007) *University of Southampton, LExDis project.* Available from www.lexdis.org.uk

Design-based Research EPSS, The University of Georgia. Available from projects.coe.uga.edu/dbr/index.htm

Workshop

Authors

Mr Peter Rainger
» University of Birmingham

Mrs E.A. Draffan
» University of Southampton

Immersive games

Symposium

Authors

Mr David White
» University of Oxford

Dr Nicola Whitton
» Manchester Metropolitan University

Dr Juliette Culver
» The Open University

Mr Alex Moseley
» University of Leicester

0231

More questions than answers: exploring the real educational benefits of immersive game environments

A panel formed from practitioners and researchers at the leading edge of immersive educational gaming will address some of the big questions in the field from a variety of viewpoints, drawing on experiences and evidence from their own work and research in educational game design. Immersive educational gaming (for example the use of massively multiplayer online role playing games [MMORPGs] and alternate reality games [ARGs]) is still a relatively new field and best practice in the area has yet to be established. For this reason, the symposium aims to explore what is already known, consider what can be learned from these experiences, and separate the true learning potential from any pitfalls or hype that surround the use of games in education.

The panel comprises David White (University of Oxford: World of Warcraft / MMORPGs research); Nicola Whitton (Manchester Metropolitan University: ARGOSI project and games research); Alex Moseley (University of Leicester: Great History Conundrum, Operation Sleeper Cell and games research); Juliette Culver (the Open University: Operation Sleeper Cell charity ARG director).

By attending this symposium, participants will:

- be aware of the pedagogic potential and pitfalls of immersive games for learning;
- appreciate the issues that arise with the use of games in further and higher education practice;
- gain an insight into current debates in the use of immersive games in education;
- through participation, help to inform and shape further research and practice in this relatively new area.

The panel will consider seven broad themes:

- Engagement (including learner voice)
- Assessment, Inclusion (mass market or specialist)
- Accessibility (including barriers to use)
- Focus (academic / support contexts)
- Pedagogy (benefits to learners)
- Autonomy (expectations / assumptions with regard to students)

Audience participation will be encouraged in two ways: first, the audience will be asked to consider the range of questions within a theme, and encouraged to comment and debate the issues from their own perspectives; second, a twitter backchannel will be encouraged and displayed behind / referenced by the panel as the discussion takes place. In this way, the symposium attempts to open up this emerging research area, crystallise understanding, and prepare the landscape for further research and practice.

Please help me study

0274
Head in the cloud, PLEase help me study!

Based on research undertaken at the University or Leicester, this workshop will explore how "cloud"-based Personal Learning Environments (PLEs) and e-portfolios can be used in the Personal Development Planning (PDP) process to help learners develop and improve skills that will be useful in both a lifelong learning and work context.

The workshop will explain and explore the key concepts of how cloud-based Web 2.0 tools, such as portals, microblogging and social bookmarking, can be used to construct PLEs and how associated technologies, such as mobile devices, can be used to collate evidence for PDP. The workshop will also explain the connections between PDP evidence, e-portfolios and the role of PLEs in lifelong learning. Participants will be invited to propose and build their own PLE and e-portfolio and devise ways of connecting them. The workshop will enable participants to develop knowledge of "cloud" tools and will provide them with the skills to create their own PLEs and e-portfolios and to deliver the methodology for embedding within their own institutions. Furthermore, participants will discuss the various ways these can be used in a lifelong learning context.

The structure of the workshop will include an overview of the basic concepts involved and a group activity where users will be divided into teams to propose and build their own PLEs. This will be followed by a discussion on the different approaches taken by each team. The teams will then conceptually build an e-portfolio collating evidence from their chosen PLEs. The workshop will end with a group discussion on the different approaches explored by the teams, their pros and cons and ideas on how to apply them in real learning scenarios.

Workshop

Authors

Mr Matthew Mobbs
Dr Richard Mobbs
» University of Leicester

Mr Ricardo Torres
» Universitat Politècnica de Catalunya

New learner systems

Short Paper

Author

Mr David Sowden
» University of Hull

0062

Enabling a personalised experience for lifelong learners

Like many other lifelong learning networks, the Yorkshire & Humber East Lifelong Learning Network (YHELLN), faces several challenges in the delivery of Information and Communication Technology (ICT) enabled services to its constituents. The iCaboodle project addressed a number of these challenges related to enabling a personalised experience for learners. The project involved introducing a flexible framework for the delivery of online services and content from partner institutions, including Virtual Learning Environments (VLEs), built around a learner's digital identity. It therefore relied upon implementing a digital identity management solution that gives a comprehensive view of the learner.

In addition to partner's systems, learners make extensive use of external tools and services. A recent survey within the University of Hull indicated that many learners use social networking tools directly related to their learning experience. Add to this the variety of institutional systems to support learning, sometimes at more than one institution, and the learner can face a significant overhead in managing the ICT enabled aspects of their learning experience. This input and critical appraisal from learners has been crucial in developing system iterations throughout the life of the project. ICaboodle validated a series of widely used and mature open-source software components, contributing to a range of tested, ready to use tools, such as a Personal Development Planner (PDP). The goal was to reduce the extensive customisation normally required by deployments of this nature and allow individual personalisation.

One means of managing the ICT experience lay in establishing a multi-institutional web-based portal, with the capability of presenting "dashboard" views of differing learning environments, together with a range of other tools and aggregated external services and applications. For the learner, iCaboodle offers a coherent anchor point for part of a lifelong learning journey. For partners, it offers a shared framework to enable personalised web based content and services. Whilst a consistent interface is offered to learners and other constituents, the portal framework also enables flexibility of branding on a per-institution basis. The result is a more personalised experience for the learner, placing information and content management firmly under their control.

Reed, J. and Sowden, D. (2008) *E-systems development within Lifelong Learning networks.* Available from www.lifelonglearningnetworks.org.uk/documents/document378.pdf

Haywood, M. Nixon, I. Bell, R. and Burke, J. (2009) *Evaluation and Review of Technical Developments to Support Lifelong Learning*

Short Paper

Authors

Ms Sarah Cornelius
Dr Alastair Gemmell
Mr Phil Marston
Ms Chris Aldred
» University of Aberdeen

0063

Learners' experiences of real-time simulation activities using SMS text messaging

Imagine you are a local utilities manager who must make quick decisions to prevent a flooding disaster. Or perhaps you are a professional educator developing a new mentoring relationship to support a tutor through their teaching qualification. In both scenarios your mobile phone and SMS messaging would be an important channel of communication as the situation unfolds, allowing you to be contacted anywhere and enabling you to make quick decisions to help manage the situation.

Mobile phones offer tremendous opportunities for simulating real-world, real-time experiences. Learning activities reflecting the scenarios outlined above have been developed during which learners are sent SMS messages at irregular intervals over a three day period. Some messages provide information about the situation, others require a decision. Responses are returned by SMS or email and determine the path the simulation takes next for each individual. Learners use their own phones and the activities encourage rapid assessment of information and application of previous learning. Both simulations have been evaluated to explore not just technical and implementation factors, but also wider contextual issues. Mixed methods studies were undertaken to obtain evidence from learners about their experiences and the realism of the simulation.

Employing a questionnaire survey and interviews with learners, course tutors and educational technologists, the research aims to uncover issues related to control, context and communication such as:

- How do learners feel about receiving study-related messages at potentially inconvenient times?
- How do learners feel about using their own mobile phones for learning?
- Was the activity undertaken independently or were phones and other technologies used to allow interaction with peers before decision making?
- Did learners favour SMS or email communication?

The findings will provide an insight into learners' attitudes towards mobile learning and the context within which this takes place. They will be set in the context of other work on learners' experiences of learning through simulations. They have relevance for the future development of mobile simulation activities and the application of real-time, real-world learning in other domains where learners use their own resources and engage with learning outside normally expected contact times.

0141

An appreciative inquiry of a developing community of learning technologists

Authors

Dr Rhona Sharpe
Ms Patsy Clarke
» Oxford Brookes University

With the rise of social networking tools and participatory media, it has become all too easy to create a community around a particular field. This project examined the process of developing such a community using an appreciative inquiry approach. The community was initially created from 40 institutionally based teams from 28 UK higher education institutions and rose to include over 200 members. The community was supported for 28 months with face-to-face and online events and a broad range of social media tools (including Elgg, Second Life, Elluminate, Moodle, Twitter, Flickr), their use modelled and facilitated by expert users from the support team.

The programme was keen to adopt a research led approach, where the whole programme had a research culture which informed its practice. The appreciative inquiry therefore ran throughout this process, encouraging a culture where evidence from the inquiry was used to inform and direct the community based model of support. It asked positive questions such as 'what makes this community effective?' and 'what is the value of this community to you'? The iterative nature of the inquiry enabled the collection of data at multiple points over time and in various formats. The result was a large, rich dataset from 25 separate data collection points. Each was reported back to the community and the project management team to assist with forward planning of support activities including the use of social media.

Based on the voices and stories of members, this paper outlines how the community developed and what its members found of value. The inquiry

allowed us to make visible a wide variety of views on the experience of community engagement from full participation to marginalisation. The community provided tangible benefits for participants. There was evidence that the community provided networking opportunities, social events and opportunities for sharing which contributed to the development of a community which had a culture of openness. The value of the community to its members was seen to be opportunities for professional development, informal networking, collaborative team formation and crucially, improved practice.

Short Paper

Authors

Ms Heather Conboy
Dr Sarah Younie
» De Montfort University

0257

Resistance, barriers and empowerment in the pedagogical use of emerging technologies: a comparative study

With over a decade of investment into teacher professional development in e-learning, some previously identified barriers to the uptake and integration of new technologies in education have been overcome. Yet, new challenges are emerging, principally in the form of non-institutional technologies over which, it has been argued, institutions have less control. Whereas it seems clear that a wider range of technologies are being used and students' expectations of e-learning are changing, some commentators have noted that innovative use of emerging technologies occurs in pockets only, often falling short of learners and funders' expectations.

This paper questions the interplay between resistance and barriers to uptake, by taking 'educator learners' as its focus and by building on previous literature, which has identified a range of factors affecting use of technologies including: personal preferences and beliefs; pedagogical; organisational; and situational context factors. The authors report on findings from a comparative study of educators' attitudes and perceptions of emerging technologies. The research draws on two main datasets: a recent national survey and selected case studies in schools and academic developers in higher education; and detailed interviews and a survey across a range of disciplines within one higher education institution. The authors employ a comparative analysis, using both qualitative and quantitative methods, to draw out similarities and differences between school and higher education perspectives. They highlight instances where recommendations in the literature do not seem to accord with the case studies. The focus, therefore, lies in recent changes, particularly brought about by non-institutional technologies associated with Web 2.0. In particular, do staff feel pressured into using technologies in their teaching? In what ways are they meeting student needs and to what extent do they feel that the learner voice can be accommodated through the use of different technologies?

The emergent findings suggest that in the past, reviews of barriers and incentives for staff have focused on the range of technologies, rather than stressing the potential for integrating 'bottom-up' strategies and pedagogical issues that may be more appropriate for the changing learning technology environment.

Herding institutional stakeholders

0290

Herding cats? Engaging stakeholders in complex institutional change projects

There is a growing trend towards institutions running large scale institutional change projects using technology to ensure a greater impact and wider improvement of the learning experience for students. Ensuring true stakeholder engagement in these projects is therefore vital, but hugely challenging due to the diversity and complexity of the stakeholders involved—from senior management to teaching and support staff and students. Whereas technology projects can often be managed in linear way with clearly defined milestones, change management projects are much more complex demanding flexibility and agility from the project team to deal with new issues raised by stakeholders at any time in the project.

Successfully working with stakeholders over a long period of time involves development of a variety of strategies and techniques. This symposium explores how five institutional change projects (from City University London and the Universities of Cardiff, Birmingham City, Cambridge and Greenwich) have all utilised a variety of techniques for stakeholder engagement. All the projects featured are part of the JISC four year sponsored programme on institutional approaches to curriculum design. Each project is responding to an institutional strategic imperative to review curriculum design and development and use technology to improve these processes. The implementation of new processes will inevitably involve large scale institutional change. A particular issue is how to bridge the gap between a top-down directive for a strategic change and bottom-up recognition that such a change is necessary albeit at a more local, and perhaps less transformative, manner.

From the perspectives of our different institutions, we will debate a variety of proposed approaches, and invite delegates' ideas and comments on the following issues:

1. The importance of stakeholder engagement to a change project
2. Understanding stakeholders' success criteria
3. Novel methods of engaging stakeholders, including the pros and cons of new technologies, from video booths to Twitter
4. How to secure continued engagement over time

This work has come out of CAMEL style events where the projects have worked together to identify major issues of concern and shared approaches how to overcome these challenges.

Symposium

Authors

Dr Susannah Quinsee
Prof Stephen Brown
Dr Pam Parker
» City University London

Mr Clifton Kander
» University of Greenwich

Ms Harriet Truscott
» University of Cambridge

Mr Paul Bartholomew
» Birmingham City University

Mr Andy Lloyd
» University of Cardiff

Choice and change in OER

Workshop

Authors

Dr Tina Wilson
Dr Patrick McAndrew
Prof Grainne Conole
» The Open University

Mr Richard Miles
» Leeds College of Art and Design

0282

Contributing evidence of choice and change when using Open Educational Resources

Open Educational Resources (OER) provide a vast array of free course material. The Open Learning Network (OLnet) is a research project, which started in March 2009 and is funded by the William and Flora Hewlett Foundation. A major technique adopted in OLnet to uncover what has been achieved with OER (by MIT, OpenLearn, OpenER and others) is to undertake a host of facilitative workshops. This particular workshop explores the reuse of content already published on OpenLearn (as part of the CAPITAL project funded by Becta).

The workshop will involve the audience in considering how they would reuse OER in their own teaching practice. The session starts by exploring the steps involved in:

- Reusing OER and,
- Researching OER in terms of techniques and tools.

This is followed by a brief discussion from an academic who reused OER in their educational practice. The academic will discuss how they developed and changed the design of their teaching materials to accommodate OER and students' reactions to this material.

Participants are invited to take part in activities designed to engage them in the process of reuse.

- Exploring steps involved in reusing and researching OER (presentation + discussion)
- Accommodating OER in teaching practice (10 mins institutional presentation)
- Group work & discussion—how to reuse OER and assess the quality of OER.

In the group work section participants are given the opportunity to share their own views and experiences whilst working together to reuse a sample OER. The audience will be split into groups to carry out the analysis steps of reusing OER through examining an extract of candidate OER material published on OpenLearn. Tools and guidelines will be provided to help this stage. This will be followed by a discussion of benefits, limitations and issues. By the end of the workshop participants should:

1. Have an understanding of the steps involved in reuse of OER content within teaching practice.
2. Have hands on experience of tools and guidelines.
3. Be able to plan and describe relevant ways to reuse OER with students.

Online identity

0208
Distribute this: online identity, presence and practice

This practical workshop will engage participants in an overview and discussion of digital or online identity, particularly in relation to developing, connecting to and participating in distributed learning communities. Participants will be introduced to and supported in using a range of online tools and services to establish an online identity. Participants will be supported in using and syndicating micro-blogging, social bookmarking, photo and video sharing sites. The wrap up session will allow us to raise issues including privacy, professionalism, search engine optimisation and folksonomy (Van der Wal 2006) in the context of their own examples. Participants will explore the most effective approach to building presence and networks. By the end of the session participants will have a practical and strategic appreciation of online identity and presence management that can be used to support individuals, projects or organisations.

Workshop format

- **Presence, Technologies and Getting Noticed**

  Presenter 1 will give a brief presentation framing identity and presence in an online context, with examples from the Emerge Community and ALT-C 2009 Crowdvine. Presenter 2 will conduct a brief walkthrough of the technologies used in the session, demonstrating their potential and risks with evocative examples. Presenter 3 will demonstrate the power of aggregation and the benefit of a strategic approach to Search Engine Optimisation in online identity management.

- **Applying the Technologies**

  If they wish, participants can bring personal CVs or project documentation but may use a social or anonymised identity if they prefer. They should ensure that they have access to a Web mail account.

