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Breakout Session 1: 10:30 – 11:00

Session 1:

Learning about elearning: contribution to a context sensitive approach focused on actors' interaction

Adrian Staii and Roxana Ologeanu-Taddei
University of Strendhal, Grenoble 3 and University Montpellier 2

Theme: eLearning Research Methods

eLearning has been given increasing attention in the last decade and takes today an important place within many academic fields. Scholars often consider this issue through three dominant approaches focusing on the content proposed to the user (the instructional design is for example a major framework), on the underlying technologies (elearning platforms, global digital environments, etc.), or on the system evaluation and the user modelling.

These three approaches certainly help improving our knowledge of the issue and guiding the design of effective systems. However, they also have an important limit, since they largely neglect the importance of the contextual logics at work during the production process of the elearning systems.

We have recently participated in a collective empirical study of six elearning systems produced and used by French universities and/or other distance education institutions. One main conclusion of this study was that the final configuration of the system has been shaped by the complex negotiation processes between a multitude of local (and often conflicting) logics at least as much as it was by the fundamental knowledge available and by the professional competences of the designers.

Indeed, it appears that the organisational structures, the project management, the economic model underlying the development of the project have a deep impact over the material shape of the system put in use. This global environment is naturally complex and difficult to control. But this difficulty is increased by the fact that any of the actors at work has neither the global view nor the power to impose a leading strategy to the other partners. A glimpse to some modern theories of socio-technical innovation can help us understand the dynamics of this process and make us believe that the interest of our approach is not strictly limited to our case panel.

Session 2:

Using mixed methods in the evaluation of elearning (workshop/demonstration)

Dr Wassila Mehanna
University of Cambridge

Theme: eLearning Research Methods

The aim of this research was to establish effective elearning practice in higher education. The study has adopted a sequential mixed methodology characterised by an initial phase of qualitative data collection and analysis, which was followed by a phase of quantitative data collection and analysis.

The first phase collected year-long data from a postgraduate programme. A grounded approach was used to analyse one million words of online conferences or discussions, and led to the

emergence of 29 pedagogic behaviours. These pedagogic behaviours were then developed into a coding instrument. The second phase, hypothetico-deductive analysis, confirmed their presence in three other cases, five million words of online interactions, and established their associations with students' learning and outcomes. By doing so, this study represents unprecedented empirical evidence for using mixed methods in the emerging field of elearning and for pulling the two poles, inductive and deductive approaches, in an unorthodox marriage, to facilitate empirical rigour, interpretation fidelity, and to provide the researcher with strong means for inference quality and plausible generalisations. Finally, it highlights the process for "a clear move between the analysis of the first phase into the data collection of the second phase" (Creswell, 2003, page 217).

Session 3:

Blended learning - getting the ingredients right

Veronica Vernon and Janette Fletcher
Faculty of Health - Edge Hill University

Theme: Methods in eLearning and eTeaching

The purpose of this presentation is to identify the ingredients needed for 'successful' blended learning. The presentation will be informed by ongoing research into student nurses' experience of engaging with a bespoke cancer elearning program across 2 separate modules, focussing upon breast cancer and lung cancer in particular. The presentation will showcase the use of podcasting technology and discuss how this was used to help students understand the patient's journey through breast cancer.

Devising and developing the elearning cancer program required a significant investment in collaboration and partnership between educationalists, clinical nurse specialists and learning technologists. Having adopted a 'blended' approach to the teaching and learning strategy across both modules, the elearning activities were developed to compliment a full day's face to face teaching session provided by the relevant specialist nurses. Within the first module the students completed, there was a high level of student engagement with the elearning program and students reported positive feedback on the benefits of the program in increasing in their knowledgebase about the patient's experience of cancer and in their confidence in talking to breast cancer patients in particular.

However a very different – and somewhat disappointing - picture of student engagement has emerged from the elearning program developed for the second module. This presentation will compare and contrast 2 nurse educationalists' very different experiences of student engagement with elearning. We will endeavour to present an honest perspective of the reality of trying to embed elearning within the nursing curricular and discuss research findings from the students' perspective to offer insight and understanding to inform curriculum design and encourage wider engagement with elearning.

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Session 4:

Changing practices in the development of digital resources

Dr Gayle Calverley, Tim Cappelli, Dr Hilary Dexter, Dr Jim Petch and
Alisdair Smithies
Distributed Learning - University of Manchester

Theme: Technological Innovation for Learning and Teaching

The scale of investment in new technologies by learning organisations now generates elearning projects whose long-term success is no longer independent of the character and structure of the host organisation. Organisations expect an efficiency that will allow their investment to generate impact beyond the lifetime of any individual project. To achieve this successfully requires an organisational shift in the processes and practices associated with an innovation. Linking process with practices opens the way for generating measurable and specified change in terms of human and organisational behaviour. This can be set in the context of a production or content life-cycle.

