EUROPEAN DISTANCE AND E-LEARNING NETWORK (EDEN)
Annual Conference 2009 – 10th to 13th June 2009, Gdansk, Poland

ABSTRACTS OF UoL AUTHORED
CONFERENCE CONTRIBUTIONS

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Introduction and Overview

The University of Leicester had a wide-ranging presence at the European Distance and E-Learning Network (EDEN) 2009 Annual Conference held in Gdansk, Poland from the 10th to 13th June 2009. Brief details of the conference contributions are given below:

A keynote address was given by Professor Gilly Salmon, UoL Professor of e-Learning and Learning Technologies, on the theme of “Best of times ... worst of times ... for open learning”.

In addition, the following short papers and workshops were presented:

“Second Life for archaeology, digital photography, and media and communication education – three case studies”
Dr Ming Nie, Dr Palitha Edirisingha and Matthew Wheeler

“Tutoring at a distance, online tutoring and tutoring in Second Life”
Professor David Hawkridge and Matthew Wheeler

“A renaissance of audio: podcasting approaches for learning on campus and beyond”
Dr Palitha Edirisingha, Professor David Hawkridge and Professor John Fothergill

“Developing e-learning design capabilities in a dual-mode institution”
Roger Dence and Dr Alejandro Armellini

“How green is your learning? Pedagogical options for environmentally sustainable education”
Dr Samuel Nikoi and Matthew Wheeler

“Wiki future gazing”
Sandra Romenska

“Conclusions from the Melville Report on the Changing Learner Experience (CLEX) Enquiry”
Professor John Fothergill

“Media Zoo tour: innovation to practice workshop”
Matthew Wheeler and Sandra Romenska

“Creating Academic Learning Futures workshop”
Professor Gilly Salmon and Sandra Romenska

Abstracts of the above conference contributions are included in the following pages of this booklet. For further information, please visit the BDRA Dissemination Activities site, where the full texts of the short papers, any handouts and presentation overheads from this conference are posted.
SECOND LIFE FOR ARCHAEOLOGY, DIGITAL PHOTOGRAPHY AND MEDIA AND COMMUNICATIONS EDUCATION – THREE CASE STUDIES

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Introduction

Second Life is the most popular and widely used 3-D Multi User Virtual Environment (3-D MUVE) by far. There is a growing interest in using 3-D MUVEs for teaching and learning in Higher Education (HE). Over 300 universities, mostly in the UK and the US have established virtual island in SL so far (Salmon & Hawkridge, 2009). However, research into 3-D MUVEs for HE is still in its early stage. Most of the research tends to be based on small-scale experiments. We urgently need to develop pedagogical models in supporting and enhancing students’ learning through 3D MUVEs.

This article reports on three case studies of integrating SL into three disciplines: Archaeology, Digital Photography and Media and Communications. The studies are conducted by Beyond Distance Research Alliance at University of Leicester, UK within a JISC (The Joint Information Systems Committee) funded research project called MOOSE: MOdelling Of Secondlife Environment (www.le.ac.uk/beyonddistance/moose/).

This article demonstrates three different approaches to use SL to support three different disciplines. Within each case study, we introduce how SL can be used to address a particular teaching and learning challenge faced by the course; we demonstrate how SL can be used in a more productive way to enhance student learning the subject area; we describe the design of activities in SL (SL-tivities) and development of artefacts within the University of Leicester’s Media Zoo island in SL (http://slurl.com/secondlife/Media%20Zoo/170/150/17); and we discuss key results from research based on student learning experience in SL.

Methodology

We conducted research with students and tutors from three courses at two HE institutions. Student and tutor engagement with SL-tivities were researched using qualitative methods. Data was captured in a number of ways. We conducted semi-structured interviews with students and tutors. We recorded chat logs and took observation notes from each teaching session in SL for further analysis. Data analysis is based on a methodology called cognitive mapping to create unique ‘maps’ of individuals and groups and their change in views, feelings and experiences over time. The methodology is grounded in Kelly’s theories of personal constructs (Kelly, 1955).

Conclusion and future work

Three pilot studies contributed to knowledge in substantive and overlapping areas. These include: ‘socialisation’ and ‘social presence’ in 3-D MUVE and their role in supporting learning at a distance, ‘identity’ and ‘sub-cultures’ issues in SL, learning through role-play and simulations, and new pedagogies and literacy in immersive environments.