  The workshop presenters will work with small groups to support their use of the following technologies:

  a. Microblogging — twitter
  b. Photo sharing — Flickr
  c. Blogging — wordpress or Lifestream — using Friendfeed or iGoogle
  d. video site blip.tv — Video sharing
  e. Social Bookmarking — delicious

- **Putting it all together**

  In the wrap up, we will showcase aggregations of participants' work and discuss possible future directions / issues and questions that arise, face to face and on twitter using #disthis tag.

Van der Wal, T. (2006). *Folksonomy to Improve IA*. Paper presented at the OZ IA, Sydney, Australia

Workshop

Authors

Ms Josie Fraser
» josiefraser.com

Ms Frances Bell
Ms Helen Keegan
» University of Salford

Mr James Clay
» Glocuestershire College

Author

Mr John Traxler
» University of Wolverhampton

0288
Students and mobile devices: choosing which dream

There is a crisis looming and a paradox emerging. Many educators advocate, promote and encourage the dreams of agency, control, ownership and choice amongst students whilst educational institutions take the responsibility for provision, equity, access, participation and standards. The institutions traditionally procure, provide and control the technology for learning but now students are acquiring their own personal technologies for learning and institutions are challenged to keep pace. These allow students to produce, store, transmit and consume information, images and ideas; this potentially realises the educators' dream but is for institutions potentially a nightmare, one of loss of control and loss of the quality, consistency, uniformity and stability that delivered the dreams of equity, access and participation. This paper traces the conflicting dreams and responsibilities.

2

Thu
09.00

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0076

User technologies and the future mixed economy of education

A JISC funded project has been exploring the likely impact of user-owned and Web 2.0 technologies on the future of education. The outcomes of the work indicate that, in the mixed economy of education, a growing proportion of educational resource and technology costs will be met by the learner and through the use of web services. The justification for this view was based on observing the rapid development of the freely available affordances of the Internet, coupled with the ubiquity of personal computing and mobile technologies. The objective of the project was to draw conclusions about the future direction of technology enhanced learning and to test the view that the existing educational paradigm could be radically changed by such developments.

The eTutor project examined the proposition that the future delivery of e-learning would be through online learning environments constructed from freely available Web 2.0 services. It also investigated the availability of high quality learning resources freely available on the internet and the ability to exploit them through a discovery learning pedagogic approach.

The eTutor project constructed and tested two different online learning environments using social networking aggregation sites populated with widgets providing communications, document handling and resource management functionality. It used a visual mapping interface and user-adaptable customised search engines to enable learners to apply discovery learning techniques to globally harvest the resources they needed to achieve their learning objectives. The project involved trialling the online learning environments, the discovery learning pedagogic approach and the web sourced materials with learners and evaluating the effectiveness of the learning experience.

The conclusion drawn from the project was that a major contribution to the

Short Paper

Authors

Mr Haydn Blackey
» University of Glamorgan

Prof Tony Toole
» Swansea Metropolitan University

future resourcing of learning generally may be achieved through the use of user-owned technologies and web-sourced learning resources. A further conclusion was that this pointed to the future globalisation of education, resulting in significantly different roles and responsibilities for learners, tutors and institutions.

Short Paper

Authors

Dr Ana Carvalho
Dr Cristina Aguiar
Ms Romana Maciel
» University of Minho

0161

A taxonomy of podcasts and its application to higher education

In this paper we address the uses of podcasts in higher education and we propose a taxonomy for podcasts. We describe results obtained within a study that is being conducted at the University of Minho, in Portugal, focusing on the use of podcasts and their implications towards learning in higher education. The project involves 6 lecturers from different scientific domains — Education, Humanities, Social Sciences, Engineering and Biology. These lecturers created 84 podcasts in order to support their undergraduate and master courses during the 1st and 2nd semesters of 2007/2008 and the 1st semester of 2008/2009. A total of 479 students — 372 undergraduate and 107 master students — were enrolled in 20 courses. Some students were not only podcasts listeners but they also had the challenge and the opportunity to create their own podcasts (34 episodes). Podcasts were classified in different types (Informative, Feedback, Guidelines and Authentic materials), styles (formal or informal), length (short, moderate or long), purpose and medium (audio or video), according to a taxonomy proposed by the authors. The majority of podcasts was Informative (76), followed by podcasts with Feedback (30), Guidelines (9) and Authentic materials (3). Most podcasts were short (102), mainly in informal style and only 21 were vodcasts.

Students´ reactions about podcasts implementation in higher education revealed their acceptance of this new tool and their receptiveness to podcasting in other courses. The majority of students found podcasts a positive resource in learning, although they did not explore one of the main advantages of this technology — portability. Lecturers also found podcasting a useful resource for learning and recognized its great potential as a pedagogical tool but stressed that it is too time consuming.

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Research Paper

Authors

Ms Sarah Cornelius
Dr Carole Gordon
Dr Margaret Harris
» University of Aberdeen

0055

'Unfettered expression of thought?' Experiences of anonymous online role play

Advocates suggest that anonymity allows all learners to have an equal voice in a learning environment, and that it encourages participation. This paper explores tutors' and learners' experiences of an anonymous, synchronous role play activity conducted using online discussion forums. A qualitative study was undertaken to investigate the experiences of five groups of learners and four tutors. Data were obtained from an online questionnaire and interviews with students and tutors.

The findings reveal a huge diversity in responses to the activity. Learners' emotions before the activity ranged from 'confident' to 'panic'. Afterwards many stated that 'anonymity' was the best thing about the activity, suggesting that it 'loosened inhibitions' and allowed 'unfettered expression of thought'. At the same time, some respondents admitted trying to guess the identity of participants, and played their roles with varying degrees of conviction and engagement. Some participants may even have refrained from playing any part in the activity, hiding behind their anonymity. For tutors issues of control were significant and issues of facilitation were raised, although inappropriate behaviour was rare.

This study has revealed the diversity of learners' responses to online role play, and the generally positive attitude towards anonymity. It also highlights the potential for anonymity to contribute to inequality in participation and raises the question of whether genuine anonymity can be useful or achievable. Key findings with significance for future implementation of similar role play activities are presented here.

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0084

Between analysis and transformation: technology, methodology and evaluation on the SPLICE project

This paper concerns the ways in which technological change may entail methodological development in e-learning research. The focus of our argument centres on the subject of evaluation in e-learning and how technology can contribute to consensus-building on the value of project outcomes, and the identification of mechanisms behind those outcomes. We argue that a critical approach to the methodology of evaluation which harnesses technology in this way is vital to agile and effective policy and strategy-making in institutions as the challenges of transformation in a rapidly changing educational and technological environment are grappled with.

With its focus on mechanisms and multiple stakeholder perspectives, we identify Pawson and Tilley's 'Realistic Evaluation' as an appropriate methodological approach for this purpose, and we report on its use within a JISC-funded project on social software, SPLICE (Social Practices, Learning and Interoperability in Connected Environments). The project created new tools to assist the identification of mechanisms responsible for change to personal and institutional technological practice. These tools included collaborative mind-mapping and focused questioning, and tools for the animated modelling of complex mechanisms. By using these tools, large numbers of project stakeholders could engage in a process where they were encouraged to articulate and share their theories and ideas as to why project outcomes occurred. Using the technology, this process led towards the identification and agreement of common mechanisms which had explanatory power for all stakeholders.

In conclusion, we argue that SPLICE has shown the potential of technologically-mediated Realistic Evaluation. Given the technologies we now have, a methodology based on the mass cumulation of stakeholder theories and ideas about mechanisms is feasible. Furthermore, the summative outcomes of such a process are rich in explanatory and predictive power, and therefore useful to the immediate and strategic problems of the sector. Finally, we argue that as well as generating better explanations for phenomena, the evaluation process can itself become transformative for stakeholders.

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Research Paper

Authors

Mr Mark Johnson
Mr Peter Lager
» University of Bolton

Mr Pete Whitfield
» Manchester College

Mr Bill Pollard
» Cheadle and Marple 6th Form College

Mr Rupert Ward
» Oldham University Centre

Mr Graham Hall
Ms Miranda Edwards
» Coleg Harlech

More tale of VLEs

Short Paper

Author

Dr Steven Malikowski
» St. George's, University of London

0278
Factors related to Virtual Learning Environment (VLE) use over three years

Virtual Learning Environments (VLEs), such as Moodle or Blackboard, are a common resource in higher education, worldwide. This presentation will focus on VLE use in the United States (US) and United Kingdom (UK). In both countries, much has been written about how VLEs should be implemented, how they should be used, and how they will be used (Sharpe, Benfield, and Francis 2006; Ansorge and Bendus 2003). These studies have provided helpful information, but few studies have analysed how VLEs are actually used and how use changes over time (Morgan 2003). One exception in the UK analysed broad issues in VLE use (Browne and Jenkins 2003). These issues included; the number of VLEs used, if use was supplementary, and if VLE decisions were centralised. This presentation would complement this UK study by describing the results of a study conducted in the US.

The US study focused on which specific VLE features were used most, how use changed over three years, and which factors were related to the use of which VLE features. A total of 12 factors were considered, these included class size, the course using the VLE, and the lecturer's technical expertise. Thirty VLE features were considered, these included quizzes, discussions, drop-boxes, grade books, and how many documents were added to a VLE. A major finding was that use was significantly different across courses, another finding was that time only had a moderate effect on use.

This study was conducted at a university in the Midwest, US with 15,000 students, in 2005, 2006, and 2007. A research team collected data by looking at hundreds of Web pages within the VLE and counting how often features were used, twice for data verification. The VLE used at this university is Desire2Learn, which is similar to other VLEs. Benefits from this study are similar to the benefits of a market analysis, for a business. A market analysis tells a business which people are most interested in which product. The results of this study can be used to identify which VLE features lecturers use most for which types of classes.

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0289

Usage and uptake of Virtual Learning Environments (VLEs) and technology assisted learning tools: findings from a multi institutional, multi year comparative study

In 2008, a longitudinal study of Virtual Learning Environment (VLE) usage in Irish tertiary institutions commenced. The study involved a dozen diverse institutions. The main research instrument was a student survey, which evolved from the individual institutions monitoring and decision support needs. While many institutions routinely conduct surveys or studies from time to time, this study is relatively unique (to our knowledge) in that it draws on data from multiple institutions, across multiple years, diverse VLE platforms, and institutions varying in over a full order of magnitude. The student survey was supplemented by a teaching staff survey and institutional case histories, and in some sites, more detailed evaluative work. These helped to flesh out the picture, and helped us to understand some of the variation in the data from institution to institution.

The survey questions explored issues from descriptive points (times, places of usage), depth and quality of usage, barriers and enablers of VLE usage, and perceived quality and value of the VLE for learning. As well as meeting the operational needs of each institution, the combined data set has helped to identify and quantify more general success factors in VLE implementation, and identified key issues with VLE operation which must be resolved.

Short Paper

Authors

Dr Robert Cosgrave
» University College Cork

Claire McAvinia
» National University of Ireland

Noreen Vaughan
Willie Ward
» Limerick Institute of Technology

Angelica Risquez
» University of Limerick

Tom Farrelly
» Tralee Institute of Technology

Nuala Harding
» Athlone Institute of Technology

Rosemary Coooper
Margaret Phelan
» Institute of Technology

Theresa Logan-Phelan
» Trinity College

Fiona O'Riordan
» Griffith College

Marion Palmer
» IADT

Authors

Mr Jonathan Ivins
Dr Marie Bassford
» De Montfort University

0322

Virtual Learning Environments (VLEs): real or virtual learning?

Virtual Learning Environments (VLEs) have become ubiquitous in higher education (Eynon 2008; Paulsen 2003). There is genuine debate over the effectiveness of VLEs as teaching and learning tools with some academics believing they offer innovative opportunities to generate debate and interest amongst students (Uskov 2002). Sceptical colleagues argue a VLE is merely an elaborate filing cabinet which both reduces attendance and further engagement whilst having little or no influence on attainment (Davies, Graff 2005; Wells, Lange, Fielder 2008).

The authors are conducting an action research project to establish which of the above views are closest to the truth. The project consists of three stages; firstly, a scoping questionnaire to gain a view of the student experience and to establish whether there is a need for further work. Secondly, an in-depth investigation into the student experience. This will be followed by a similar investigation into the staff usage of a VLE. The authors have now completed the first and second stages of the work. Initially a small cohort of fifty students was given a scoping questionnaire. The results showed students valued Blackboard as a useful learning tool: 90% said they accessed it at least three times weekly. 75% confessed that they miss lectures when notes are available on Blackboard. 30% of the respondents made use of blog, wiki or other interactive tools. 45% used it as an email client to contact their tutor. The results of the second stage confirm the initial findings that students perceive VLEs as useful. 72% indicated that they missed taught sessions because they could download the notes albeit only 4% of respondents indicated that this was a regular occurrence. 79% of respondents believed that Blackboard made them more independent learners and better equipped for work.

These results raise more questions than answers. Do students think independent learning means simply downloading a set of notes and memorising them? Is engagement and further study facilitated by using a VLE? Do academics use a VLE correctly to enhance learning or digitally mimic the old analogue processes? The authors are currently working on these issues and will report their findings later.

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Redesigning systems

0050
Learning 2.0 @LJMU: a Web 2.0 staff development programme

Learning and Information Services (LIS) at Liverpool John Moores University (LJMU) provide learning resources, facilities and services to a large student population. A recent analysis of training needs identified several skills gaps amongst LIS staff. This included familiarisation with technology enhanced learning initiatives, including the use of Web 2.0. A staff development programme was developed, the objectives of which were to enhance the support available for learners and to encourage innovative ways of working amongst LIS staff.

The resulting staff development programme, 'Learning 2.0 @LJMU' is a hands-on, interactive learning programme that provides an opportunity to explore Web 2.0 tools and the impact these tools are having on teaching and learning. The programme was developed collaboratively amongst LIS staff and the learning technology department and commenced in January 2009, with all 140 LIS staff taking part. Delivered within the Blackboard Virtual Learning Environment (VLE), Learning 2.0 introduces staff to all aspects of Web 2.0 technologies and asks participants to reflect upon how platforms such as blogs, wikis, social networking, etc. can be applied within their environments. The programme makes use of e-portfolios ,staff are divided into 'learning groups' and are required to complete and submit an e-portfolio at the end of the programme to demonstrate their progress, knowledge and understanding. Participants are invited to continually reflect upon what they have learned and the programme developers continue to make use of such reflection as part of the development cycle.

This 'hands on' demonstration will allow participants to interact with the VLE and engage in some of the online content developed for the programme. Participants will also be able to create an e-portfolio and view examples of best practice from within the programme. An overview of the development of the programme will be presented, which will be broken up with opportunities for involvement with the online learning materials.

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Demonstration

Authors

Mr Leo Appleton
Mr Will Reid
Mr Stephe Fletcher
Ms Bethan Hughes
Mr Alex Spiers
» Liverpool John Moores University

Demonstration

Author

Dr Steven Malikowski
» St. George's, University of London

0283

Going beyond virtual patients: open source interactive web cases for all disciplines

Web-based Virtual Patients (VPs) allow medical students to encounter challenges and responsibilities similar to those faced by practicing clinicians (Ellaway et al. 2006). St. George's, University of London, has been particularly active with VPs, with several grant-funded projects in the UK and EU (eViP Partnership 2009; JISC 2009). The VPs described here are created with open source software, to help medical students solve medical problems. The same open source software could be used to help students in other disciplines solve real-world problems, in their chosen field.

When medical students use a VP, they are given information about a clinical problem and choices about how to proceed. Unlike some VPs, those made at St. George's require students to deal with the consequences of their choice. If students make a poor choice at the beginning of VP, they will have to work through the consequences of that choice. This is called a "branched VP." It contrasts with the more popular "linear VP" where students are brought back to a correct decision path after making an incorrect decision.