The eLearning Maturity Model (eMM) provides a first step in being able to identify process and practice sets that may be associated with individual educational-technological innovations, such as adopting a CMS. The question is how to approach managing the changes that adopting a CMS will bring? eMM can provide a framework to help identify stakeholders in both old and new practices, to identify and agree information flows and dependencies as well as ownership and use of artefacts and information and the scope of responsibilities. This approach, fully consistent with established socio-technic approaches to organisational management and driven by the capacity for shared understanding provided by high level modelling, provides a promising way of embedding new practices in elearning.

The HEA Pathfinder project at the University of Manchester builds on the Manchester's benchmarking pilot in which eMM was trialled under the constraints presented by UK Higher Education. This included its ability to assess high-volume data representing sub-organisation level units (such as individual faculties) and specific organisational functions, rather than being based primarily on data generated by projects that are considered to be representative of an organisation.

Session 5:

Student experiences of using enhanced podcasts to support learning

Crispin Dale and Dr Ahmed Hassanien
University of Wolverhampton & Napier University

Podcasting involves "the authoring of, and subscription to, audio and/or video files on the internet for downloading to the user's personal computer" (Lim 2005) Furthermore, Podcasting "enables users to quickly and easily download multimedia files, including audio and video, for playback on mobile devices including iPods and other MP3 players" (Bausch & Han, 2006). The growth of podcasting since its incarnation has been phenomenonal. Within popular culture, podcasting has become an innovative way of broadcasting information on a range of subjects from news-based items to comedy sketches. However, within an educational context, podcasting offers innovative and creative opportunities for academics to further support learning.

The study reports upon the findings of a level one undergraduate module called "The Tourism Society" where enhanced podcasts have supplemented the weekly sessions. Enhanced podcasts, which in addition to audio recordings also incorporate images and reference material,

have been developed to further engage students with the subject matter. Using focus group and questionnaire data the study reports upon the findings of student experiences of using enhanced podcasts. The study also proposes strategies for developing enhanced podcasts to support learning.

Session 6:

Learning technology, knowledge construction and the shaping of teachers' professional identities

Dr Graham Rogers
Faculty of Education - Edge Hill University

Theme: Impacting on Students' Learning through eApproaches

This paper constitutes a preliminary report on a research project, funded through the HEA History Subject Centre, and has a focus on factors that impact on shaping a professional self-identity among intending teachers who combine the academic study of history with a course of professional training at undergraduate level.

It is generally agreed that students' attitudes towards learning in both an academic or professional field are largely determined by their first-year experience of higher education. Furthermore, it has been argued that the influence exerted by a training or academic programme on shaping an emerging professional role has been comparatively weak. There are competing tensions at work, but the positive impact of institutionally-based programmes has to be measures against not only their content but the epistemological manner in which they are received.

Therefore, for the purposes of this project it is contended that the bedrock to the professional development of young teachers has to reside in students' security in their own epistemological beliefs and practice. In short, becoming an effective teacher necessitates students' deeper understanding of the processes of knowledge construction, and that can only be mediated through a disciplinary context. This research project aims specifically to identify competing influences (both negative and positive) on students' perceptions of 'learning to teach' within the academic domain of history over the course of a first year module, 'Foundations to History Education', which employs a 'blended learning' approach, and to illuminate its impact on students' evolving attitudes towards learning, teaching and ultimately practice itself.

In summary, by drawing on a vicarious range of evaluative data, the research will shed light on both students' learning experiences of historical subject knowledge and draw attention to the design features of an elearning environment that have the potential to influence students' learning behaviour and their professional outlook on the practice of teaching.

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Session 7:

Importance of elearning in improving the performance of students in group work activities: a case study

Habib Ullah Khan
Dhofar University

Theme: Impacting on Students' Learning through eApproaches

The world has changed dramatically from earlier ages to today's highly technological world. Similarly, learning has also evolved from the traditional classroom to distance learning and now to online learning, where students learn in "invisible classrooms" (Sutherland, 1999). Forum on technology in Education working under U.S. Department of Education, wrote in their strategic review of national educational technology plan 2000, that the internet is fast becoming an engine of innovation in education, as it is revolutionizing business through e-commerce; it is on a course to redefine education.

Group work activities are another main point or task in the high education. Switzer and Shriner (2000) were of the view that students are the most obvious party who benefit from group work among students, faculty members, and the community. According to them there are four overlapping types of benefits for students. These are: 1) immediate educational benefits, 2) immediate social benefits, 3) critical thinking benefits, and 4) long-term career benefits.

Lawrance (1992) and Yates (2001) were of the opinion that face to face communication will not solve the gender related problems, because through FTF interaction male dominant roles can be produced due to identity of speaker, eye contact, nodding, moving the hands, and facial expressions etc. In this situation elearning can be considered as an alternative mode of communication, where there is a chance of discrimination.

This case study will be a further step in addition to the previous IT & group work related researches. In this the researcher will try to explore how elearning can play its role to over come group work problems and to increase the performance of the students in developing countries.