Three pilot studies also contributed to the reservoir of understating of how SL can be used for formal teaching and learning in HE. This empirical knowledge and research to practice approaches developed in MOOSE has contributed to the redesigning of the distance delivery of two postgraduate courses: Psychology and Education at University of Leicester. Course teams are currently examining MOOSE approaches to improve the learning experience of about 200 students distributed around the world. Specific approaches under consideration are: SL for role-playing, induction and dissertation supervision.
TUTORING AT A DISTANCE, ONLINE TUTORING AND TUTORING IN SECOND LIFE

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Tutoring at a distance and online tutoring

Research into tutoring at a distance has a fairly long history and the functions of tutors in distance education institutions are well understood. Over the past 20 years research into online tutoring has advanced significantly as such institutions have ‘gone electronic’: in this paper we cite published research from the UK Open University. Recently, blogs, wikis and podcasts have arrived to supplement established systems like email, virtual learning environments (VLEs, such as Blackboard) and computer (web) conferencing. Ideally, the technology enables online tutors to weave together conference conversations, Web pages and even emails. They do so by acknowledging contributions, synthesising and summarising, drawing threads together, watching for and correcting conversational ‘drift’, spotting good ideas, opening up new avenues for development, identifying holes in arguments (and patching them), separating opinions from facts, clarifying areas of agreement and disagreement, encouraging further exploration, pointing to valuable sources, promoting selectivity and building patterns.

Tutoring in Second Life

Very little research has been published so far, however, on tutoring distant students in three-dimensional multi-user virtual environments (3-D MUVEs). Distance educators may want to ask whether the best practices from tutoring at a distance and online tutoring can be transferred to these environments, which do not resemble VLEs. Second Life (SL), the prime example of a 3-D MUVE is a social environment, not a game. Generally, users are not expected by the software to meet objectives, engage in battles or undertake quests and tasks as in most virtual games. SL contains no goal-driven rules: it was not designed with tutoring in mind. Academics seem to be using SL for educational purposes such as virtual laboratories and field trips, problem-based learning, group discussions and design teamwork. Such initiatives try to take into account students’ preferences and habits, and, by exploiting aspects of immersion, aim to enrich their learning.

What is feasible when tutoring in Second Life?

Is SL an ideal setting for distance education, and perhaps for tutoring students? To clarify what may or may not be feasible when tutoring in SL, we shall present an onscreen elucidation through avatars, on an island in SL created by the Beyond Distance Research Alliance at the University of Leicester. The island offers a setting for communities of inquiry within which avatars can create and enjoy social, cognitive and teaching presence [to be demonstrated]. The avatars may represent tutors and learners from any part of the globe.

A distance education institution can limit access to its island (or a part of it) to those registered for a particular tutorial, and doing so eases problems of identity and trust that crop up if complete strangers appear out of the blue. As tutors get to know their students’ avatars, they may find their own identity and authority challenged, not least because avatars tend to be on equal terms in SL, more so than their owner-users are in real life (RL). Tutors who try to replicate their RL ‘full-frontal’ teaching style in SL may find themselves at a considerable disadvantage, since presentations can take up to four times as long in SL and student avatars may wander off. If the tutors’ avatars are tutoring synchronously worldwide, time differences are a problem: asynchronous sessions have to ‘wait’ for students’ avatars on other continents to contribute. Despite such challenges, SL offers tutors and students considerable advantages. For example, tutors can create in SL artefacts or objects that simply do not exist or are inaccessible in RL, to use for illustration or as the spark for a discussion among avatars.

Discussion of opportunities and challenges

These and other issues are summarised in a handout. Discussion in this EDEN session is likely to focus on the opportunities and challenges inherent in asking students and tutors to meet in such an environment.
We urge practitioners to consider the potential of podcasting for teaching, learning and assessment. Although audio has been proved successful in terms of student learning, especially in distance education (DE), its use has been often undervalued because of the lack of production, recording, distribution and playback facilities for audio, and, for radio, the lack of flexibility of broadcast schedules. Podcasting has changed the position of recorded audio as a medium of learning. A podcast is a digitally recorded sound (or sound with vision) file. The name comes from the Apple iPod, a small, portable player with a huge memory. Podcasting is often applied to the whole of making and using podcasts.