Two types of open source software are used to create a branched VP, Vue and OpenLabyrinth. Vue creates concept maps or flowcharts, which works well for creating the branches in a VP. A file from Vue is imported into OpenLabyrinth. This file is edited as needed and saved as Web based VP. These VPs are technically simple, requiring no special plug-ins or web browsers. The web pages that make up a branched VP essentially introduce students to a medical problem, ask them how to proceed, and explain how the problem changed based on their decision. This process is repeated until the end of the VP. This same process could be used in most academic disciplines by simply introducing students to a problem outside of medicine, such as engineering problems, legal problems, or many others (Ellaway 2007; Savin-Baden 2000).

This demonstration will be led by a member of St. George's e-Learning Unit. The demonstration will show several virtual patients and "non-medical" virtual cases. The demonstration will also show how a virtual case is created in Vue and OpenLabyrinth.

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Student experiences

0142

Personalising provision through blended learning: a bottom-up departmental strategy

The blended learning strategy adopted by the Scarborough School of Education at the University of Hull, UK, aims to enhance the experience of its full-time undergraduate and part-time work-based students. The approach is informed by a study of effective change in educational organisations, making it a grass roots initiative owned by the teaching staff involved in its implementation. The aim is to reduce the extent of traditional didactic teaching and to foster personalised learning through the greater use of small group activities and interactive online materials.

The objective of the current three-year phase is for every teaching staff member in the department to design and implement at least one blended learning session per semester. The Articulate Studio authoring software is being used to create narrated slideshows with embedded learning games and quizzes for deployment on the university's Virtual Learning Environment (VLE). Some of the materials created replace traditional lectures, and others aim to provide formative assessment and mastery learning. Collaborative group tasks are now replacing whole-class lectures, freeing tutors to assess students' levels of understanding and to target assistance and support.

Faculty funding has enabled a research component. This centres on the core subjects of a primary initial teacher training course in which modules in english, mathematics and science aim to transmit subject knowledge and to develop student teachers' subject confidence and positive attitudes. More extensive materials and activities have been created, drawing upon the experience of blended learning specialists within the department. Pre and post assessments of students' retention and understanding of subject content are being compared, and their confidence and attitudes are being evaluated. The research outcomes will be used to refine core subject materials and activities and to inform blended learning practice across the department.

The conference presentation will elaborate the departmental strategy and the staff-owned change model which underpins it. Examples of learning materials on the VLE will be demonstrated, and the effectiveness of various activities to foster personalised and collaborative learning will be compared. Interim results of the research study will be presented and anticipated future developments will be discussed.

Short Paper

Authors

Dr Peter Williams
Ms Christine Trala
» University of Hull

Short Paper

Authors

Dr Debby Cotton
Dr Jennie Winter
Ms Joan Gavin
» University of Plymouth

Mr Jon Yorke
» Curtin University of Technology

0154

Boundary management in e-learning: a student perspective

The increasing use of e-learning in higher education has led to an associated concern with the student experience of social and learning technologies. Student use of social networking sites is at an unprecedented level, yet our understanding of how they use technology for learning remains somewhat limited. This research takes an 'instrumental' case study approach (Stake, 1995) to explore the learner experience of technology in a holistic manner, encompassing both social and learning technologies.

The research focuses on postgraduate students — a group that are relatively under-represented in the literature — with a view to investigating their use of technology as part of the whole student experience. We used questionnaires, audio-diaries and the 'interview plus' method (semi-structured interviews using prompts from audio-diaries and questionnaires) to elicit the student voice.

Our results suggest that many students use learning and non-learning technologies and applications simultaneously, flicking from sites such as Facebook and MSN to their academic work. However, they frequently found combining socialising and study in this way to be problematic, and took steps to reduce the impact of distraction on their work. There was also some evidence that students resented the blurred boundaries between work and social life and took a number of steps aimed at 'boundary management' (maintaining a division between academic and social activities). Specific strategies included turning off MSN, Facebook and other social tools (including email) whilst working, and also controlling the impact of academic work on social activities (for example by not using mobile phones or MP3 players for work).

Despite the assertion that today's students are 'digital natives' who multi-task easily, our research suggests that the learners themselves perceived this to be an ineffective way of working, and took steps to minimise multi-tasking through boundary management. They used similar strategies to prevent academic work impinging on their social lives. This research has implications for the potential uses of technologies for learning, and suggests that care is required to ensure that students obtain the maximum benefit from new technologies. The area of digital distraction and boundary management would benefit from further exploration.

Stake, R.E. (1995) *The Art of Case Study Research.* London: Sage Publications

2

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10.50

0304

Do learners dream of digital seminars? What do learners dream of?

Learner experience research has developed rapidly in the last few years. The JISC Learner Experiences of e-Learning programme has been central to this and the phase 1 studies prompted further research with a wider range of students. The research approach of this programme aimed to address the learning experience in a holistic way, and as learners made sense of it themselves.

The seven phase 2 projects have surveyed the experiences of almost 3000 students and collected rich data from 177 learners in post-compulsory education. The projects have taken care to develop methods which collect and capture learners' voices in their own words including video diaries, card sorts, email pen pals and phone interviews. Each project has had a different emphasis, one looking at Master's students for example, another at the experiences of disabled learners, and another at how learners experience change through their learning journey. The overarching programme aims were detailed and ambitious and included: how are personal and social technologies used, what skills and strategies are developed, what critical choices are made and what role do institutional practices play in learners' experiences of e-learning?

As the projects report their findings, this paper takes an overview, summarising the key findings and relating them back to the programme aims. This research has shown us that the role of technology in society is influencing learners' expectations of technology in post-compulsory education. Expectations for ubiquitous access, flexibility, convenience and rapid response are high. Learners value access to academic digital content, consistency in use and a blend with face to face teaching. We saw evidence of the agility of some learners at personalising their existing tools and using their skills and social networks to support their study in innovative ways. However, we are concerned at a lack of basic information literacy for other learners, a resistance to changing established patterns of study and a narrowing and deepening digital divide. When combined with a tendency for learners to be largely led by their tutors in their choice and use of technology for learning, these findings have important implications for teachers, tutors and course designers.

Short Paper

Authors

Dr Rhona Sharpe
Ms Helen Beetham
Mr Greg Benfield
» Oxford Brookes University

Ms Ellen Lessner
» Abingdon and Witney College

Ms Eta De Cicco
» NIACE

Staff development

Short Paper

Author

Dr Lynne Gornall
» University of Glamorgan

0177

Our careers, our selves: 'New Learning Professionals' ten years on

'New Professionals in HE Teaching & Learning' was a piece of research and a discussion launched at ALT in September 1999. The author and the community have seen many changes and much progress since then. However, the debate about roles, boundaries, jobs and career progression in higher education is still very current.

Ten years ago, the learning technology (LT) 'new professionals' could be described as 'central to the mission of higher education, but less so to the organisation'. These were some of the findings from empirical research conducted at the time (1999), which led to additional 'mapping across the sector' detail (with others) in 2000/1(authors 2001, see also Oliver et al 2004). Today, there is considerable recognition of the centrality of the role of new pedagogies, of learning technology staff and of innovative learner support structures in all sectors of education. However, the career positioning and trajectory of new LT professional staff in higher education has been impacted by the outcomes of a related but perhaps more far reaching policy document, the Bett Report (1997). Research in progress by the author looks at the effects of the 'harmonisation' of roles and job structures recommended by Bett (ibid) that has since been implemented as the National Framework Agreement (NFA) in all public further and higher education institutions.

The outcome of this for the positioning and status of the learning technologies 'new professional' staff, and its implications for their career progression, will be discussed in the paper and session. The author argues that the changes need to be seen in relation to wider policy shifts, the changing nature of related roles in higher education (particularly 'academic' and 'support' groups) and the ways in which work spaces as well as learning spaces have changed a decade on.

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0204

Continuous work-force development for ICT staff: the Media Centre Project at London South Bank University

Managing continuous workforce development for Information Communication and Technology (ICT) staff is a major challenge for university planning. The Teaching Quality Enhancement Fund (TQEF) Media Centre Project has achieved two main goals: introducing the process of work-based learning (WBL) to media services staff and creating new digital facilities and services for staff that bridge the gap between IT training and the independent creation of digital learning resources. The project presents an innovative approach to using applied research within the institution, developing higher level skills to enhance personal performance, encouraging team development, and scaffolding the process of change.

As Billet indicates, co-participation is about "understanding how individuals come to learn and develop further vocational practice through work and throughout working lives" (2002). After the university invested significant capital funds in new classroom audio-visual resources, there was a need to increase technician's capabilities in a wider spectrum of learning and teaching duties. As many issues related to integrating new media and learning call for institutional change (Gonick 2006), the WBL approach facilitates reconciling technical and academic / customer perspectives for developing resources.

The project was carried out in three stages, with qualitative methods such as interviews and document review used to understand complexity. Staff included a dedicated learning consultant and advisory group of academic and academic-related staff. Project reports have been written throughout the process for the university learning and teaching committee. The media centre case study may be useful to other universities who are trying to introduce innovative methods of developing ICT and / or university staff. WBL provides opportunities regardless of educational background, with individual progression through self-managed learning (Cunningham et al. 2004). The project has ensured job continuity when media services were merged into the ICT department from building services. Two media services staff are now team leaders within ICT. New services have been phased in with a project framework approach: including two new specialist studios, a campus-wide streaming service, and an increased use of Blackboard by core teaching staff. The ICT Director has observed and received positive feedback from media technicians and requested more WBL activity for additional ICT staff.

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Authors

Mr Jim Nottingham
Ms Paula McIver Nottingham
» London South Bank University

2

Thu
10.50

Authors

Dr Sharon Slade
Ms Fenella Galpin
» The Open University

0222
Effective recruitment and selection of online tutors

This paper describes the Open University Business School's (OUBS) experiences in developing an approach to the recruitment of tutors working on globally-available courses that are supported through an online environment. The approach recognises that, as well as a standard set of facilitation and academic skills, additional competences are required for effective online student support. These include proficiency in working with basic technical tools with access to appropriate ICT, as well as an understanding of the constraints and benefits of online communication, the use of appropriate language and an appreciation of cultural differences.

A background to the tutor-student support model is set out and a summary given of the current traditional approach to tutor recruitment, whereby applicants are invited to a venue for interview and to demonstrate other largely face-to-face tutoring skills.

The continuing advancement of ICT and an improved understanding of managing effective online learning have led to an evolution of OUBS course delivery, allowing students to successfully participate in many of our courses without geographic constraints. This in turn required a revised approach to tutor recruitment that tested for newer competences than the standard approach addressed.

As part of this approach, the paper discusses a set of activities designed to establish applicants' understanding of the differences needed to transfer effective facilitation of student learning into effective online learning. Detailed examples are given of some of the activities used, as well as an indication of the expected responses. The recruitment method is adapted to suit the needs of each course, and has evolved as a result of experience and application to a wide range of different courses and requirements. The approach has now been recommended as standard for recruitment of tutors to online courses across the wider university.

2

Thu
10.50

Peer support

0106

Social media and the need for peer support: student attitudes towards study and the impact of Web 2.0 on student study habits

This paper will present our segmentation model for the collective "student voice" on course work and students' beliefs about technology in their studies. We will discuss how Web 2.0 is impacting student behaviours and methods. We conclude with the need for peer-assisted, collaborative learning tools to help students intuitively translate their social-technology skills to their education.

Our ethnographic student research included:

■ Video ethnography: students "thinking aloud" about decision making and motivations.
■ Study journals: activities (social, work and study) and use of technology over three days.
■ Study environments: photographs of physical study tools and contexts.
■ On-campus observation: interactions in study and recreation areas.
■ Individual and group interviews: mapping study methods and tools.
■ Social media: cataloguing all study-related conversations on blogs and social media.

We will also share salient cross-group behaviours, e.g.

■ Anxiety / lack of confidence due to unclear "rules for success".
■ Peer support through social media for building confidence.
■ Anomalies in sophistication levels with technology in different contexts. e.g. basic skills with search and tagging for research, despite expert use for social purposes.
■ Sources / research: "build the skeleton" using online sources (wikipedia), "put meat on the bones" with academic sources (published).

Short Paper

Author

Ms Emily Sawtell
» McGraw-Hill

0193

Instruction to independence is possible! Developing autonomous collaborative learning cultures in dance and digital performance

Following three years of research at the University of Wolverhampton, and first presented at ALT-C 2006, Dance and Digital Performance: a video podcast series has been developed as part of an Higher Education Authority Performing Arts Subject Centre funded project, to explore the challenges and possibilities of blended curriculum redesign.

The project, piloted within the Department of Dance Practice and Performance, provides the opportunity to foster innovative transitional cross-year learning in the field of dance practice by bringing together the dancer, the studio and Web 2.0 common technologies, and has generated 'cutting edge' reusable learning and teaching resources for the wider higher education community. The aim of this project was to produce a video podcast series designed as an intervention into student group and independent learning. Previous iterations of the module had left both students and lecture dissatisfied with the required group work element. Whilst crucial to devised performance related assessment tasks, module evaluation indicated frustration as to the varying dynamics of group work. With each video-podcast students worked through prescriptive

Short Paper

Authors

Mrs Dennie Wilson
Dr Ben Andrews
» University of Wolverhampton

demonstration and more analytical and conceptually driven tasks. Choices were given as to when and where to work, and even how to use, navigate or interpret each video-podcast. Students could watch and interact to learn original work and to create their own dance phrases. These resources expand the possibilities for the video-podcast, and provide a platform from which discourse in how change in curriculum design and delivery could engender a more mutually beneficial teaching and learning experience.

Questions relating to the effectiveness of the series such as how the design of each podcast promotes student interaction and how that intervention impacts on learning and learning outcomes are being measure in a variety of ways:

- Reflective task on a student blog.
- Filmed focus group.
- Summative assessment: the live performance piece

In conclusion this title emerged through the process of design, implementation and evaluation. This paper looks to present evidence that indicates positive effects on all student groups at differing stages within the module. This evidence promotes further redesign of these mobile learning resources and the blended collaborative learning culture that has been initiated.

Short Paper

Authors

Mr Gijs de Bakker
Prof Wim Jochems
» Eindhoven University of Technology

Dr Jan van Bruggen
Prof Peter Sloep
» Open University of the Netherlands

Prof Tammy Schellens
» Gent University

0298

The influence of synchronous online reciprocal peer support on answer quality

Higher education has been subject of change in the last decade. Particularly in the wake of social-constructivist theories, many institutions have transformed their learning approach to a model in which students are involved in different activities at different moments. Thus, student populations are becoming more heterogeneous. For example, they have different tutoring needs. This leads to an increasing workload for teachers. At the same time, students have changed in their expectations. A young generation of students, who grew up with ICT embedded in their daily lives, have become used to the almost instant availability of knowledge and accessibility of people through the internet. The aim of our research is to propose a solution for the extensive and diverse tutoring needs that have arisen in these novel societal and educational settings, by introducing peer support activities for ad hoc student questions. We previously proposed a model for a system that facilitates reciprocal peer support activities via instant messaging: the Synchronous Allocated Peer Support (SAPS) system. Via this system, students with questions during their learning are allocated to competent fellow-students for answering. The SAPS model is designed for reciprocal peer support activities among a group of students working on the same fixed and stand-alone modular material every student has to finish, such as courses with separate chapters. If some of students' questions will not be forwarded to the teacher anymore but to fellow students instead, the most important question is whether the quality of the answers given by students selected via the SAPS algorithm is of equal quality as that given by teachers. This paper reports on an experiment in which two groups of students used an online reciprocal peer support system. The questions of students in the experimental group were allocated to peer students based on the SAPS algorithm, while the questions of students in the control group were assigned to the teacher. In the evaluation, answer quality is defined as both the factual correctness of the answers as rated by experts, and the perceived helpfulness of answers as rated by students themselves. The results of this work are not yet complete.