Session 8:

E-mpowerment - estrategies in performing arts

Phil Christopher
Performing Arts - Edge Hill University

Theme: eWork in Progress

This presentation will look at the ways in which technology contributes to the exploration of performance by describing pilot initiatives, outlining the evaluation of such initiatives and theorising the nature of performance and learning revealed by these approaches.

Breakout Session 2: 11:30 – 12:30 - Chaired Panels

SOLSTICE 2007 Abstracts

Chaired Panel 1 - eLearning Research Methods:

Case study methodology and elearning: reflections on evaluation activities for blended modules

Dr Richard Walker and Wendy Fountain
University of York

This paper offers a description of the case study research methodology at the University of York and reflects on the way that it has been applied to capture student learning experiences for a series of blended learning pilot projects. Discussion focuses on the interpretive research approach, which has been adopted to provide a rich picture of student working patterns across a range of pilot projects. The York approach aims to establish a rolling evaluation programme, rather than a snapshot of current practice through e-benchmarking. This work in progress highlights the challenges to the successful implementation of this programme, and to the long-term sustainability of case-study research for e-learning.

Peeling the onion without tears: a layered approach to researching elearning

Cathy Sherratt and Professor Andrew Sackville
Edge Hill University

Online technology is now widely accepted as a major teaching method, but do we fully understand the processes involved in learning via this approach? And how can we obtain meaningful information?

In this paper, we will draw on our experience of delivering and researching a supported online learning course (Postgraduate Certificate in Teaching & Learning in Clinical Practice) over an eight-year period, and we will discuss our approach to researching elearning, especially considering students' engagement and interaction online.

Our research to date has identified a number of 'layers' of enquiry, which exploit a variety of methods and types of data. As each individual 'layer' is revealed, we can gain new perspectives and fresh insights, to bring our understanding of online learning increasingly into sharper focus.

We will outline the main questions that have guided our enquiry to date, and we will explore the techniques we have used in collecting and analysing data in each 'layer'. Areas will also be identified as foci for future research.

Chaired Panel 2 - Methods in eLearning and eTeaching:

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Using the wiki the wrong way; a case study in plant sciences

Dr Frances Tracy, Katy Jordan and Dr Keith Johnstone
University of Cambridge

The Plant Sciences Pedagogy Project began in the autumn of 2005 as part of the Cambridge-MIT Institute (CMI) research partnership. The project objectives within the Department of Plant Sciences at Cambridge have been twofold; to conduct research into undergraduate teaching and learning within the department, and to develop online resources to support this.

Research has focused on the second year undergraduate course taught by the department, known as the 'Part IB Plant & Microbial Sciences' course (IB PMS). Technical support for use of the Universities' adaptation of the Sakai Virtual Research Environment (VRE) platform, known as CamTools, was available within the university from the Centre for Applied Research in Educational Technologies (CARET). Within CamTools a number of optional tools are available for implementation within any course or work site.

Wikis have been heralded as one of a number of new and powerful forms of software capable of supporting a range of collaborative ventures and learning activities. The Sakai RWiki tool was originally designed to support people working in collaborative research projects. We immediately saw an opportunity to use the wiki tool to build up a course site within our Sakai based Virtual Learning Environment (VLE). The site contains wiki formatted lecture notes with links to glossary pages and a variety of electronic resources. However, we restrict the access and editing rights of the site members so that lecturers do not have administration rights and students can only edit glossary pages. Are we breaking the rules? We put across our case that the wiki is a more versatile tool than the developers originally envisaged, and that it is not necessary to allow full editing rights to all members of a VLE in order to support the teaching and learning of students in higher education.

Collaborative reflective learning: lessons drawn from the TEMPUS/ESCalate Projects

Dr Elena Luchinskaya
Manchester Metropolitan University

This paper assesses the usefulness of on-line reflective journals as a means of enhancing our understanding of the learning process in an international context. This research is based on the results of a three year EU TEMPUS project (2002-5) coordinated by Manchester Metropolitan University and a follow-up ESCalate project (2005). The aim of these projects was to establish a Centre for Social Policy at Udmurt State University, Russia and thereby encourage international professional learning and knowledge transfer among lecturers in higher education, social welfare practitioners and policy makers throughout the region. In the course of the project, participants from the Udmurt republic took part in a series of mobilities during which they learned how welfare systems operate in different countries. They collaborated in identifying potential and prioritising areas for development of social work capacity at the regional level where the experience gained could be put into practice. As part of the project, a group of ten participants were asked to contribute to online reflective journal writing related to their experience while working on the project.

This paper explores the difficulties of using such a technique in Russia where academics and practitioners are unfamiliar with reflective practices and outlines the benefits of using this approach. It demonstrates how Russian participants in the Tempus/ESCalate projects were influenced by the socio-cultural context when participating in online text based professional

dialogue. It also suggests that the qualitative analysis of the online discussion provides us with insights into issues and problems related to the use of e-learning technologies and methodologies in international professional education.