**IMPALA on campus**

Our perspective is drawn from research on IMPALA (Informal Mobile Podcasting And Learning Adaptation), involving colleagues in 10 universities in the UK, South Africa and Australia. It started with a pilot at the University of Leicester using podcasting in an undergraduate module in electrical engineering, with 30 campus-based students who studied the module online using the university's Blackboard VLE. The professor changed his "physical" lectures to e-lectures but met the students three times during the module. His weekly podcasts supplemented his online teaching with updated information and guidance on the weekly activities, and motivated his students by relevant news items and a fun item such as a joke. His podcasts complemented the module's activities with summaries and further guidance. Each 10-minute podcast appeared on the VLE at the beginning of the study week, for nine consecutive weeks. Since this module was and is being taught online, it would be fairly easily adapted for distant students. Its approach to using podcasting would be admirably suited to them, helping them to feel a sense of community by 'meeting the prof' in each week's podcast. Difficulties would arise in providing distant students with facilities for tutorials, not in using podcasts.

IMPALA partners created their own podcasting approaches to address their specific teaching and learning challenges. Over 500 students and 20 academic staff have taken part in IMPALA since 2006. The podcasts' impact on students' learning was studied through collecting and analysing qualitative and quantitative data. We present examples of three approaches: 1) helping Kingston University students to prepare presentations and assessed work, 2) offering feedback from staff on Chester University students' assessed work, and 3) assisting Leicester University undergraduates to make the transition from school or college to university.

**IMPALA for distance education**

The approach to podcasting at Kingston University would convert well to DE, except that it was helping students in part to hone their presentation skills: distant students seldom if ever have opportunities to present their work face-to-face. It was also helping students to get their portfolios ready to be assessed: that is something distant students on certain courses have to do too, and podcasts would help them. Students, including the student mentors, were asked to help to create podcasts based on their experience. That approach would transfer well to distant students, who could speak up about the problems and solutions they had found, for the benefit of other students new to DE. The approach at Chester University in the UK to using podcasts to give students feedback on assessed work would convert to DE almost without alteration. Distant students would appreciate even more than their campus-based colleagues the spoken feedback from tutors on their work. The podcasts would help to bridge the gap, since in many cases distant students never meet their tutors. The University of Leicester podcasting approach to supporting new undergraduates' transition from school or college to university is very well matched to the needs of distant students, except of course the experiences and advice from students contained in the podcasts would have to be related not to campus-based study but to learning at a distance. Distant students are often older, therefore the transition might be from not having studied for some years to studying at university level away from the campus, using the materials and systems provided. On the evidence available to date from IMPALA and other studies, we feel confident in predicting that podcasting will be integrated more and more into DE, to the immense benefit of the long distance learner.
DEVELOPING E-LEARNING DESIGN CAPABILITIES IN A DUAL-MODE INSTITUTION

Roger Dence and Alejandro Armellini, University of Leicester, United Kingdom

Higher education institutions offering open or distance learning provision alongside traditional on-campus delivery can face particular course design, development and delivery challenges. Research and innovation in one context may provide learning design benefits in the other, as well as practical opportunities to transfer innovation to practice in both modes of delivery.

The development of e-learning competences among academic staff and the provision of opportunities for active experimentation with different learning technologies are thus vital enablers in improving teaching and in enhancing the student experience, irrespective of the mode of delivery. This paper outlines the pathways followed by the University of Leicester (UoL) in developing e-learning capabilities and learning design competences and presents some of the outcomes achieved to date.

The UoL is a traditional campus-based university with a significant DL offer that is largely the result of entrepreneurial activities by individual academic departments over more than 15 years. At 1st December 2007, it had over 19 000 students, including over 8500 part-time and distance-learning (DL) students. The UoL DL portfolio has widened considerably since 2006 by developing new programmes and expanding into new markets.

The development of e-learning capabilities was given new impetus in mid 2005 when a formal strategy explicitly addressing e-learning was adopted. This complemented the existing learning and teaching and distance learning strategies. Since then, significant change interventions have been made to strengthen further the institution’s learning design capabilities, for both on-campus and DL delivery. In particular, resources were allocated to address the individual and team e-learning competences necessary at the course and module level in a number of departments offering both modes of provision. A view of the causal linkages seen between these elements is shown in Figure 1:

| The strategic challenges: designing developing and delivering effective, sustainable technology-rich courses in a dual-mode university | requires | The provision of learner-centred curricula using the affordances of the VLE and peer and collaborative e-tivities, with technological innovations in teaching and learning | which results in | The transformation of student learning opportunities providing equivalent learning experiences in on- and off-campus delivery | and provides | Research evidence of sustainable embedding of innovations in curriculum design, development and delivery |

Figure 1: An e-learning enhancement causal effects flow.