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Westera, W. (2007) *Peer-allocated instant response (pair): Computational allocation of peer tutors in learning communities.* Journal of Artificial Societies and Social Simulation, 10(2). Available at jasss.soc.surrey.ac.uk/10/2/5.html

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Blog innovation

Short Paper

Authors

Ms Helen Boulton
» Nottingham Trent University

Dr Alison Hramiak
» Sheffield Hallam University

0036

Developing reflective practitioners through the use of blogs: a collaborative approach to learning communities

Developments in teacher training over the last decade have seen an increased focus on developing skills in becoming a reflective practitioner. As Web 2.0 technologies are emerging they are provide alternatives to reflective diaries which are proving to engage some students more than traditional methods. At Sheffield Hallam University (SHU) and Nottingham Trent University (NTU), research has taken place over the last two years in the use of reflective diaries, with teacher education students using a web log (blog). Phase 1 of this research focused on determining if blogs could provide a setting for reflective practice. Responses from trainee teachers from a variety of subject backgrounds across the two universities identified that the use of blogs did assist them with their own development as reflective practitioners. This research was presented at the ALT-C Conference, Sept 2008.

Phase 2 of this research builds on Phase 1 findings and seeks to determine whether or not the successful 'bloggers' from the first phase of the research — now in their second year of teaching — have continued with this practice, examining what the inhibitors and enablers are to developing the use of blogs within their professional role. This paper focuses on the data from Phase 2 of the research. A comparative analysis was conducted using data from interviews and comparing the trainees from both institutions. Reflective theory is used to help to understand the responses gained from the participants over the years in terms of the change in attitude to reflection between their training and actual teaching. This is also linked to theories of communities of practice (Wenger, 1998) and to socio constructivism (Vygotsky, 1978) in order to help to explain the drop in reflection seen when trainees become isolated as newly qualified teachers in schools. The researchers believe that this research has relevance to a diversity of subjects in higher education.

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2

Thu 10.50

0103

'Blog-it and they will come': challenges for engaging teachers and learners with wikis and blogs

"We are not creating learners… not creating inquirers anymore… they will think when you tell them what to think… [the wikis] are… trying to shift the way they engage with learning and the way they think about their own learning… an opportunity to get them engaged and talking to each other." Project interviewee.

This paper presents the outcomes of a project benchmarking blog and wiki use. The paper suggests critical success (and failure) factors in the uptake of these tools and identifies good pedagogic practice. The interdisciplinary team includes anthropologists with the methodological and analytical skills to explore the mechanisms that render tools like wikis and blogs meaningful in a socio-cultural context. Learning technologists contribute knowledge of pedagogy and practice. The project is in stage two of three at the time of submission, and will be completed before ALT-C 2009.

Stage one reviewed the use of wikis and blogs using interviews with staff to develop a baseline of practice and evidence. The paper presents identified innovative practice from diverse disciplinary areas: modern languages used blogs as 'personal-learning journals' for continual formative-assessment; computer science used wikis for group project management; geographers used wikis to engage students with the literature and education students to build a bank of visual resources on diversity. We consider the critical factors (pedagogical, technical and cultural) in making these approaches successful. For example, user experience, confidence and pre-existing social hierarchies' impact on use.

Stage two triangulated our findings with staff and student survey data. We utilise the results to evaluate the effective use across the institution accounting for context (subject, level, distance or blended, group or individual use). One interview suggested males posted on blogs, whilst females 'lurked'. Was this gender difference reflected in a wider survey?

The final stage outlines models of good practice which we present for discussion. These flexible models aim to support the embedding of good practice in collaborative online learning. Ownership, constructive alignment of the activity with objectives, assessment and overcoming fear of 'fixing opinion' as text, all play a role. We believe these guidelines will be applicable to other institutions.

Short Paper

Authors

Ms Jan Metcalf
Mr Martin Edney
Mr Mike Cameron
Dr Steve Lyon
» Durham University

Dr Megan Warin
» Adelaide University

Abstracts Posters

0022

Critical success factors in e-learning for large enterprises

In 2008, the New Zealand Ministry of Education funded a project aimed at examining the use of e-learning to build workforce capability (Clayton, Elliott, Saravani, Greene & Huntington, 2008). Data was collated from on site employee and trainee interviews and an online questionnaire. Critical Success Factors (CSFs) were subsequently identified which could be used to enable a large enterprise (>100 employees) to ensure effective and efficient e-learning implementation.

These CSFs include commitment and support by senior management, leadership, multidisciplinary training teams, designated training coordinators, regular evaluation of training and outcomes, communication and feedback from employees and embedding e-learning in workplace training are described and presented in a graphical format.

Becta (2005) *Research into the use of ICT and e-Learning for work-based learning in the skills sector.* Literature review: British Educational Communications and Technology Agency, Coventry

Clayton, J. and Elliott, R. (2008) *e-Learning in Industry: New Zealand Case Studies.* e-Learning in Industry: Tertiary e-Learning Research Fund, Wellington. Available from ito.e-learning.ac.nz [accessed on July 17th 2008]

Clayton, J. Elliott, R. Saravani, S. Greene, N. and Huntington, N. (2008) *e-Learning in Industry: A Summary of Activities.* e-Learning in Industry: Tertiary e-Learning Research Fund, Wellington (pp80): Available from ito.e-learning.ac.nz [accessed on July 17th 2008]

Lain, D. and Aston, J. (2004) *Literature review of evidence on e-Learning in the workplace.* Institute for Employment Studies, Brighton

Authors

Mr Richard Elliott
Dr John Clayton
» Waikato Institute of Technology

0028

LEGO Mindstorms: communication in Second Life

The poster will graphically detail research that defines and asses effective measurements for evaluating strategies of teaching basic programming using LEGO robots with Mindstorms software. The robots are collaboratively constructed and programmed by students physically located in different countries (UK and Japan) and communicating in a virtual immersive interactive environment (i.e. Second Life [SL]). It is anticipated that collaboration and communication in virtual environments will become more prominent in mainstream higher education within the next 5 years, and this research aims to provide educators with a framework upon which to construct their curricula, design effective tasks, and assess learning outcomes. The poster is complementing a demonstration submitted to the conference.

Participant groups in Japan and UK communicate via Second Life, programming LEGO robots to navigate pre-determined courses. Multi-modal communication (text, audio, gestures) is digitally captured and analysed. A quantitative data set (i.e. Task Effectiveness (TE)—the number of commands successfully programmed into the robot, and Interaction Effort (IE)—the amount of time required to interact with the robot [Olsen & Goodrich, 2003]) will be merged with personalised 'meaning' of data collected via a qualitative data set; i.e. follow-up interviews and digital-capture of participants on task. Poster images will display screen shots of student avatars manipulating Mindstorms programming blocks in SL.

Authors

Dr Michael Vallance
Mr Taku Suto
Mr Tatsuya Nishi
» Future University, Hakodate

3

Phase 1 has entailed designing and building a learning space within SL for task implementation. Students then programmed a robot and attempted to teach the programme to another student at a remote location using the communication tools and NXT representations within the designed SL space.

The Phase 1 research is a two-year collaboration between Teesside University, UK and Future University — Hakodate, Japan. It is funded by the Prime Minister's Initiative PMI2.

Olsen, D.R. and Goodrich, M.A (2003) *Metrics for Evaluating Human-Robot Interactions.* Available from icie.cs.byu.edu/Papers/RAD.pdf [accessed on January 8th 2009]

Authors

Ms Ali Wyllie
Ms Ingrid Nix
» The Open University

0038

Offering students choice in online e-assessment to promote engagement and formative learning

The Learning with Interactive Assessment (LINA) project explores a selection of question design features intended to make computer-based assessment more motivating and engaging, particularly to work-based learners. Building on the formative assessment principles established by Re-Engineering Assessment Practices (REAP), we were particularly interested to evidence if the affordances of the technology would encourage students to self-regulate their assessment experience through allowing learners to configure and control their own mode of learning and the resulting learning experience. The small scale LINA project trialled a range of features with social work students participating online and completing a questionnaire. The resulting quantitative data was cross-referenced with qualitative data from three 'Userlab' participants, to build up an unusually detailed and triangulated picture of the learner experience, based on analysis of audio interviews, observational recordings, questionnaire responses and system logs.

We will present initial findings on learner perceptions of:

- a confidence indicator tool—for learners to indicate their confidence that their answer will be correct before answering a question;
- a learning log—for learners to insert reflections or view system-recorded information about their learning pathway;
- question feedback—for displaying a range of author comments.

Themes which emerged related to factors affecting self-confidence, risk-taking, reflection, and attitude to feedback influenced by personal needs and expectations. This included data on when feedback was not made use of. Our findings suggested that students welcome and need choice, and are motivated by being able to fine tune their own learning environment and learning experience. By building in features which develop student skills in managing their own learning environment, we are preparing them for emerging learning approaches such as using Web 2.0 tools. This study contributes to our growing understanding of student perceptions. Future research is needed to scrutinise more closely the student and tutor / author role and optimize the computer-based assessment experience. This project is funded by the Centre for Open Learning of Mathematics, Science, Computing and Technology Centre for Excellence in Teaching and Learning (COLMSCT CETL) at The Open University.

REAP (Re-engineering Assessment Practices) Project. Available from www.reap.ac.uk [accessed on January 6th 2009]

0040
EVAF4All: electronic voting analysis and feedback

The use of Electronic Voting Systems (EVS) has spread rapidly through many disciplines in higher and further education in recent years. Particular instructional strategies for use in conjunction with these devices, such as Peer Instruction, have been shown to have a significant effect in improving student understanding of topics[1]. Much less attention has, however, been given to the use and deployment of data collected at times after the point of capture, yet this offers the potential for detailed feedback to students and staff alike. This poster will illustrate an online system that has been developed to facilitate this, allowing easy uploading, analysis and feedback of captured EVS data from commonly-used handset manufacturers.

Our system is a web-based tool that allows effective aggregation of EVS data, and is able to be made visible to students and staff via a common interface. It has the capability to unite student voting data with a particular clicker, exploiting 'loanership' schemes that are in operation in institutions. It provides features for some analysis and feedback to students not just staff — unlike the third party EVS software providers' solutions which tend to focus on staff-only features. The tool uses Ruby/Rails and SQL technologies and integrates with institutional Virtual Learning Environments (VLEs) and handset loanership schemes.

The poster will illustrate how we have addressed the issues around privacy of student data and also present details of how the tool has been used in a first year undergraduate course to provide feedback to students aiding review and revision in the run up to an end-of-course assessment.

This topic is relevant to a wide audience; interested academics, e-learning technologists and staff developers. In short, any one who has used or supported the use of EVS in teaching (either individually or from an institutional perspective) and thought that much more could be done with the data that is collected will find the demonstration of interest.

[1] **Smith M.K. et al** (2009) *Science* 323: 122–124

Authors

Prof Simon Bates
Mr Keith Brunton
» University of Edinburgh

0051
Learning 2.0 @LJMU: the story so far

Learning and Information Services (LIS) at Liverpool John Moores University (LJMU) provides learning resources, facilities and services to a large student population. A recent analysis of training needs identified several skills gaps amongst LIS staff. This included familiarisation with technology enhanced learning initiatives, including the use of Web 2.0. A staff development programme was therefore developed, the objectives of which were to enhance the support available for learners, and to encourage innovative ways of working amongst LIS staff.

The staff development programme, 'Learning 2.0 @LJMU' is a hands-on, interactive learning programme that provides an opportunity to explore Web 2.0 tools and the impact these tools are having on teaching and learning. The programme was developed collaboratively amongst LIS staff and the learning technology department and commenced in January 2009, with all 140 LIS staff taking part. Delivered within the Blackboard Virtual Learning Environment (VLE), Learning 2.0 introduces staff to all aspects of Web 2.0 technologies and asks participants to reflect upon how Web 2.0 can be applied within their work environments. Participants are invited to continually reflect upon what they have learned and the programme developers continue to make use of such reflection as part of the development cycle.

Authors

Mr Leo Appleton
Mr Will Reid
Mr Stephe Fletcher
Ms Bethan Hughes
Mr Alex Spiers
» Liverpool John Moores University

3

The poster will graphically convey some of the theory behind Learning 2.0 as well as images illustrating the learning content and materials. All participants completed a skills assessment before and after participation in the programme. The evaluation of these will be displayed with an overview of the progress made by staff in their competence in supporting online learning and Web 2.0 applications. The data available within the poster includes quantitative examples of how staff knowledge and understanding of Web 2.0 has incresaed and improved as a result of the staff development, and how their competence in using technology enhanced learning has improved. There will also be anecdotal data available from the programme evaluation.

It is anticipated that conclusions will demonstrate that an investment in such online learning programmes has clear benefits to student support within the higher education sector.

Authors

Dr Marie Bassford
Mr Jonathan Ivins
» De Montfort University

0066

Facebook: friend or foe of formative feedback?

Social networking sites, such as Facebook and MySpace, are now synonymous with university students as a mechanism for making and maintaining friendships, arranging social get-togethers and the sharing of photographs (Ipsos Mori, 2007). Such sites adorn the majority of student computer browsers within academic libraries as students keep a window constantly open whilst carrying out scholarly activity. Furthermore, Facebook in particular has been creeping into the classroom and laboratory much to the concern of many academics.

A new final year module 'Advanced Imaging Technology' within the Faculty of Technology at De Montfort University presented the need to investigate online portals to enable formative peer review of student-generated work. Summative assessment incorporates practical coursework, including submission of a portfolio of images captured weekly as part of laboratory sessions throughout the academic year. The ongoing generation of a portfolio, right from the very start of the module, meant feedback to students was essential to ensure that students could share experiences and learn from mistakes. Whilst alternative online tools were considered (Bassford and Ivins, 2009), it was concluded that due to the ever-increasing presence of social networking sites within classrooms, Facebook could be trialed as a tool for students to upload their work for peer review.

This poster session continues the module team's journey into formative peer review tools including student Intellectual Property rights. The project methodology comprises two stages: a survey of students and in-depth interviews of students. The completion of stage one is presented here and describes the user perceptions and experiences of using Facebook for peer review. The results so far suggest that the majority of students consider Facebook to be a useful or a very useful tool, with more than 90% claiming to post their work regularly to the group. Surprisingly, almost all of the students (85%) did not object at all to being contacted via Facebook, some even stating that it was better than using the university email system. Differences between female and male user perceptions were also compared. Stage two will involve in-depth interviews to establish if Facebook is friend or foe of informal peer review.

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Bassford, M. and Ivins, J. (Forthcoming) *Enhancing peer review via social networking sites.* British Journal of Educational Technology

0069

Promoting reflective practice at a New Zealand tertiary institute: creating the conceptual framework

Authors

Dr John Clayton
Mr Adam McMillan
» Waikato Institute of Technology

Increased connectivity to high bandwidth telecommunications and greater access to digital databases are transforming the flow of information and educational materials, personal communications between learners and educators and the formal contact between educational institutions and students (Statistics New Zealand, 2007: HEFCE, 2005). Conventional models of education are being challenged and "flexibility" is a concept educational institutions must consider in meeting their obligations of providing high quality learning experiences (Clayton & Elliott, 2007).

Embedding flexible learning in the culture of the organisation requires educators to be firstly, convinced the learning environment created is pedagogically appropriate and secondly, they are technically competent of operating successfully within these environments. Both these requirements can be addressed by the provision of ongoing and relevant professional development (Mitchell, Clayton, Gower, Barr & Bright, 2005).The Capability Development team at the Waikato Institute of Technology believe professional development based on reflective practice and student feedback are key components in driving change at an individual and institutional level. A pictorial conceptual framework has been created to illustrate the benefits of individual reflection and soliciting student feedback.

This poster will graphically illustrate how the framework is underpinned by three As, Cs and Es creating the A.C.E. model. The three As are aligned with the identifiable stages of a project life cycle:

- Awareness (reflect on existing educational capacity and capability).
- Action (generate policies providing guidance for ICT implementations).
- Accomplishment (measuring the impact of ICT implementations).

The 3 Cs aligns with what is considered to be the pillars of flexible learning (Clayton, Elliott, Twohey, 2009):

- Context (factors shaping and influencing perceptions).
- Content (factors influencing direction and focus).
- Capability (factors shaping participant confidence and understanding).

The framework progresses to an indicator layer conceptualised by the 3 Es,

- Enabled (initiatives measured on how they have enabled users to participate).
- Engaged (initiatives measured on how they have initiated and maintained engagement).
- Empowered (initiatives measured on how they have ensured capability of participation).