Chaired Panel 3 - Technological Innovation for Learning and Teaching:

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From text to screen: challenging approaches to creating learning in an online environment

Catherine Naamani
University of Glamorgan

The aim of this paper is to explore different approaches to course design within the blended learning continuum in the context of an externally funded, collaborative project - the development of an online Master's Programme.

The research literature identifies two main categories of curriculum design – the systematic approach, described by the models of Pask (1973), Keller (1983), Gagné (1985) and Dick & Carey (2001), and latterly, approaches which promote a more constructivist model as described by Hoyle (2005).

A multi-specialist team comprising a project coordinator/instructional designer, multi-media developers, an editor and an e-resources librarian/rights officer was recruited for the project. This core team worked with subject specialists from both an academic background and in the film industry to develop the award over 13 months.

The project adopted three models of materials development:

- the adaptation and re-use of existing elearning materials;
- 'translating' existing lecture notes for an online environment; and
- the development of modules from scratch.

The paper uses examples to explore the extent to which each of the above models is effective in terms of identifying good practice in blended learning curriculum design. It also discusses the challenges associated with rethinking module design for online delivery and issues connected to multi-specialist team-working in higher education.

The findings suggest that the most effective way of developing materials is to undertake a complete redesign. 'Translating' lecture notes tends to result in a content heavy product, which takes longer to develop because of issues relating to structure, availability of resources and so forth. The re-use of existing elearning materials can be equally difficult unless some initial thought is given to planning the development. The findings also indicate that while many academic staff may still be uncomfortable with the concept of working with a multi-specialist team, the result is generally an enhanced learning experience, both f-2-f and online.

Constructing a personal learning environment the free and easy way

Derek Harding
University of Teesside

Having been involved in the implementation of a commercial Virtual Learning Environment and the staff development activities associated with it, I can say with some confidence that this approach has problems as well as advantages.

Blackboard for example, is essentially an expensive American product and it shows. Moodle is free and more versatile but can still be used to impose particular ways of working. Also students often use technologies in ways that lecturers may not.

Because of the plethora of tools and technologies available to us and the power of the 'semantic' web to present and represent them to their publics we can now construct a personal resource quickly and easily. In this paper I will illustrate how it is possible to simply construct a

personal learning environment using these tools and technologies and in doing so will argue that these more flexible approaches will be more appropriate for the modern learner.

Chaired Panel 4 - Technological Innovation for Learning and Teaching:

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A workable model for virtual patient creation and design

Dr Jonathan Round, Emily Conradi, Dr Terry Poulton and Arnold Somasunderam
St George's University London

St George's University of London have created a generic 'model' for virtual patient (VP) design, simple enough for clinicians to use, yet flexible enough to simulate real clinical decisions. This method of VP creation is disseminated to educators within our institution through regular VP workshops.

For each VP an ideal pathway is described, with 3 or 4 critical points or 'nodes' that the patient must pass through, in order to progress through the case. These might be, for example, the restoration of cardiac output after an arrest, ward transfer, or referral to another doctor.

In order to navigate between nodes, a map of different interconnected possibilities is designed, typically with 3-4 steps and 3-4 choices at each step. Choices at each step mimic some of the choices that would be available for a real patient. Many of these would not allow progress to the next node.

The online activity modelling system 'Labyrinth', developed by the University of Edinburgh, allows these ideas to be quickly and easily transferred into a digital virtual patient. Labyrinth offers an easy to use VP creator and player that conform to the latest technical standards. The finished VP can be accessed online or through an institutional VLE, with optional add-ons such as timing and scoring.

As a result, a simple educational model can be used to create ergonomically designed VP's.

The next step will be to determine how to incorporate the generated VPs into our medical curriculum. A pilot study will replace our current PBL-based curriculum with a VP curriculum is being piloted. VPs for the clinical years are to be developed for mobile devices, to provide the students with 'just-in-time' learning.

Computer adaptive testing in higher education: a case study

Mariana Lilley, Dr Trevor Barker and Dr Carol Britton
University of Hertfordshire

In Higher Education today, increasing reliance is being placed upon the use of online learning and assessment systems. Often these are used to manage learning, present information and test learners in an entirely undifferentiated way, all users having exactly the same view of the system. With the development of increasingly large and complex computer applications and greater diversity in learner groups, consideration of individual differences and greater efficiency in learning and testing have become important issues in designing usable and useful applications.

Computer Adaptive Tests (CATs) are software applications that adapt the presentation of test questions to the learner's proficiency level. In our research, presented here, we have shown that CATs provide an efficient individual motivational test for each leaner, based on his or her individual abilities. We have developed a CAT based on Item Response Theory. Our CAT employs a database of questions calibrated according difficulty level and also Blooms taxonomy. Calibration is undertaken initially by experts and then updated according to performance as the tests are run with students. The output from our CAT prototype is therefore, a continuously updated estimation of proficiency in each of the domain areas covered

in the test. We have used these CAT profiles to produce automated individualised feedback for learners.