The adoption of the UoL e-learning strategy in 2005 was followed by an audit of the institution’s e-learning capabilities as a pilot project within the UK Higher Education Academy’s Benchmarking programme. Further e-learning change initiatives formed part of the Academy’s Pathfinder, the e-Learning Research Observatory and the Pathfinder Network programmes.

Outcomes included significant improvements in the benchmarking performance of key e-learning criteria from 2006 to 2007. Some 20 intervention workshops were held within UoL up to end 2008, involving more than 160 staff from 31 courses across 14 disciplines, and resulting in the production of over 100 newly designed or re-designed e-tivities. These have shown the key role of learning design and learning technologies in effective teaching and learning and as a major determinant of the student learning experience.
HOW GREEN IS YOUR LEARNING? PEDAGOGICAL OPTIONS FOR ENVIRONMENTALLY SUSTAINABLE EDUCATION

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Introduction

In 2002 the UN launched the Decade of Education for Sustainable Development to integrate sustainable development into all aspects of education. In the UK, and within the education sector, the Higher Education Funding Council for England and the Learning and Skills Council have published strategies aimed at environmentally sustainable education. The Times Higher Education published in 2008 a Green league table ranking universities by their environmental performance. The University of Leicester was ranked 96th, the lowest of all HEIs in the East Midlands.

Greening of E-learning ChecK Out (GECKO)

GECKO, funded internally by the University of Leicester, was a pilot study to address environmental challenges faced by the University. It compared the total carbon emission of students during a blended learning course, i-Science, with those emitted during a face-to-face Physics course on four key parameters (ICT, paper, energy and travel) with an aim to start to inform the University’s policy on environmentally sustainable learning and teaching.

Study aims and objectives

- To compare CO₂ emissions of blended and face-to-face modes of delivery
- To test the hypothesis that blended learning is more environmentally sustainable than face-to-face
- To develop the Learning Carbon Footprint for various modes of delivery

Research methods

GECKO surveyed online 10 student volunteers from each of the two courses: BSc i-Science and BSc Physics over a three week period in November-December, 2008. Students were given booklets to keep a log of how long they spent on their PCs or laptops, photocopiers and scanners, how much paper they used for printing and photocopying, how much energy they consumed in the form of electricity and gas for heating and lighting, and how far they travelled by public or private transport to or from the University.

Findings

- CO₂ emission associated with ICT use is higher for face-to-face than for the blended learning. Students on the latter use laptops which may be more environmentally friendly than PCs despite their longer use.
- Paper use is higher for face-to-face learning than for blended learning. Face-to-face students, more than blended learning students, are likely to have access to printing and photocopy facilities on campus.
- More energy is used for heating rooms for individual blended learners’ accommodation than for lecture halls for face-to-face students, although the difference depends on the class size and capacity in the face-to-face mode.
- CO₂ associated with travel are higher for blended learning than for face-to-face students because these students are mostly mature students who do not live locally and tend to use their own transport to travel to campus.

Recommendation

- Provide support for environmentally sustainable learning design
- Encourage green “travel” through synchronous interaction, using web-conferencing tools.
- Make students aware of the environmental implications of their learning-related behaviour.
Higher education institutions 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 research approaches and tools to inform strategic thinking within the institution about the future of higher education.

One of the aims of the CALF project is to design and test means of structuring and filtering information, in order to facilitate institutional strategic decision-making in participative and creative ways. This work has led to the creation of a web-based tool – the CALF project wiki – which provides a means for eliciting and structuring ideas and information from students about possible futures in higher education in innovative and creative ways.

The use of wikis for developing future scenarios with students for the enhancement of their learning is an innovation and its merits and shortcomings are still in need of careful assessment by academics, practitioners and learners. Insufficient availability of data and lack of a substantive theoretical framework regarding both future studies and the pedagogical use of Web 2.0 tools are major constraints for the wider application of these interesting approaches in educational research and practice.