Finally, staff perceptions of the efficacy of this framework to drive change are presented.

Clayton, J. and Elliott, R. (2007) *Report 1: A review of the literature: E-Learning Activities in Aoetearoa / New Zealand Industry Training Organisations.* Tertiary e-Learning Research Fund, Wellington. Available from ito.e-learning.ac.nz

Clayton, J. Elliott, R. and Twohey, S. (2009) *Open, Flexible and Networked Education Capability of the Waikato Institute of Technology.* ETC White Paper: Waikato Institute of Technology

Mitchell, D. Clayton, J. Gower, B. Barr, H. and Bright, S. (2005) *Final report for the Tertiary eLearning Research Fund project: An investigation into the factors that influence New Zealand polytechnic / institute of technology tutors' uptake of e-learning, with particular reference to early and later adopters and resisters.* Hamilton: Ministry of Education. Available from cms.steo. govt.nz/elearning/projects/showall.htm

Statistics New Zealand (2007) *Information and communication technology in New Zealand: 2006.* Wellington: Statistics New Zealand. Available from www.stats.govt.nz/NR/rdonlyres/ B45B1ECD-E10F-4948-B243-6E7EAF34E712/0/58072SNZICTWEB.pdf

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Authors

Mr Ian Truelove
» Leeds Metropolitan University

0071

Open Habitat: the manual, publication and poster

The JISC funded Open Habitat project is exploring the potential for teaching and learning in virtual worlds. The project team is working with art and design undergraduates at Leeds Metropolitan University (LMU). Testing out various methods for enabling learning through user generated content and collaborative endeavour. The pedagogical framework for our investigation is the historically successful and increasingly relevant constructivist art and design model, adapted and expanded to suit the 3D virtual environments of OpenSim, Second Life and Wonderland.

As well as traditional research outputs, the project is generating a wide range of visual artifacts including, 81 micro-projects used in the pilot activities formatted for a variety of media, including a 16 page downloadable booklet, an iPhone friendly web-app and a Second Life version. This collection of micro-projects (The Manual), provides anyone interested in learning in Second Life with a framework for their explorations, encouraging engagement by suggesting stimulating activities. We are also currently producing a high quality printed publication that contains a variety of formal and informal outcomes from the project. The publication accommodates the diverse outcomes from the project, and communicates a range of perspectives. It also enables the rich visual aspects of the project to be presented in an appropriate format.

As a direct result of the Open Habitat project, virtual worlds are now embedded into the art & design curriculum at LMU. The research outputs generated will enable other educators to adopt and adapt our tried and tested methods, as they tap into the potential for learning in virtual worlds. The Open Habitat project would like to display copies of the micro-project booklet and the publication, along with a poster that summarises their contents and displays key visual and textual elements.

Authors

Mr Stefano Ghazzali
» Manchester Business School Worldwide,
  University of Manchester

Mr Daniel Perry
» JANET UK

0073

Student support platform: a new dynamic

Manchester Business School Worldwide is an organisational unit of Manchester Business School, with centres in Hong Kong, Singapore, Malaysia, China, the Caribbean, the United Arab Emirates, Brazil and the United Kingdom, offering premium positioned, blended learning postgraduate MBA programmes to circa 3500 students geographically distributed in 90+ countries. Students are highly demanding, time focused, mid-senior professionals, all in full time employment.

Delivery is through printed media, online activities and materials and face to face workshops and supported via a bespoke student support platform. This paper considers the educational benefit of the implementation of a new platform, designed to remove the institution of student bias, focusing on a student centric approach, enabling the student to create their own personalised learning environment, integrating with institutional and non-institutional communities and systems. An action research approach was adopted, based on regular feedback and continuous platform development. This feedback, gathered from all relevant stakeholders, drives direction of development, allowing students not only to control their environment, but have a meaningful input to the future direction of this platform.

This work has led to the construction of a second version of the platform, moving from a highly structured institutional information transaction led approach to a more community based approach, stretching beyond the

boundaries of the institution. This 'beyond the institution' approach brings real value for students and those beyond the student stage, and sets the base for mentoring, leading to the potential for the platform to be used as a personal learning and reflection environment, which is key for continuing professional and personal development. While this is not a true Personal Learning Environment (PLE) nor a traditional social network, by recognising the value of informal learning and existing networks, and integrating these through a range of Application Programming Interfaces (APIs) students are more clearly and simply able to bring their digital identity and existing resources into the educational space.

This work is valuable, responding to the changing needs and expectations of current and future students, and has taken as a basic principle the ability to integrate with both existing and future Web 2.0 technologies and the process itself incorporates student feedback to guide development, giving a truly student centric approach.

0079

Virtual Learning Environments: real or virtual learning?

Authors

Mr Jonathan Ivins
Dr Marie Bassford
» De Montfort University

Virtual Learning Environments (VLEs) have become ubiquitous in higher education (Eynon 2008; Paulsen 2003). There is genuine debate over the effectiveness of VLEs as teaching and learning tools with some academics believing they offer innovative opportunities to generate debate and interest amongst students (Uskov 2002). Sceptical colleagues argue a VLE is merely an elaborate filing cabinet which both reduces attendance and further engagement whilst having little or no influence on attainment (Davies, Graff 2005; Wells, Lange, Fielder 2008). The authors are conducting an action research project to establish which of the above views are closest to the truth. The project consists of three stages; firstly, a scoping questionnaire to gain a view of the student experience and to establish whether there is a need for further work. Secondly, an in-depth investigation into the student experience. This will be followed by a similar investigation into the staff usage of VLEs.

The authors have now completed the first and second stages of the work. Initially a small group of fifty students was given a scoping questionnaire. The results showed students valued Blackboard as a useful learning tool: 90% said they accessed it at least three times a week. 75% confessed that they miss lectures when notes are available on Blackboard. 30% of the respondents made use of blog, wiki or other interactive tools. 45% used it as an email client to contact their tutor.

The results of the second stage confirm the initial findings that students perceive VLEs as useful. 72% indicated that they missed taught sessions because they could download the notes albeit only 4% of respondents indicated that this was a regular occurrence. 79% of respondents believed that Blackboard made them more independent learners and better equipped for work.

These results raise more questions than answers. Do students think independent learning means simply downloading a set of notes and memorising them? Is engagement and further study facilitated by using a VLE? Do academics use a VLE correctly to enhance learning or digitally mimic the old analogue processes? The authors are currently working on these issues and will report their findings later.

Davies, J. Graff, M. (2005) *Performance in e-learning: online participation and student grades.* British Journal of Educational Technology Volume 36 Issue 4, Jul 2005

Eynon, R. (2008) *The use of the world wide web in learning and teaching in higher education: reality and rhetoric.* Innovations in Education and Teaching International Volume: 45

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Paulsen, M. F. (2003) *Experiences with Learning Management Systems in 113 European Institutions.* Educational Technology & Society, 6 (4), 134–148

Uskov, V. (2002) *Developing innovative web-lecturing technology and online courses at Bradley University.* Proceedings of the IEEE International Conference on Computers in Education

Wells, P. de Lange, P. Fieger, P. (2008) *Integrating a virtual learning environment into a second-year accounting course: determinants of overall student perception.* Accounting & Finance Volume 48 Issue 3, Pages 503–518

Authors

Mr Ian Cole
» University of York

Ms Alison Willis
» York Further Education College

0082

Using Adobe Captivate to enhance the student experience across further and higher education institutions

This poster presentation outlines the collaboration between the University of York and the York Further Education College in the use of Adobe Captivate software to reduce face to face contact time and enhance the student learning experience. The first phase of the project started at the University of York with the video recording of lectures to evaluate which content was deemed suitable for lecture replacement. After researching appropriate software, Adobe Captivate was chosen for its ease of use and the functionality of being able to create simulations of procedural computer screen instruction. A pilot 20 minute Captivate screencast was created that dealt with introductory information for new undergraduate students, included in this presentation was previously taught content, a simulation of how to use the university email system and an external compulsory task that had be completed after viewing the screencast.

An action research methodology was used to evaluate the pilot sceencast and 150 students were asked to fill in a 30 question likert scale type questionnaire of which 93 students responded. The findings showed that while there was some neutral and negative responses, phase one was deemed successful because there was a significant tendency toward positive results. In response to question 28 "would you like to use more screencast lectures." less than 6% of students responded in the negative. The second phase of the project has begun at York Further Education College, where the screencasts are being used to enhance the learning experience of further education students in meeting the needs of the learners in terms of differentiation and individual learning styles. These screencasts will help to meet student needs in the form of study skills content and an initial referencing screencast will be created then evaluated. Phase three of the project will be the integration of shared screencasts across both institutions.

This poster presents:

- An outline of the three stages of the project.
- The finding of the initial evaluation of the screencasts.
- The outline of the production of a screencast.
- Screenshots of screencasts to show how students interacted with the materials.

Authors

Dr Jonathan Loose
» Heythrop College, University of London

0093

Creating technology enhanced courses with reused and repurposed learning materials: a report from the JISC PSYCHE Project

Creating technology enhanced courses with reused and repurposed learning materials offers a range of potential benefits, from saving time to increasing the quality of learning resources. However, the process of construction involves a number of stages, each with their own challenges. The JISC funded PSYCHE Project has explored these stages in the construction of two technology enhanced courses for teaching psychological research methods

using a range of externally sourced materials. The important stages for such a project are the collection of material, clearing the rights to use the material, creating the material, and then critiquing them.

This poster will explain the process of construction by describing diagrammatically the experience of the PSYCHE project, and providing a range of illustrations and examples of the resulting materials. The two areas which present the greatest challenges are clearing rights to use material, and integrating a range of material into a single, cohesive unit. These aspects will receive the greatest attention.

These results are particularly important given subsequent interest in and funding for projects exploring the release of content from UK higher education institutions for open use within the UK. The poster will conclude with a brief discussion of issues in sharing content.

0098
The worked example

One surprising aspect of e-learning is that it is an ideal vehicle for reviving some older techniques in teaching, popular in their time and considered highly effective, but which have since fallen out of favour. One such is the worked example. The words of Seneca (the Latin Library): longum iter est per praecepta, breve et efficax per exempla "The road by instruction is long, [the road] by examples is short and thorough", who lived from c 4 BC to 65 AD, suggest that the didactic value of worked examples has been recognised for centuries. Until a few decades ago, no chapter in a school textbook in maths or science would have been complete without several.

E-learning offers not only a medium for showing worked examples but, more importantly, a way of generating multiple instances of a given type using random numbers. ActionScript is ideal for writing the examples: it offers excellent control over the screen and can cope with the mathematics involved. Its shortcoming is the disproportionately large amount of effort required to create a few pages of text and pictures for the tuition necessary beforehand.

Xerte Online Toolkits (©University of Nottingham) have been designed to obviate these difficulties; furthermore, they offer easy connections to many third party applications. What is perhaps less appreciated is they allow a SWF file to be imported and controlled by the teacher without the SWF having to be edited further.

This poster will show such techniques in use: how they appear to the final user, what the ActionScript might look like and how the SWF can be controlled from within Toolkits to gain the most from the SWF and its production. It will also show how a concise commentary with each answer can add greatly to the student's experience in understanding the material and in gaining confidence using it. Students report (in questionnaires and verbally) that they find this approach highly beneficial. Experienced teaching staff have given this approach their strong approval by wanting to use programs adopting it.

The Latin Library. L. Annaeus Seneca, Epistulae morales ad Lucilium, VI, 5. Available from www.thelatinlibrary.com/sen/seneca.ep1.shtml

Authors

Dr John Horton
» University of Nottingham

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Authors

Dr Maria Rodriguez-Yborra
Mrs Sarah Lawton
» University of Bolton

0105

Embedding ePDP in teacher training: experience and challenges

This poster presents and analyses the challenges faced during the implementation of an electronic Personal Development Plan (ePDP) tool in the Teacher Training (TT) programme in the School of Art, Media and Education (SAME), at the University of Bolton (UoB). This experience has provided with sound information using a bespoke virtual learning platform (Reflect), enabling a comparative study with another pilot currently being carried out within the school, using a different Virtual Learning Environment. The outcome of the experience in the TT programme will inform us about the most efficient platform to be considered for full implementation of ePDP across the school.

The UK government agrees that e-portfolios, through facilitating PDP and meeting the requirements of higher education progress files, can support the quality of teaching and learning. The University recommended the use of an electronic format for PDPs to provide the benefits of a wider variety of information ans specially, the ability to easily network and share information. This study relates to the experiences of a pilot ePDP from the TT program at SAME, and its implications to similar programs. The Institute for Learning (IfL) provides a bespoke online ePDP application, Reflect, launched in April 2008. TT students can access individual e-portfolio areas. Since September 2008, TT trainees have accessed it and contributed to peer discussion and online assessments. Over 200 students and a number of tutors have been trained, subsequently making Reflect an integral part of the PGDE programme.

Although some students encountered some initial access problems, trainees are now successfully evidencing the 'Minimum Core', as well as their Work Based Experience (WBE) file, using this eResource. Feedback indicates that overall trainees have found the e-portfolio experience to be very valuable, improving their ICT skills and enhancing networking opportunities within the application, and indeed within the sector.

The culture of ePDP in TT is rapidly changing in the UK due to the greater involvement of students and staff with technology and the availability of free valuable eResources, like Reflect. The challenge is to ensure that the eTool is fully embedded and the resulting transformation is demonstrable.

Authors

Dr Hilary Dexter
» University of Manchester

Dr Dave Millard
Dr Yvonne Howard
» University of Southampton

Mr Tom Franklin
» Franklin Consulting

0108

Innovation base: lowering the barriers to knowledge acquisition, exploration, and sharing

How can we capture and share knowledge across an organisation or sector in a way that benefits both contributors and users? Innovation Base is an open source web tool being developed to serve the higher education sector as a whole, and any individual organisation or group that wishes to establish a knowledge sharing environment. The tool allows navigation, retrieval and visualisation of knowledge elements from any of its multiple underpinning knowledgebases. It is currently being tested by real users across the sector and there are knowledgebases available in the areas of higher education, enterprise architecture, roles and competencies, curriculum mapping, social networking and collaborative authoring. The knowledgebase library is growing and evolving, offering a rapid way in to knowledgebase provision for organisations new to a given area. The tool aims to lower the barriers to contribution and sharing of many expressions of knowledge and has been demonstrated to support decision making and planning. It is designed to guide entry and retrieval with templates and wizards, visualise complex

interrelationships of elements and address formal and informal modelling of systems.

Ongoing development of the tool is by participatory design with groups from a variety of areas of interest. A number of different types of interfaces are being developed to allow for people wishing to view knowledge element combinations in ways suited to different uses. There are three main types of user interaction currently supported: route-based, process-based and document-based. By combining Innovation Base with a social networking environment, "e-llaborate", a parallel development soon to become generally available, users can work collaboratively. A consultation and collaborative editing environment is provided, for the creation and updating of knowledge elements. In this activity, the knowledgebase is used to provide related supporting materials and to guide entry and linking of knowledge elements. Users' membership in task-related or interest-related groups is managed by the social networking tool.

Community engagement is showing that users find the Innovation Base exposes and clarifies issues, aids groups in reaching shared understanding and consensus on terminology, and provides a means to share knowledge and good practice and to learn from others' experience.

0118

A change model for embedding technology enhanced learning within institutions

The extent to which Technology Enhanced Learning (TEL) is embedded within the sector remains relatively low. The E-learning Pathfinder project was an ambitious undertaking to exploit and develop synergies between institutions aimed at enhancing and changing practice where necessary. The core aims of the project were to support organisational change, development and dissemination. Thus one might say it had a vision or was a 'dream' of the future, however alongside this dream came significant responsibilities: to institutions; to the wider sector and to students in ensuring that the technology provided real enhancement of the learning experience.

Organised in cluster groups, four institutional Pathfinder Projects, using a process of collaborative working, were able to identify a range of common barriers and enablers for both students and staff in terms of embedding learning technology within institutions. Classification of both the barriers and enablers showed mutual links across the institutions in four areas: communication; student learning experience; staff development and senior management buy in. This led to the development of a common strategy and model for change amongst these institutions.