In this paper we present an overview of our research over the previous five years, summarising the development, implementation and evaluation of our CAT to test undergraduate students in the domain of Computer Science. We were able to show that our CAT was a valid and reliable assessment method and that in general student and staff attitude to the method was favourable. We present the benefits of the CAT method in this paper and discuss some potential limitations of the method and how we have overcome them.

Chaired Panel 5 - Impacting on Students' Learning through eApproaches:

SOLSTICE 2007 Abstracts

On-line debate: in search of a learning community

Graham Hallett & Karen Mills
St. Martin's College

This presentation will give participants an opportunity to share in our experience of working within St. Martin's VLE, Blackboard, on the design and development of a blended learning course, addressing Inclusion. The module utilises an online discussion board to encourage reflective thinking surrounding ideas introduced during face to face contact. In addition, opportunities have been taken to engage in some of the research activities offered by the VLE, including on line surveys, and data, and discourse analysis.

The presenters will suggest that participants experience a staged process of engagement with the discussion board, with an initial apprehension giving way to an increased confidence. For most participants, a further stage, of assured competence, is reached, which is marked by higher level thinking, metacognition, and the development of transferable skills applicable to classroom practice.

An innovation in the current iteration of the module will be explored; the introduction of self and peer assessment processes relating to the online debate, carrying 30% of the assignment weighting.

The problematic nature of this approach will be considered, for example, in parity of access, preparation for assessment, staff training, time constraints, board structure, and moderation.

The presenters will encourage reflection on the benefits of the approach. It will be suggested that a community of learners was engendered, with staff and students working alongside each other to construct a developing understanding of the plethora of issues relating to Inclusion.

It will be suggested that pedagogy was redefined, to an emphasis on the conjoint construction of knowledge and understanding, away from a reliance on a more traditional transmission model of knowledge transfer.

Finally, it will be suggested that the student participants were as important in content development as tutors, who became online teacher researchers, given a privileged overview of their students' development as deep learners, through reflection, analysis, and debate.

Engaging Students in Online Discussion – or not?

Elisabeth Skinner
University of Gloucestershire

This paper discusses why some students participate well in activities designed to generate online debate while others hold back and miss this opportunity for learning, even when their contributions are assessed. If teachers have a responsibility for seeking to improve the experience of learning of all students, including surface learners and those who appear to lack motivation, then what can we do to help draw these students in?

The literature on community development work examines interventions in local communities designed to encourage participation in community activity. This paper considers how teachers might apply ideas from community development practice to the building of learning communities online.

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Community development workers reach out to people to encourage participation. They make personal connections and show a genuine interest in individual needs. They suggest ways in which participation can help to address those needs and give people more influence over decisions that affect their lives. Similarly teachers might reach out to those who struggle to participate and through personal encouragement, support and persuasion, draw them in.

This paper reflects on findings from research into students' motivation for online discussion. The research focuses on the experience of Level One modules where attitudes to online discussion and group activity were audited, students' performances were monitored, their assessed reflections on the activity were analysed and a third of the students were interviewed to gain further insights into the experience.

The literature reminds us that each student is an individual with different needs and different approaches to learning with many variations in the ways in which they experience the learning situation. The dilemma for teachers is how to design learning activities to take account of all possible differences.

Chaired Panel 6 - Impacting on Students' Learning through eApproaches:

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Impact of mobile technology on students' experience of learning and assessment in practice settings: a focus group study

Jackie Haigh, Dr Christine Dearnley and Fiona Meddings
University of Bradford

As part of the ALPS CETL* 29 student midwives and their link lecturers were given an electronic version of a clinical portfolio on Personal Digital Assistants (PDAs). These devices were used during a seven week clinical practice placement to record tripartite assessment interviews and clinical experiences relevant to the performance indicators of the placement.

Focus groups explored the impact of the electronic portfolio on the students' experience of clinical practice and its assessment. Data was analysed from an activity theory perspective in that the electronic portfolio was viewed as an artefact mediating situated knowing about student assessment in a particular socio-historical context. Findings suggest that the changes made to the electronic version of the marking criteria mediated a shared understanding of the assessment process which was pragmatic and less contested by students; however this still required skilful facilitation by the link lecturer and needed to be sensitively introduced to clinicians.

Changing the assessment tool has the potential to change the shared understanding of the assessment process. Before seeking to radically change the tool for all professional groups it is essential to understand current processes and how the introduction of mobile technology and new tools might impact on them.

This paper analyses student experiences of using an electronic assessment tool on a PDA to facilitate self-assessment, feedback and grading in clinical practice. It explores the potential of the new tool to mediate a shared understanding of the assessment process and to enhance student learning from experience in practice. The significance of the project lies in its potential to illuminate the potential of new technologies and tools to change the shared meaning of professional practice assessment.

* Assessment & Learning in Practice Settings (ALPS) is one of the 74 Centres for Excellence in Teaching and Learning (CETLs) funded by the Higher Education Funding Council for England.