The case study reported in this paper demonstrates some of the strengths and limitations of using wikis for involving students in creative activities for generating future scenarios for higher education. New ideas emerge in a way that would not have been possible if conventional scenario planning methods were used. The use of the wiki enables collaborative creative thinking across a broader spectrum of possibilities about the relationship between the present and the future of higher education.
THE CHANGING LEARNER EXPERIENCE:
HIGHER EDUCATION IN A WEB 2.0 WORLD

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Investigating the Impact on Higher Education of the Use of Web 2.0 Technologies

Increasingly schoolchildren employ Web 2.0 technologies both socially and within the school curriculum. These technologies are normally on-line and facilitate communication, collaboration, participation, and sharing. Facebook is a good example. It had been noticed that this was not only changing behaviour (e.g. the use of computers in favour of watching television) but also attitudes and expectations. There were indications that new university students would presume the use of Web 2.0 technologies to be natural in a higher education environment. An independent committee was therefore established in the UK under the leadership of Prof. Sir David Melville to conduct an independent inquiry into the strategic and policy implications for higher education of the experience and expectations of learners in the light of their increasing use of the newest technologies. The committee was supported by the principal bodies and agencies in UK post-compulsory education. This paper summarises the conclusions and recommendations of the committee’s report published in May 2009.

The committee reviewed the findings of cognate studies, took oral evidence from a range of practising academics and researchers; and commissioned briefings and studies, including one substantial piece of work on current and developing international practice in the use of Web 2.0 in higher education.

Conclusions of the Committee

Young people, especially those who will become higher education students in the next few years, inhabit the Web 2.0 world with ease. They willingly create, share and participate in web spaces, and have a strong and natural sense of being part of an on-line community. They expect to find information quickly and easily, but they generally lack criticality in evaluating their findings and they are casual in attributing authorship or recognising issues of copyright or intellectual property. The attributes of higher education tend to run counter to Web 2.0. The environment of academics tends to be individual or at best hierarchical, their work guarded, constructed slowly after careful consideration of the provenance of evidence, and published with extensive citations following a process of peer review. Meanwhile, the commercial market place is demanding more nimbleness and flexibility, expecting its employees to be adept at ‘soft skills’ such as networking, teamwork, collaboration, and self-direction, which are among those fostered by students’ engagement with social web technologies.

Currently students adapt to the exigencies of higher education without necessarily changing their attitudes. However, the attitudes and expectations of the new generation of incoming students, coupled with the pressures for including aspects of vocational training in the curriculum, may necessitate some rapprochement in higher education if it is to continue to provide a learning experience that is recognised as stimulating, challenging, and relevant. The impetus for change will be reinforced by the positive experience of new cohorts of students, often with the support of schools, through engaging with Web 2.0 technology.

Higher education is respected for its academic rigour. The skills in interpreting information and data, leading to new understanding and knowledge, are essential to the development of society. Higher education must therefore fulfil the new role of helping students refine, extend, and articulate the diverse range of skills they have developed through their experience of Web 2.0 technologies whether or not e-learning methodologies are incorporated into the curriculum. Higher education needs to build on and perhaps champion the behavioural traits associated with Web 2.0 technologies such as experimentation, collaboration and teamwork whilst addressing the negatives such as the casual and insufficiently critical attitude to information. In accepting responsibility to change in this way, higher education institutions must consider the choice and deployment of appropriate tools to achieve these ends. Considerations will be required for improving learner skills, staff skills, IT infrastructure, and relationships between the higher education, FE, and schools’ sectors. In the UK, bodies such as the HEA, JISC, and BECTA will be vital in supporting this work.
Participants in this workshop will have the opportunity to take part in a discussion and a range of creative activities, based on the research and practice of the Beyond Distance Research Alliance at the University of Leicester, addressing two of the EDEN 2009 questions:

- How to empower innovation within the huge diversity of different learning situations and settings?
- How to use existing and emerging technologies to create new value for learning?

Using an innovative presentation format, the Beyond Distance team will offer the participants transferable ideas for successful integration of learning technologies into teaching practices in higher education, using examples from their own innovation to practice experience.

The structure of the workshop will enable every participant to experiment with each of the technologies researched by the Beyond Distance Research Alliance in a supportive environment and develop collaboratively a practical solution to the central question of “How to measure collaborative learning efforts” on the basis of a learning technology of their choice.

What will it be like to learn with constant, pervasive and ambient online networking, mobile devices embedded in everything and a massive summer garden of digital abundance?

What is the future for open and distance learning in such a world?

Take part in this workshop and create a vision today - markers on the horizon and our pathways towards it.