The model, strategy and methodology for this common change process will be outlined, providing other institutions with an implementable set of tools to drive institutional change in this area. The significance of the underpinning area of institutional communication and key activities in this model will be outlined and how this provides a framework for change. The validity of the model was tested at a previous ALT workshop, where representatives from a number of institutions both further and higher education, discussed the barriers and enablers to embedding e-learning in their own institutions and compared them to that of the proposed model. This activity clearly illustrated that such barriers and enablers are shared across the sector and of value to the educational community. The poster will depict the model and its components, common barriers and enablers will be illustrated and communication channels outlined. The poster and related toolkit can be used together by groups to explore barriers and enablers to embedding TEL in an institution.

Authors

Dr Eileen Webb
» University of Teesside

Dr Judith Kuit
» University of Sunderland

Dr Dave O'Hare
» University of Derby

Ms Sandra Partington
» City and Islington College

Prof Peter Chatterton
» Daedalus e-world

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Mayes, J.T. and Morrison, D. (2008) *You take the high road: national programmes for the development of e-learning in Higher Education.* Reflecting Education. Vol 4, no1 pp 6–16

Authors

Mr John Conway
Ms Tina Rowe
Dr Philip Ramsden
Mr Bang Nong
» Imperial College London

0122

Mathematics Education Technology Research, Imperial College (METRIC)

This poster will highlight the METRIC mathematics application, developed to support the teaching and learning of mathematics across a number of faculties and departments.

METRIC comprises a bank of interactive resources in mathematics, including:

- self-test exercises;
- visualization tools;
- interactive microworld environments.

METRIC be used by and for a variety of audiences in the exploration of mathematical topics and concepts. Departments currently using the application include mathematics, physics, chemistry and engineering. The poster provides the viewer with a real sense of how the tool can be used in a blended learning environment, by the use of embedded video technologies. The poster will further highlight how the application can be utilised within a Virtual Learning Environment (VLE).

The poster consists of a number of images, supplemented by brief explanations together with a video, embedded within the poster to highlight the use of the application within a real classroom context. Further diagrams are provided presenting statistical information relating to the usage of METRIC.

METRIC was ported into the VLE to capitalised on the environment's tools, such as tracking, assessments, discussions and feedback and creating bespoke views for particular groups, extending METRIC's functionality and usefulness. The migration of METRIC to the VLE was simple, as it comprises a collection of applets, accessed via web pages. METRIC is regularly used within the undergraduate programmed. For Students it provides:

- formative, self-paced learning through quizzes;
- revision tool prior to examinations.

For academics it provides:

- tracking student progress through the various topics;
- diagnostic testing;
- quick flagging of issues.

The use of 'tex' with the 'jsMath' plug-in has enabled the rendering of mathematical objects within the browser without needing to generate gifs or use an equation editor. Tex documents are formatted in a template with an attached style sheet, rudimentary formatting is applied and the resource is ready for the VLE. Marking up the web pages requires no real knowledge of maths. This leaves the development of the mathematics content to the academic specialist, making updates relatively straight forward and efficient.

0133

Regional Implementation of e-portfolio: pilot and beyond

The Centre for International e-Portfolio Development (CIePD) based at the University of Nottingham are running the technology workstrand for Leap Ahead (the Lifelong Learning Network for Nottinghamshire and Derbyshire), undertaking trials of up to 1000 learners using institution-free and learner centred e-portfolio systems with a range of learners. The aim is to develop e-portfolio experience amongst regional partners across a variety of sectors and applications with a further aim to equip partner institutions to take fully-informed decisions about their choices of technology for the future.

The challenge is to build capacity through cross-sector and cross-institutional partnerships around the idea of using e-portfolios and to raise awareness of the potential of e-portfolios to support a wide range of learning activities, as well as to explore some of the issues of securing initial engagement, factors in institutional change and the IT barriers to adopting solutions. Embedding technology from a largely practitioner led viewpoint, drawing on elements such as the sharing of practice from the CAMEL model, has enabled the e-portfolio uses to originate directly from the needs of the practitioners, and the CIePD team, in working with various institutions and other agencies have enabled knowledge and practice to flow amongst these diverse partners.

The poster will illustrate the journey undertaken by some of the key innovators involved in the e-portfolio projects, from the challenges, methods of engagement of different stakeholders, and ultimately, how the projects have impacted onto the learners themselves. The poster will also demonstrate the variety of activity that is being undertaken as well as the processes that the activity supports.

Work undertaken has impacted on learners and practitioners in the following areas; schools, employers, information, advice and guidance services, further and higher education, post-graduates, job seekers, local authority, and sector skills councils. The work reinforces findings from the Hartnell-Young et al 2007 Becta report in recognising that there are numerous processes supported by flexible technology, which are largely generic for learners in all of the above areas. Modifications of approach and content can cover principal elements of these learning processes and applications without the necessity to embrace the system in its entirety.

Hartnell-Young et al. (2007) *Impact Study of e-portfolios on learning.* Becta2. JISC, "CAMEL". Available from www.jiscinfonet.ac.uk/camel

Authors

Ms Kirstie Coolin
Mr Phil Harley
Mr Stuart Wood
Ms Adele Cushing
» University of Nottingham

0135

Identifying the potential of QR codes as a learning technology

This poster will adopt an innovative approach to enable the attendees to identify what QR codes offer as a learning technology. By the end of the poster activity people will be able to answer the question, "What does a QR code offer as a learning technology". Admittedly, we may not have reached the definitive answer. However, we will have made significant steps in our understanding.

A Quick Response (QR) code is a two dimensional barcode. When scanned on a mobile phone it will allow you to complete a task. The most common tasks include accessing a web resource, sending a pre-written SMS or accessing more text information. The unique selling point is they enable the mobile learner to effectively and efficiently connect to an electronic resource or activity from a physical object.

Author

Mr Andy Ramsden
» University of Bath

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The poster is divided into a number of individual QR codes which the person will need to scan on their mobile phone to complete. These will be placed around the poster room (5cm by 5 cm stickers), with a poster which describes the activity and how people can install a QR code reader on their phone. This is an interactive poster which will give people the opportunity to complete many of the common activities associated with QR codes in an engaging way. Group work will be strongly encouraged.

The questions addressed within the QR codes will include;

- What is a QR code?
- How do you create a QR code?
- How do you access a QR code on your phone?
- How are they being used in teaching and learning, and in other sectors?
- Do people have the technology to use them now?
- How are they being used in Teaching and Learning?

Finally, people will be encouraged to leave comments on a blog post (or by SMS) on the broader question, "What does a QR code offer as a learning technology?"

Ramsden, A. and Jordan, L. (2009) *Are students ready for QR codes? Findings from a student survey at the University of Bath.* Working Paper. University of Bath. Available from opus.bath.ac.uk/12782

Ramsden, A. (2008) *The use of QR codes in Education: A getting started guide for academics.* Working Paper, University of Bath. Available from opus.bath.ac.uk/11408

QR Code Project Blog. University of Bath. Available from blogs.bath.ac.uk/qrcode

Authors

Prof John Carroll
Mr David Cameron
» Charles Sturt University

0138

Learning to respond: a crisis management simulation

The ability of any large corporation or public institution to handle a crisis can have major economic, environmental, social or cultural consequences. One challenge that confronts educators in the area of crisis communication is how to provide cost-effective scenarios that simulate real-world events within a controlled educational environment. This poster presentation will illustrate key elements in the development of computer-based simulation and role-play tools to enhance the learning and planning activities of Australian Defence Force (ADF) public affairs personnel. The tool is also being used with students studying journalism and public relations, and potentially has broader educational application across a range of first response organisations such as ambulance, fire, and police.

The poster will provide contextual information about the project's aims to merge established educational drama techniques and conventions with principles drawn from the technologies of digital games, Virtual Learning Environments (VLEs) and social media. It will use visual cues such as screenshots to illustrate the prototype application, the processes by which it manages and delivers content through a browser interface, and the types of media and peer-peer and learner-facilitator interactions supported by the system. Attendees will also be able to observe and interact with the prototype and a sample scenario provided on a laptop during the discussion. The learner voice will be present in the poster and accompanying discussion presentation through reference to research evidence gathered from trials to date. The poster will address issues of cost and labour for resource adaptation in different content environments, and point attendees to further information.

This poster will present an example of cross-disciplinary applied research in progress that aims to explore and evaluate the use of distributed role-based simulation to transform both professional practice and curricula. It will

describe an example of the innovations that may develop from a synthesis of well-established pedagogies such as educational drama and emerging forms such as digital games and VLEs. The comments and reflections of attendees will also feed back into the design and research stages of this work in progress. A demonstration session proposal to expand upon this poster presentation has been submitted.

0147

A project developing the use of mobile learning to deliver learning support to patients and informal carers in Suffolk

Authors

Mr Tim Goodchild
Dr Jane Day
» University Campus Suffolk

This poster will outline a recently commenced 2 year project which is developing the use of mobile learning to deliver learning support to patients and informal carers in Suffolk. It is estimated that 1 in 8 adults are carers in the UK, which is around six million people (Carers UK, 2009). Patients with long term conditions and their carers are often unable to access learning support due to the continual demands they face. Mobile learning is focused on the flexibility and mobility of learners, and this project is evaluating and developing learning technologies and techniques to support the delivery of education and informal care, often at the moment of need.

A definition of mobile learning is "learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of learning opportunities offered by mobile technologies" (O'Malley 2007). Mobile learning is a rapidly expanding component of education and training (Dearnley et al. 2008; Vavoula & Lonsdale. 2007), and this project, which is supported by the Suffolk County Workforce Group, is exploring current and future trends in mobile learning, and using these as a basis to provide innovative mobile learning and support allowing patients with long term conditions, carers, families, and students to have access to contemporary information flexible in time, place and speed.

The three main aims of the project are to:

1. provide innovative learning and support allowing patients, informal carers, families, and students to have access to contemporary information;
2. provide a full economic costing of delivering this new mode of learning support to patients, informal carers and their families and provide a cost benefit analysis;
3. support the development of a patient focused provision, including a range of credited modules and/or programmes for informal carers and patients at the required academic levels.

The project will also provide a proposal for a new mode of care delivery focussed on supporting patients, families and carers. This poster will outline progress so far including the scoping exercise of current mobile technologies and review of related projects.

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Dearnley, C. Haigh, J. and Fairhall, J. (2008) *Using mobile technologies for assessment and learning in practice settings: a case study.* Nurse Education in Practice, 8(3), 197–204

Vavoula, G. and Lonsdale, P. (2007) *Mobile Learning for young allergy sufferers: A report exploring research opportunities, challenges, methods and best practices.* Available from www.eee.bham.ac.uk/woolleysi/research/MobileHealthReport1.doc [accessed on December 17th 2008]

Authors

Dr Katarina Winka
Mr Thomas Fritz
» Umeå universitet

0148

A new model for competence development: experiences from Umeå University, Sweden

In order to retain and develop teachers' teaching competence, training is needed on an ongoing basis. One obstacle is that the opportunities for participation in competence development activities vary between departments, and the initiative and responsibility to enrol in this training is put on the individual teacher. Also, the individual need for competence development is often neglected when the offered training is limited.

In 2007, a teaching competence inventory was conducted at Umeå University. Teachers answered the question "What skills does a university teacher need?" The ability to use different teaching methods and the ability to use ICT as part of instruction were two of the skills that were identified. The compiled list of skills identified by the teachers has since then been used as a source of inspiration and one of the tools to identify the competence development needs and the strategy for competence development.

The Centre for Teaching and Learning provides training opportunities for teaching staff at our university. We have designed a new model for pedagogical competence development based on national and local guidelines, and the identified teacher skills from the survey. The training of online teaching-skills is integrated in all our courses, as is the training of different teaching methods and the scholarly approach to teaching.

Our model is based on three principles.

1. Develop yourself as a teacher by choosing either complementary or depth courses.
2. Your path through the range of courses is determined by an individual competence development plan.
3. In the courses the focus is to professionalize the teaching role and to develop a scholarly approach to teaching and learning.

By providing template development plans, and involving the heads of department in the planning process, the need for competence development for the individual, and the department, becomes visible. It is then possible to create opportunities for teachers to take part in competence development and for the department and faculty to plan a budget for this. The teacher has the possibility to influence the contents of the individual competence plan, but the final decision should be done together with the head of department.

Author

Mr Adam Unwin
» Institute of Education, University of London

0160

Course team approaches to online task design in higher education

The focus of this research project is the issue of task design for higher education staff that are using e-learning on their courses. Technologies can encourage a transmission approach to provide students with resources and curriculum. It is widely accepted certainly by educationalists that there needs to be a greater engagement and consideration of pedagogy when using new technologies in higher education. Key drivers (Laurillard 2002) in achieving educational change are the course teams that work on existing and new courses. This project concentrated on investigating the experiences of staff designing e-learning tasks and student's experiences of participating in such tasks.

The project conducted small scale qualitative research with courses in three different universities and disciplines (medicine, education and business).

However the data collection and analytical methods adopted enabled generalised understandings of task design, pedagogy and experience. This increases the potential for higher education practitioners to engage with the broad outcomes of the project and consider key issues in the contexts of their own courses.

Outcomes of the project include two overview diagrams, these are central to the poster. The first illustrates 'what course teams aim for and what students value'. The second illustrates 'factors influencing the design capability of course teams'. These diagrams should not be seen purely as a way of presenting findings, they have been designed so that they can also be used as a flexible tool in course and staff development. The poster includes exemplar guidance about how they could be utilised by course teams.

Although this work is in progress, it is clear that the student's own professional / educational context needs to be central to the design of tasks, which can be shared by participants to encourage interaction and collaboration. This combination allows benefits of both situated and socially constructed learning. Course team's experience of successful teamwork requires collaboration; meaningful collaboration of all stakeholders requires time. Design was more successful where existing models of tasks were available, where there was a shared course ethos and there was active course centred research within the team.

Laurillard, D. (2002) *Rethinking University Teaching, a conversational framework for the effective use of learning technologies.* London, Routledge Falmer

0167

Enhancing university curricula via adventure learning

Researchers and practitioners have frequently attempted to engage learners in authentic and experiential learning in an attempt to connect the activities that occur in the classroom and learner life beyond the classroom walls. One creative and promising way to engage learners in such activities has been through educational programs that revolve around outdoor-based expeditions and adventures grounded on the use of technology to reinforce the experience and connect learners, educators, experts, and explorers. Given the transformational educational potential that such programs have exhibited, the interest from the educational community, and the relative disconnect that exists in the current literature, this paper presents how the Adventure Learning (AL) approach to designing hybrid and online learning (Doering, 2006) can be applied higher education curricula. The goal is to present a framework used to redesign curricula for heightened, engaging, and aesthetic learning experiences.

AL is an approach to the design of online and hybrid education that provides students with opportunities to explore real-world issues through authentic learning experiences within collaborative learning environments (Doering, 2006). The approach is based on the theoretical foundations of experiential (Kolb, 1984) and inquiry-based learning. This approach to learning design is also grounded on aspects of adventure, synchronised learning opportunities, media enhancements, internet delivery, collaboration and interaction, active participation, and a guiding modular curriculum based on authentic problems.

To date, five projects have been based on the AL approach: Arctic Transect 2004, and GoNorth! 2006–2009. These projects have been based on the same narrative: a team of explorers and educators dog-sled an Arctic region of the world. Teachers and students, follow the travels and adventures of the team. The experience is mediated and enhanced by electronic media and

Authors

Dr George Veletsianos
» University of Manchester

Dr Aaron Doering
» University of Minnesota

3

artifacts sent from the trail (e.g. video, audio, imagery). This presentation will explore the guiding principles of this approach to learning and showcase how it can be applied by higher education staff to diverse curricula including topics in the humanities, physical sciences, social sciences, and medical science.