Evaluating the impact of mobile technologies on the student learning experience in health practice placements

Dr Jill Taylor, Catherine Coates, Sara Eastburn and Ieuan Ellis
ALPS CETL - Leeds Metropolitan University

Practice education is a core element of all health care professional education programmes and an essential component for registration to practice. Assessment and Learning in Practice Settings (ALPS), a Centre for Excellence in Teaching & Learning, is a collaborative project between 5 Higher Education Institutions committed to delivering excellent assessment, learning and teaching (ALT) opportunities across health and social care professions.

As an ALPS partner site, Leeds Met undertook a pilot project, involving pre-registration dietetic and physiotherapy students, to deploy mobile technologies into placement settings and to develop appropriate pedagogic approaches that exploit the technology to deliver an enhanced student learning experience.

MediaBoard was used to set up web-based multimedia message boards. Students and tutors contributed to the message boards by sending SMS (text), MMS (picture), or audio files from O2 XDA 2 mobile PDA/phones. This allowed recording of immediate “real time” experiences within the placements setting and exploited the features available on the mobile devices to record this information in multimedia formats.

The students collected information as part of a multimedia blog including information about observations and learning experiences, especially pivotal incidents that support critical analysis of learning and underpins reflective and reflexive learning. The approach also gave them the opportunity to work collaboratively to support and enhance inter-professional learning. Although the emphasis was on supporting formative activities the data collected could be used as evidence in summative assessment of some of the practice placement learning outcomes.

Key findings from the project evaluation will be presented such as learner and tutor experiences, benefits to ALT, and issues associated with implementation such as usability, connectivity, and the ethical and cultural change issues that arise. In the light of our findings we will suggest ways in which this technology could be utilised and embedded more effectively in ALT strategy.

Breakout Session 3: 14.25 - 14.55

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Session 9:

Exploring students' views using video diaries

Professor Peter Bullen and Nuzhat Quadri
The Blended Learning Unit (BLU) - University of Hertfordshire

Theme: eLearning Research Methods

Students' views are often sought by institutions using conventional methods such as surveys, focus groups, and interviews. Students tend to be saturated by such methods and there is a strong possibility that their views are not fully reflected. In an attempt to gain a deeper insight into student behaviours, this institution has implemented a form of feedback which could be perceived as enjoyable for participants as well as constructive. This feedback is the popular method of video diaries used in an educational setting.

Five students were loaned a digital camcorder to show what a typical week is like at the University. Students were given advice on what areas to focus on but there were few restrictions on the content. Students provided feedback at the start and end of their day in order to reflect their normal routine, and for academics to gain understanding of student life. The general topics which were covered were learning and teaching preferences, perspectives on using technology in learning, as well as commenting on how the Managed Learning Environment (MLE) is an aid to learning. Although the number of students was small for this study, the project was set up as a pilot and to inform a second project using various media.

Students handed in recorded tapes at the end of the week from which analysis was conducted. By viewing the videos, themes were developed and corresponding clips were edited with help from a Video Production Officer. In this presentation, the method and initial findings will be discussed in further detail, covering how video diaries can be implemented in an educational setting and used as an alternative form of feedback. The presentation will also cover an extension of this project involving video, audio and blog diaries.

Session 10:

Producing good quality, multilingual, web-oriented text material in a multicultural project: the passport to trade case study

Giuseppe Rossi, Jane Silver, Dr Keith Lawrence and Vera Barron
Spin scrl and University of Salford

Theme: Methods in eLearning and eTeaching

The purpose of this work is to present a methodology to support the production of multilingual training material.

Such an activity is very common to many European multicultural projects, where additional value is afforded both by the identification of regional-specific issues in a common European framework and by the availability of the material in a number of different countries and cultural/linguistic environments.

In most cases, such projects face two problems. The first is that producing the versions in different languages requires taking into account a large number of country-specific cultural issues. This means that you might not even know what information about your cultural environment is relevant (i.e. different, not banal) for the other national cultures. The second

issue is that the material for the different countries must be developed with a comparable level of detail and a uniform style by remote and not always homogeneous national teams.

Such issues can make the production of the material (including proof-reading and style correction) a very long and costly process, and even more so when one adds the need for multiple translations. Even worse, each element in the production chain increases the risk of errors being introduced. Linguists and professional translators are very familiar with such problems, but teams working on trans-national projects are not always fully aware of their impact and consequences.

The EMBER project ("Effective Marketing for Business in European Regions") and the PASSPORT TO TRADE project, both supported by the European Leonardo da Vinci Programme, are good case studies, and, from the complexity of their tasks, enables the compilation of a set of useful guidelines.