Doering, A. (2006). *Adventure learning: Transformative hybrid online education.* Distance Education 27(2), 197–215

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development.* Englewood Cliffs, NJ: Prentice Hall

Author

Mr Chris Hall
» Swansea University

0170

If it takes a village to find a phone... Using appreciative inquiry to engage a university in positive change

Benchmarking can be seen as threatening. You are not up to scratch. What you are doing is wrong and you must change! If people perceive they are being judged, they may try to portray themselves and their work in the best possible light. This can only lead to a false picture and therefore make any benchmarking a hollow and somewhat pointless exercise. This poster outlines the Appreciative Inquiry (AI) approach to benchmarking taken by Swansea University as part of the Gwella programme and the Welsh Assembly Government's 10 year plan for Technology Enhanced Learning (TEL).

Gwella used ELDDA, an amended form of the Pick and Mix methodology used in England. Having studied the experience of previous rounds of benchmarking, we felt that honest dialogue would be the most important aspect of the process. In order to achieve this, we took an AI approach to the dialogue and data gathering exercise — studying where things work well and how they can be applied to other areas of the University. Traditional change management sees organisations as problems to be solved and thus a great deal of time is spent discovering what doesn't work. AI stresses that organisations move in the direction of what they study and therefore in order to be excellent you need to study excellence.

We split the ELDDA criteria in to themes and mapped appreciative questions to the themes. Except in a few cases, we asked staff and learners the same questions. Additionally, we asked respondents to outline the best experience they have had of using technology in their teaching or learning. This was done as part of a questionnaire but also with a number of Appreciative Interviews.

Using AI enabled us to avoid being told what people thought we wanted to hear and allowed us to achieve a 'positive honesty' about our use of TEL. We have been able to take the best of what is currently working and apply it to our Gwella programme. We feel the 'mashing' of ELDDA and AI approaches provides a framework for other institutions to adopt this methodology and pursue excellence.

Author

Dr Sarah Chyriwsky
Ms Gaynor Arrowsmith
» The Open University

0186

Innovative approaches to e-marking in symbolically-rich subjects

The Maths Online Project within the Open University (OU) is exploring ways to enable tutors to assess electronically-submitted assignments whilst providing rich feedback incorporating mathematical notation and diagrams. In the interests of access and widening participation, it is important that students are free to use their preferred method to prepare work, including word-processing, or handwriting and subsequent scanning. Consequently

tutors must be able to deal with assignments submitted in a variety of formats whilst maintaining the quality of feedback traditionally associated with OU 'correspondence tuition'.

Due to the potentially large numbers of tutors involved with electronic marking, a cost-effective software solution was sought. Word 2007 was chosen because of its improved mathematical editor and on-screen inking facility. These were augmented by tools developed in-house to allow manipulation of embedded images and insertion of pre-prepared comments, ticks and marks. A trial was conducted in 2008 with a group of 24 tutors across a range of mathematics and statistics courses. Perceptions of their first experience of on-screen marking were sought via an online forum and three formal questionnaires. The style of marking and feedback provided to the student electronically was also compared to paper-based examples.

Including mathematical notation and diagrams in annotations was found to be time-consuming for tutors and could reduce the personalisation and spontaneity of their comments. However we found that each tutor combined different aspects of the available software to develop an individual approach to providing effective and timely feedback. This poster will show examples of different e-marking styles, illustrating our conclusions that the style developed depends on a number of factors:

- the tutor's Information and Communication Technology (ICT) experience;
- computer configuration;
- preferred marking style on paper;
- the format of the student's assignment and the academic requirements of the particular course.

It is hoped that these examples will inform tutors new to e-marking and assist them in using the technology effectively. The issues are also relevant to other symbolically-rich disciplines such as languages, music and the sciences. The outcomes of the trial as a whole are informing policy and practice in the roll out of electronic submission of assignments across the OU mathematics curriculum.

0191

E-assessment in Wales: experiences from higher education in further education (HEinFE)

Although e-assessment practice has become established and well-characterised within higher education, the potential barriers and benefits have not been investigated for HEinFE students. With the increasing prevalence of both this mode of study, and e-assessment generally, this JISC-funded project sought to examine how e-assessment could benefit HEinFE learners, and what the barriers to effective e-assessment in this context might be.

Meetings were held with academic staff to identify timely opportunities to aid learning with e-assessment. Tests were created and deployed. Feedback on the tests, the process of creation of the test and their role in aided learning was gathered from staff and students by short questionnaires and focus groups. Previously identified and emergent barriers were recorded, as were attempts made to overcome them. Both strands and outcomes will be represented in a diagram showing a student's progression through the course

A wide variety of tests were created to meet disparate learning opportunities. Many of these opportunities lay outside the usual role of e-assessment and were used to drive learning in a wider context than the curriculum. Staff and students found these activities useful, though not without drawbacks. Significant barriers, both technological and cultural were

Authors

Dr Peter Obee
Mr Mark Pelling
Dr Spencer Jordan
» University of Wales Institute

found between higher and further education. Competing differences in the workload of higher and further education staff including number of contact hours, demands of institutional IT systems, access to suitable facilities and equality of access were all identified as issues that reduced the effectiveness of e-assessment.

E-assessment can be a very valuable tool for improving the learning of HEinFE students. By using assessment as a driver for specific learning activities or skills, the wider student experience can be enhanced. Such an approach requires a broader suite of assessment, and assessment must be carefully aligned to objectivesThe higher/further education divide is not illusory, and is relevant for e-assessment. Efforts to overcome it must bridge the conformity/individuality differences that define institutions, and this requires close attention and cooperation between partner organisations.

Authors

Dr Ming Nie
Mr Matthew Wheeler
» University of Leicester

Dr Paula Roush
» London South Bank University

0209

A case study of Second Life for collaborative learning

This poster introduces a case study of using Second Life (SL) to provide collaborative learning opportunities. The study was carried out by the University of Leicester in October 2008 with six undergraduate students studying digital photography at the London South Bank University. The study was part of a JISC-funded research project, MOdelling Of Second life Environment (MOOSE, www.le.ac.uk/beyonddistance/moose)We adapted the idea of Virtual Story Cubes to work in SL. To structure the group work and facilitate collaborative tasks, three SL-based learning activities (SL-tivities) were designed based on Salmon's (2004) 5-stage model and the concept of e-tivities(Salmon, 2002).

In SL-tivity 1, students were shown and encouraged to experiment with different ways of using snapshot tools to create the most stunning images in SL. They were instructed to participate in a discussion to share their experiences.

In SL-tivity 2, students were shown how to create a cube, change its size and texture and move it around. Each student then produced their own cube with digital images taken from SL-tivity 1. After the task was completed, students were instructed to participate in a discussion to explain how they came to create their story cube.

In SL-tivity 3, in this task, the individual cubes had to be arranged together to create a group story cube. This required lots of negotiation and debate with regard to which snapshots to keep and which ones to hide in order to tell a story about it.

Student learning experience was researched using qualitative methods. We interviewed each student and held a focus group with the six students in October 2008. We also recorded chat logs and took observation notes from each SL session for analysis. Students identified a number of ways in which SL enhanced their learning: enabling active learning, gaining publicity as a photographer and promoting research into subcultures. Both the students and tutor found that the most gratifying aspect of working in SL is the ability to work together on the collaborative task which involves building virtual story cubes, moving them around and agreeing on the collective narrative.

Salmon, G.K. (2004) *E-moderating: the key to teaching and learning online.* 2nd edition, London: Routledge Falmer

Salmon, G.K. (2002) *E-tivities: The Key to Active Online Learning.* Rutledge Falmer: London

0217

A new Moodle module for enhancing learner autonomy and encouraging peer-assisted learning: the Question Creation Activity module

This poster will illustrate the philosophy behind and development of a Moodle activity module called "Question Creation Activity", which is intended to encourage students to take more control of their learning and to promote peer-assisted learning. Viewers will be able to get hands-on experience of the activity via the presenter's laptop. This module is free to download and install in Moodle systems (Ruthven-Stuart).

Teachers are aware of the need to encourage their students to take more responsibility for their learning. Consequently, many of them are attempting to blend technology into their teaching in the belief that it will allow their students to become more autonomous. One such technological tool that has grown in popularity in recent years is Moodle, a free open source Virtual Learning Environment (VLE). Moodle is thought to be eminently suited to facilitating learner autonomy because of its constructivist pedigree. Yet, it is just as possible to use Moodle to perpetuate the traditional roles of teacher and student, as it is to create a course that frees students from the strictures of 'sage on the stage' type pedagogies. Indeed, Moodle lacks features that overtly encourage students to study on their own. Consequently, the presenter has collaborated with a programmer to create an activity module for Moodle called the "Question Creation Activity". In this activity, students create questions as well as distracters and corresponding feedback; a process that is believed to advance a deeper understanding than is needed to simply answer questions about the subject. The questions can be graded automatically manually, and questions that meet a certain standard subsequently included in Moodle quizzes. Via screenshots in the poster and the demonstration web site, the presenter will show how both teachers and students interact with this activity.

Participants will be invited to describe how they might incorporate the activity into their teaching environments, and to suggest ways in which the module could be improved. This module represents phase one of a three-phase process of development. The following two phases will allow students to create their own quizzes, and finally to create on-the-fly quizzes from "smart question lists".

Ruthven-Stuart, P. *The Question Creation activity module.* Demonstration Available from qca.petesweb.org

Author

Mr Peter Ruthven-Stuart
» Future University-Hakodate

0228

Online numeracy support for students in further and higher education: a user-centred approach

Lack of basic mathematics skills and problems understanding numerical methods, the so-called "Maths Gap", impinges on student learning throughout further and higher Education. Here we report on work comparing the causes and consequences of this across a range of subject areas and identify potential solutions, particularly using online material. Following on from our successful web-based toolkit system called NuMBerS (Numerical Support for Bioscience Students) we present and evaluate a more generally applicable system, Students Upgrading Mathematics Skills (SUMS).

The SUMS project was initially stimulated by interest in the NuMBerS resource from different cognate areas and support services within Anglia Ruskin University. We put this in context of the findings of a series of

Authors

Dr Toby Carter
Dr Dawn Hawkins
Mrs Jacqui McCary
» Anglia Ruskin University

Mr Jamie Myland
» Peterborough Regional College

Dr Julian Priddle
Mrs Philippa Priddle
» Science Training & Education Partnership

workshops and surveys we ran focusing on the causes, consequences and solutions to the "Maths Gap" in further and higher education. These workshops were both inter-disciplinary and inter-institutional bringing together and drawing on the resources and experience of a number of education initiatives seeking to address the "Maths Gap" in the UK.

We reflect on how lessons learned so far could improve the uptake and effectiveness of SUMS and other on-line solutions. The SUMS project is the subject of a demonstration at this conference. Funding for the SUMS project initially came from an Anglia Ruskin University Teaching and Learning Fellowship and is currently supported by a grant from the Higher Education Academy EvidenceNet.

Castronova, E. (2006) *Synthetic worlds: the business and culture of online games.* Chicago : University of Chicago Press, 2006

De Freitas, S. and Griffiths, M. (2008) *The convergence of gaming practices with other media forms: what potential for learning?* A review of the literature. Learning, media technology, 33(1), p. 11

JISC (2007) *Game-based Learning.* JISC Briefing Papers, JISC

Salen, K. ed. (2008) *The Ecology of Games: Connecting youth, games and learning.* Massachusetts: MIT Press

Steinkuehler, C.A. (2004) *Learning in massively multiplayer online games.* International Society of the Learning Sciences, Santa Monica, California

Authors

Mr Mark McCalmont
Prof Paul Collier
» Queens University

0235

Design and implementation of an interprofessional virtual workshop

The Centre for Excellence in Interprofessional Education (NI) (CEIPE)—one of three Centres for Excellence in Teaching and Learning at Queens University—involves the students and staff of the Schools of Medicine, Dentistry and Biomedical Science, Nursing and Midwifery, Pharmacy and Education in a variety of research projects focusing on interprofessional learning and teaching.

Using different e-learning technologies is one way this approach is being implemented by the centre and one key project in this area is the development of an online virtual workshop on "Medicines Governance" for medical, nursing and pharmacy students. A number of parallel interprofessional workshops on "Medicines Governance" took place in October 2007 and 2008, but due to the potential number of students involved and timetabling constraints it was decided that a set number from each profession would be permitted to attend the "live" workshop, and the remaining students would be given the chance to complete the workshop online. The entire workshop was video and audio recorded, edited, and produced in a format that would be easily accessible online. In 2007 a discussion board was used for the group discussion, but as it was only compulsory for pharmacy students the response rate was very poor. In 2008 it was decided to make the workshop compulsory for each of these groups of students and a chat board was set up to simulate the group discussion that took place in the live workshop. This worked much more successfully.

The results from a questionnaire completed online after the workshop indicate the students found using the virtual workshop to be a very valid alternative to attending the real thing. It is envisaged that follow up research will be carried into how well the virtual workshop compared to the live workshop, and the advantages and disadvantages of chat boards vs discussion boards. This paper will show how the workshop was produced and implemented, and how the process is being refined in order to produce a generic template to support future virtual workshops in this and other disciplines.

0239

Audio, autonomy and authenticity: constructive comments and conversations captured by the learner

This poster describes a university-wide project designed to develop learner autonomy. The Student Audio Notes Project (SANP) involved students recording personal audio notes and conversations at their discretion. It built upon work that considered approaches to the design of audio feedback (Nortcliffe and Middleton, 2008). Usually the tutor controls the process of recording and distributing audio feedback; however, in one successful approach involving the recording of lab or studio-based feedback conversations, it was noted that a transfer of responsibility from the student to the tutor had unnecessarily occurred due to the ownership of the technology. SANP set out to discover if and how students would use devices if they were in control and to what extent 'rich, relevant and real world contexts' (Herrington and Herrington 2006) would be evident in the notes.

SANP gave away discrete, large capacity MP3 recorders to 60 students from across the faculties who joined the project following an open call for participation. Participants attended a drop-in induction session where they heard the ideas of other participants and recorded their own statements of interest. These initial participant recordings were used to seed a project podcast from the Virtual Learning Environment, which also hosted guidance materials. Students were asked to keep a record of how they used the devices. Other data were collected through surveys and focus groups.

Results from the year-long project will be included in the poster. They will reveal how the student expectations for the use of MP3 recorders compared to their actual use. Participants were encouraged to think creatively about their use of the recorders. For example, during project induction many explained that their interest came from a need to record lectures due to difficulties with note-taking. The project hopes to find out if participants recorded lectures, did they listen back? Did they attempt to summarise lectures? Did they involve other people? Did they share their recordings? The poster will report on these and other ideas proposed in the project materials, which included recording summaries of sessions with peers, recording group work decisions, and peer reflective reviews following assessment.

Herrington, A. and Herrington, J. (2006) *Authentic learning environments in higher education.* Hershey, PA; London: Information Science Pub

Nortcliffe, A. and Middleton, A. (2008) *A three year case study of using audio to blend the engineer's learning environment.* Engineering Education, Journal of the Higher Education Academy Engineering Subject Centre, Vol. 3 Issue 2

Authors

Dr Anne Nortcliffe
Mr Andrew Middleton
» Sheffield Hallam University

0247

The APT STAIRS model

The Appropriate and Practical Technology (APT) STAIRS Model was developed as part of JISC project to explore barriers to the adoption of new technologies by staff and students in the education sector. In particular, it aims to identify simple, scalable and practical solutions that address the collective needs of diverse user groups. It draws on the the Users and Innovation Development Model (UIDM) to specifically promote technologies that are agile, inclusive, rapid and relevant.

On the poster, a cartoon strip is used to demonstrate how the "gap" in technical competence between lecturer and student can be incrementally closed. Whilst the cartoon depicts the teaching and learning dynamic, it is also equally relevant to a research context where "lecturer" becomes "researcher" and "student" becomes "research collaborator"; in fact in many

Authors

Ms Caroline Bell
Mrs Sarah Sherman
» Royal Veterinary College

cases, the researcher and the lecturer are the same person.

The STAIRS model was applied and tested in a practical setting through small scale demonstrators. Initially, the basic technology used was Google Docs. The intention was that a user who had been encouraged to trial the use of a collaborative document only has to take a small step to use more innovative collaborative technologies such as blogs or wikis; hence, progressing up the "STAIRS".