Session 11:

Looking at distance and blended learning through the lens of a communication model

Deirdre Viviers
The Open Polytechnic of New Zealand

Theme: Technological Innovation for Learning and Teaching

As information technology's power and ubiquity have grown, its strategic importance for the education industry has diminished. Most institutions are now able to offer at least some form of contact, distance and or blended learning, and increasingly, looking at making learning materials available free of charge. As Carr notes, "..the very power and presence of information technologies have begun to transform them from potentially strategic resources into commodity factors of production in the teaching and learning environment. What makes a resource truly strategic, the basis for sustained competitive advantage - is not ubiquity but scarcity." (2003, 42)

At the same time, there has been a plethora of new jargon and terminological confusion around the 'delivery' of learning to students according to these modes and technologies. Terms like open learning and flexible learning, computer–aided and online learning, and contact or centred learning have often been used interchangeably and differences in meaning, content and intent are sometimes blurred or unresolved.

This paper proposes an exploratory analysis using a communication model based approach, to draw certain conclusions about the meaning and appropriateness of the terminology relating to contact learning, electronic learning and blended learning. Preliminary findings suggest that much can be learnt from clearly identifying the components and the implications of two-way communication in learning and teaching.

As New Zealand's primary institution of distance learning, we are continually transforming our methods of teaching and learning. This paper forms the preliminary focus of a larger research project.

(IT doesn't matter. Carr, NG. Harvard Business review, May 2003, Vol 81, Issue 5:41-50)

Session 12:

SOLSTICE 2007 Abstracts

Exploring the use of an institutional teaching and learning repository service to enable the sharing of resources and expertise - a social approach (workshop/demonstration)

Steve Loddington
Loughborough University

Theme: Technological Innovation for Learning and Teaching

At Loughborough University there are a number of distributed IT systems for the sharing of research and teaching outputs and resources. These include a Virtual Learning Environment (VLE), an Institutional Repository (IR) containing research outputs and a publications database. The JISC funded, Rights and Rewards Project is undertaking research and development into 'blended' Institutional Repositories containing a variety of research and teaching materials. PEDESTAL is a pilot of a new teaching and learning material repository service, which aims to ease the delivery and management of research and teaching resources amongst academics and students. It also enables these groups to create communities of practice.

Unlike other systems that exist nationally, such as the JORUM repository (www.jorum.ac.uk), and Institutional VLEs, PEDESTAL adopts a social approach to the sharing of resources. Each member of staff is given their own teaching and research profiles which, can updated to reflect such interests. Discussion around these interests can form valuable content for other users of the service in addition to uploaded resources. Each user is provided with a personal blog which, can be linked to other blogs via the use of RSS.

PEDESTAL allows contributors to easily share resources whilst protecting the rights of the creators and those of the University. In the past, lack of awareness with rights issues, has been a major barrier to contributing to such repositories. Also, there has been a distinct lack of motivation to use repositories. Personal altruistic rewards were promoted, such as receiving feedback on contributed resources and the ability to retrieve a variety of resources through a blended search mechanism.

The key aspects of the PEDESTAL blended repository environment are demonstrated. Characteristics of social software are explored. This pilot system illustrates how technology can have a positive impact within education.

Session 13:

Active learning through digital storytelling

Jo Lonsdale
University of Gloucestershire

Theme: Technological Innovation for Learning and Teaching

Environment courses at the University of Gloucestershire encourage the use of active learning, based on Kolb (1984) and Performances of Understanding (Blythe & Assoc, 1998). Developing reflective practice is an important, yet challenging part of this approach. Reflection is not necessarily an individual process and can be improved when others are involved (McDrury & Alterio, 2002).

This session will discuss the development of digital storytelling with first year students and draws on the use of reflection and storytelling as learning tools (Kolb, 1984; McDrury & Alterio, 2002; Moon, 2004; Brown, 2005). This approach also acknowledges the claim that many new students now learn differently and seeks to use technologies they are already conversant with (Prensky, 2001: Oblinger, 2003; Brown, 2005).

Digital storytelling has been piloted as a reflective learning tool for individuals and groups during their first year, as part of active learning; a dominant pedagogical philosophy of the Department of Natural and Social Sciences. Students are first introduced to digital storytelling within their discipline groups, during induction week, where it is used as a group work reflective tool. Additionally, as part of this induction, students of landscape design were introduced into the studio culture using storytelling as a community building activity, which was then integrated into a mini-project where the final output was a group reflective digital story. The technique has also been piloted as a reflective component of a module where individual students were asked to reflect on their learning process and personal development at the end of their first semester.

The session will report on the results of the evaluation of digital storytelling. This will include student perceptions of the value of these techniques to their learning experience, and staff views on its use and future development.

Session 14:

Three for the price of one: developing study, elearning and information literacy skills in an online module (workshop/demonstration)

Dawn McLoughlin and Lindsey Martin
Edge Hill University

Theme: Technological Innovation for Learning and Teaching

Creating independent learners by developing their study, elearning and information literacy skills is a priority of Learning Services at Edge Hill University. Study skills advisers, learning technologists and information professionals have had considerable success in developing these skills within programmes of study but had only tentatively begun to explore how the three skill sets could be brought together for the benefit of learners under the umbrella of 'academic skills. Our approach to academic skills acquisition rejects a 'deficit model', that 'fixes' problems at the start of a students higher education, but rather offers the learner an apprenticeship into new ways of thinking and expression, that develops over a number of years. Feedback from external examiners, students and academic staff had indicated a pressing need for further opportunities for the development of these skills.