The key message in the cartoon is that technology can offer new opportunities to collaborate, communicate and coordinate and provide the potential to bring lecturer and student to their common goal of ensuring the highest quality of teaching and learning. This has been born out by practical application of the model in a range of different higher education settings.

Fowler, C. and Scott, J (2007). *The User Innovation and Development Model Guide.* University of Essex

Authors

Dr Bernard Scott
Mr Piers MacLean
Ms Katie Janota
Mr Nigel Donald
» Cranfield University

0249

Project wALTer: developing web-based resources for e-learning practitioners

This paper reports on wALTer, an ongoing JISC funded project that aims to provide a high-quality web-based resources to stimulate and support e-learning professional development in the UK higher education sector. The project partners are Cranfield University (CU) and the Association for Learning Technology (ALT).The project is of relevance to all teachers and e-learning professionals involved in the design, development and delivery of e-learning and is designed to support professional accreditation in the field. As such, it is also intended to be a useful resource for staff in other education and training sectors. The project builds on other research activities concerned with the professional development of e-learning practitioners. CU, in association with the UK University for Industry and the British Institute for Learning Development, has carried out a comparative survey of the education and training needs of learning designers, together with a survey of what education and training opportunities are available. The findings have helped specify what should be included in the resources. The CU output from the project will be a single web service incorporating a digital repository of taxonomically organised support materials together with a wiki style interface.

The project is at a 'proof of concept' stage. It builds on an existing web-based resource at CU, The Online Learning Knowledge Garden (OLKG). The OLKG has been designed to be an elegant and accessible resource that encapsulates a well thought principled approach to course design that has proved particularly useful for a number of online courses developed and delivered at the UK Defence Academy — College of Management and Technology (DA-CMT). The OLKG is being developed and extended by means of a set of linked technologies. An enterprise web portal application, wiki and content management applications ensure that the resource can be searched and accessed in multiple ways. The URL for the revised OLKG will be published on the project website when, following evaluation studies, the repository goes live.

0250

How many tools is too many?

Can you have too many e-learning tools? This is an important question, which every educational establishment needs to consider. In my view, the answer is simple: one tool is too many if it is the wrong tool.

History shows us that tools are often adopted with little or no thought, and then stakeholders act surprised when such initiatives fail. Educational establishments have an obligation to make intelligent decisions when selecting new tools, as they often do this on behalf of the people who will actually be using them on a day-to-day basis.

This poster will draw attention to the importance of this issue by graphically representing four fictional educational environments. Each will approach the acquisition of new e-learning tools in a completely different way. The small primary school will refuse to have any e-learning tools, isolating itself from the outside world. The community college will have one tool and will use it for almost everything, no matter how inappropriate. The small university will have multiple tools, but will insist that all tools are in-house, and will discourage the use of tools with a wider user base. Finally, the large university will use every e-learning tool under the sun, even though it cannot possibly support them all.

These extreme examples will serve to highlight the common pitfalls when adopting new tools. The lower section of the poster will then discuss sensible strategies when selecting tools. The poster will encourage educational establishments to ask the following questions before embracing a new tool:

- Is the tool future-proof?
- Does the tool provide features that existing tools don't?
- Is the tool easy to use?
- Will our learners like this tool?
- Can we effectively support this tool?

The poster will also demonstrate the need to periodically review existing e-learning tools to ascertain whether they meet the needs of both the educator and the learner. Ultimately, this poster will raise more questions than it will answer. However, hopefully it will provide a stimulus for discussion and highlight the importance of making intelligent decisions when new tools are adopted in the future.

Author

Mr Marty Jacobs
» University of Essex

0254

Designing a context-aware ubiquitous language learning environment

Mobile learning has been a popular practice for people using handheld devices or portable computers to develop new languages, knowledge and skills individually or collaboratively on the move. Since the early 2000s, an emerging form of mobile technology with wireless communication sensors and Radio Frequency Identification (RFID) embedded objects in the surroundings provides new ways of technology enhanced learning, which is called context-aware ubiquitous learning (u-learning; Liu & Hwang, 2009).

Yang, Okamoto and Tseng (2008) observe the learning technology (LT) field and indicate that context-aware u-learning is an emerging learning paradigm. With more new LT values being identified (Liu, 2008), we are currently experiencing a paradigm shift from conventional e-learning to m-learning (Rushby, 2005), and from m-learning to context-aware u-learning (Hwang et al., 2008). However, since it is a new type of mobile learning, there has

Authors

Dr Gi-Zen Liu
» National Cheng Kung University

Prof Gwo-Jen Hwang
» National University of Tainan

3

been little research concerning how to identify important attributes and then design a language learning environment for context-aware u-learning.

According to Collins et al (2004), design research has been developed as a new method "to carry out formative research to test and refine educational designs based on principles derived from prior research" (p. 15). In the study, the researchers use the design research methodology (Collins et al., 2004) to validate and refine a set of design guidelines derived from prior e-learning context related research in order to better plan a context-aware ubiquitous language learning context. In this qualitative study, it is assumed that useful design guidelines will be helpful for interested practitioners and researchers to better understand how to plan and implement this new type of m-learning environments.

The two researchers will present a set of design guidelines for a context-aware ubiquitous language learning context. In addition, the implications of the technology use for a context-aware ubiquitous language learning environment will be provided.

New guidelines or models that can help us conduct LT research on the most advanced computer technologies are still insufficient. The researchers hope the proposed design guidelines will provide a practical direction and shed more light on context-aware ubiquitous language learning.

Collins, A. Joseph, D. and Bielaczyc, K. (2004) *Design research: Theoretical and methodological issues.* The Journal of The Learning Sciences, 13, 1: 15–42

Hwang, G. J. Tsai, C.C. and Yang, S.J.H. (2008) *Criteria, strategies and research issues of context-aware ubiquitous learning.* Educational Technology & Society, 11, 2: 81–91

Liu, G.Z. (2008) *Innovating research topics in learning technology: Where are the new blue oceans?* British Journal of Educational Technology, 39, 4: 738–747

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Rushby, N. (2005) *Editorial.* British Journal of Educational Technology, 36, 5: 709–710

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Authors

Ms Ida Kemp
Mrs Jennifer Parr
» Univerity of Leeds

0272

Can technology enhanced learning engage the 'silent' student?

As Virtual Learning Environments (VLEs), blended learning and online resources become integrated into teaching methods in higher education, this poster presents findings on student participation in VLE as opposed to 'live' in-class discussion. A comparison between class participation and VLE or other technology participation is undertaken, along with an analysis of student engagement and participation with new technologies.

Student participation is monitored to see if any patterns in relation to engagement are evident. Work has already been undertaken to monitor this and gain feedback on VLE blended learning approaches, but limited work has been done to see if the new 'virtual' environments present an opportunity for students, who might not otherwise participate in 'live' discussion. Data is taken from a range of departments in the University of Leeds, with a view to mitigating any subject or gender bias. New technologies can take the form of VLE discussion boards, use of mobile phones during lectures or practicals to help lead discussion and online student question and answer forums. We envision the central picture of the poster will be a discussion board screen and leading off the thoughts behind this work, the methodology, the findings and feedback from students.

The VLE, Blackboard, in the case of the University of Leeds, is a very powerful tool and it is being used by many across the University of Leeds but we do not know enough about its effects and are subsequently not aware

at how it is changing student participation. The context of higher education is rapidly changing with the involvement of Technology Enhanced Learning (TEL). TEL is progressively taking hold in higher eduation institutions. The focus is, understandably, on the development of teaching material including some form of TEL. Developers look at which delivery tools best suit the learning objectives. However, how is this effecting student participation? More specifically is TEL allowing those who normally do not engage to 'come out of their shell'?

This poster wants to give an impetus to start thinking about the technology and student participation.

0273

When the 'teacher' is a co-learner…

Author

Mr Vincent Perera
» Middlesex University

The development of a new module gives opportunities for extending choice and changes in approach to both teaching and learning. The choice of content, and changes to methods of delivery and assessment are essential considerations. The background to the study is one where everyone involved is learning — the teacher therefore being a co-learner.

The poster will illustrate the structure / organisation of assessed practical work which forms the main learning activity. The emphasis is on students learning amongst themselves. Graphical illustrations will include the organisation of individual work which contains a group element where students are encouraged to improve each others' attempts. Conversely, group work has an individual element, where students specialise and provide leadership in a selected number of topics and spread their knowledge within the group. Although there are set activities, students have a choice including case studies and methods of learning. This includes an option related to work-related experience or of innovation — such as a simulation or specification of a game. An illustration (also on a laptop) will include the weekly assessed online activities where students explore two conceptual approaches ultimately identifying a unifying theme and another where students search on-line for an 'answer' only to find the limitations of their exploration. These activities lead to critical analyses resulting in deep learning.

This research incorporates a recent ('Likert') survey and a variety of assessment instruments. Current findings include responses and comments from students and colleagues, suggesting that there is general acceptance of an innovative approach and satisfaction. Statistical analyses from a pilot and a follow-up forms part of the presentation.

These experiences are possibly discipline-specific. Instead of a 'static' design where a course follows a predetermined structure, some exercises are framed in an inquiry-based 'dynamic' manner to help students learn. The poster will reference writers on the general pedagogy which might encourage the application of the approach to other disciplines.

0277

Online Coursework Submission at the University of Essex

Author

Mr Ben Steeples
» University of Essex

The ever increasing student-staff ratio is an all-encompassing issue, affecting every aspect of an academic institution. One area particularly affected by this is the collection, collation, and returning of coursework; a task traditionally assigned to administrative staff within a department. On the other side of the coin, we are seeing an increase in both the number

of distance learners, and the number of digital natives. Both these groups are demanding that the submission of coursework should be at their convenience, not the institutions. It is clear that a solution for both sides needs to be found.

In 2001, one department at the University of Essex decided that it would accept its coursework submissions electronically; allowing students to submit their files via a web-based interface that it had developed. At the time, the university-wide Virtual Learning Environment (VLE) was still in its infancy, the possibility that it could be used to accept coursework was not a viable option. Since then, online coursework submission has gone from strength to strength. Adopted as a centrally supported service in 2005, and used for all undergraduate coursework since 2007, Online Coursework Submission (OCS) has been one the most used e-learning tools at the university. In addition to accepting online submissions, the system also supports traditional paper and pen marking and review, by producing a uniquely watermarked (and identifiable) hardcopy for each piece of work.

The poster aims to give a general overview of the OCS system, describing the submission, watermarking, and review processes with the aid of screenshots and flow diagrams. In addition, it will provide technical details of how the system was constructed, alongside a comparison against other electronic submission systems that are available (such as TurnItIn). Finally, the poster will disseminate usage figures and trends from the last four years of use, and our ideas for the road ahead. It is hoped that the poster will help other institutions who want to introduce a similar service, but not be wedded to off-the-shelf systems. In addition, it may help institutions who currently have online marking and feedback systems, but no means of collating and returning coursework.

Author

Mr James Clay
» Gloucestershire College

0301
The Glossy Project

The Glossy Project undertook the large-scale development and implementation of mobile learning across Gloucestershire College utilising the mobile devices that learners already own.The project put in place an infrastructure at Gloucestershire College that allows learners using devices that they already own and college devices to access learning activities and content. The project created a student wireless network that can be accessed by learners' own devices to access a range of content and learning activities through the college Virtual Learning Environment (VLE).

The aim of the project was to enable learners to access learning at a time and place to suit them in order to improve retention and achievement. The project provided mobile devices to learners in selected groups; including excluded learners and learners with learning difficulties and disabilities. The project allowed the college to provide suitable hardware and software based in the college libraries that let both staff and learners develop, create and convert content for use on a range of mobile devices.

The poster will show the key issues, challenges and opportunities that mobile learning offers institutions. It will show the key stages that are required to allow institutions to utilise the mobile devices that learners already own. The difficulties of working with diverse learner devices will be outlined on the poster because understanding them is vital to any discussion of sustainability.

The poster, through a range of examples, will show how important it is to address the differing attitudes of staff, IT support needs and staff development. The Glossy Project did much more than start Gloucestershire

College down the road of mobile learning, it had an impact on the whole culture of the organisation in the use of not just mobile technologies, but also other learning technologies, audio, video, podcasting, wireless and use of the VLE to enhance and enrich the learning experience. The project had an impact on 14,000 learners during its lifetime the project ran from November 2007 to July 2008. It continues to have a benefit as the infrastructure enables mobile learning to continue.

0303

Making the most of what we've got: how Peninsula College of Medicine and Dentistry is maximising the use of its eResources

Authors

Mrs Sally Holden
Mrs Natasha Harden
Ms Lizzy Parsons
» Peninsula College of Medicine and Dentistry

In 2007 Peninsula College of Medicine and Dentistry (PCMD) put together an e-learning strategy which has since provided guidance on the use of e-learning across the institution. Principles articulated within the strategy are used as criteria against which to review existing and future eProvision. Another outcome of the strategy was to develop a process by which to evaluate future eResources requested by individuals or curriculum teams.

This poster illustrates the development and implementation of a procedure by which specialist software, eResources and reusable learning objects (RLOs) can be requested, approved, developed in-house, obtained (e.g. "freeware") or purchased and subsequently reviewed on an annual basis, by PCMD, for its users (academics, researchers, support staff and students). It is hoped that this procedure will ensure all eResources are of high quality, promote efficient/appropriate pedagogical use and minimise support staff time required to successfully implement any new eResources, systems or tools. PCMD uses a wide-range of specialist software and eResources to support all facets of the organisation's activities, including teaching, learning, assessment, research and administrative support. In order to ensure that software and eResources that are requested are appropriate for use at PCMD, it is important to check that they are compatible with the education philosophy and the IT infrastructure at the college before they are purchased, developed or obtained. This new approach has been running for almost a year and is beginning to be embedded within the organisation. Learning technologists and academics from all key areas of the college meet termly and consider new requests for purchases or developments and review usage of existing materials. Whilst probably being seen as less exciting than the ongoing "cutting edge" medical and dental e-learning developments within PCMD, we consider this "housekeeping" work and the new procedure will also make a vital contribution to the overall improvement of the eProvision for our students. The poster will illustrate the principles of the e-learning strategy, the decision making processes for purchase/development/maintenance/removal of software or eResources and the steps we have taken to promote/embed the new procedure across the institution.

Authors

Ms Patrina Law
Mr Graham Healing
Ms Gill Needham
» The Open University

0307

LearnAbout educational technology: a practical approach to professional development at the Open University

This poster will describe an innovative approach to professional development employed at the Open University over the last three years. This project addressed the challenge of bringing not only the university's community of full time academic and academic related staff but also 8,000 part time tutors fully up to speed with the potential use of innovative technology in learning and teaching. The objective was to ensure that the community as a whole was able to benefit and learn from the expertise and innovative experience available across the university, and to build confidence and competence in those for whom technology may be unfamiliar and / or challenging.

The approach was two-fold. A series of concise and practical LearnAbout guides were commissioned from experts, covering topics such as 'blogs and wikis', 'metadata' and '3D Virtual Worlds'. These have a standard format: they are short and written in non-technical language. They give a basic overview and then a clear focus on practical implementation with both examples and contact details. Each guide is peer reviewed and professionally edited before being posted online in both text and audio. New topics can be suggested by any staff member: there are currently 50 guides available. Following the success of the guides a LearnAbout fair was organised in January 2008 to promote their use. This was a highly interactive event: a 'bring and buy' format with LearnAbout guide authors as stallholders presenting their wares and an ongoing programme of presentations as well as opportunities to experiment with a range of gaming and mobile technologies. The fair was so successful that it has been repeated in 2009.

The poster will present the results of an initial staff survey of attitudes to and confidence with new technologies. Examples of the LearnAbout guides will be available as well as an explanation of the development and production process. A multimedia presentation will capture the format and experience of the LearnAbout fairs and the detailed results of a survey of participants will be included. Overall the poster will demonstrate the impact of a simple but effective approach to building capacity for innovation with educational technology.

Titles by paper number

Index of principal authors