The University's Summer Enrichment Programme requested that Learning Services create a 15 credit module. Their brief requested tailored approaches and support materials that could be delivered to students using the institution's virtual learning environment, WebCT, to allow them to learn at their own pace. Our multi-professional team approach ensured the module, called 'Spring Board: enhancing academic study skills' was developed with an understanding of the technological, accessibility and pedagogical issues as well as the study and information skills content.

An insight into the student experience was obtained through WebCT usage statistics, questionnaires, discussion forum contributions and assessed work. All indicate that the experience has been positive and formative, allowing us to assess that it has made a major impact on their confidence in developing academic literacies.

This weaving together of the different but related academic skill sets is a significant development within the University and has resulted in the team being asked by the Faculties to develop subject and level-specific versions of Spring Board. The team also aim to experiment with re-purposing content by breaking it down into smaller, customisable learning objects that can be embedded within programmes of study or used in face-to-face or blended learning.

This demonstration will provide an opportunity for delegates to experience this integrated approach to developing academic literacies and explore the subsequent development and delivery of Spring Board. It will report on the evaluation of the module, focusing on the students learning experience and lessons the team have learned.

Session 15:

Evaluating a model for citizen participation in elearning environments

Dr Richard Hall
De Montfort University

Theme: Impacting on Students' Learning through eApproaches

This paper focuses upon the individual learner's integration of both institutional and non-institutional technologies in their personal learning spaces as they journey between levels 1 and 2 of higher education. The author evaluates the ability that learners have to select and make decisions about the types of technology that they deploy in their work, and how this frames participation in the curriculum.

The context for participation is framed by two central issues and linked questions.

- HEIs have invested significant amounts of money to embed virtual learning environments as institutional standards. Are the models of learning that they encourage relevant for e-communicators in a world of rich, user-focused Web 2.0 technologies?

- The perceptions and expectations of academic staff about technologies impact upon the learning environments experienced by learners. Does this strategic, academic-modelling of the curriculum empower or disempower the learner? How are sub-groups of learners widening the space in which they learn through Web 2.0 technologies?

These two issues pivot around the ability that learners have to select and make decisions about the types of technology that they wish to deploy in their work. It is the creation of a context in which decision-making can be highly personalised that promotes participation.

The personalised, participative elearning contexts that support new epistemological spaces will be identified, described and critiqued through the implementation of an action research methodology. This will be structured around the "Interview plus" technique demonstrated by the JISC LEX project with groups of students and academic staff, in order to address the following two questions. Why do specific groups of students decide to utilise or reject technologies other than those deployed by academic teams? What is the process that leads them to embed or reject particular Web 2.0 technologies in their epistemological models?

Session 16:

Future learning environments

SOLSTICE 2007 Abstracts

Professor Eric Hamilton
Director of the Centre for Research on Learning Technology at the Institute for Information Technology Applications, US Air Force

This talk and the conversation that it seeks to spur will highlight a series of six principles that are likely to characterize future learning environments. Each of these is “in play” and represents important bodies of research, development, and implementation. Understanding these principles, though, and how they interconnect, may help to clarify research directions and possibilities towards designing humane and high performance learning environments that engage a broader spectrum of students who can ably contribute to future society. This talk charts some of these directions and identifies what might be considered four grand challenges for the development of future learning environments. It argues the proposition that we may well be walking a thin line between continued stagnation in educational systems and a truly golden era for education, where the outcome will be determined by our imagination and will.

Breakout Session 4: 15:25 - 15:55

Session 17:

SOLSTICE 2007 Abstracts

Creativity and its role in the adoption of education technology

James Turner
Liverpool John Moores University

Theme: eLearning Research Methods

Educational technology needs to become embedded within teaching practice in order to successfully realise its potential. The focus of this process has been on academic staff training in technological skills and, more recently, educated in pedagogical implications. With this new information they are encouraged to create their own personal re-interpretation to fit their particular situation. The amount of innovation from the older established practice involved in this last process, will depend on many pragmatic, political and personal issues.

What if we were to view the act of embedding learning technologies as fundamentally creative? Would the skills requirement tend to move towards staff developing methodologies of how to re interpret the new into the old? Does creativity hold hidden aspects to the problem of adoption that need further exploration?

The study of creativity has given us different methodologies for enhancing, developing and measuring its different aspects. I propose in this paper that positioning creativity centrally to the adoption process, could provide a different approach to skills and training and also a different view point of the abilities needed to successfully embed technology in teaching practice.

Session 18:

Integrating elearning and eresearch

Sheena Banks & Dr Gordon Joyes
University of Sheffield & University of Nottingham

Theme: Methods in eLearning and eTeaching

The research questions underpinning this paper are: (1) how technology can be effectively used in the teaching and learning of research methods and (2) how technology and pedagogy can be integrated to achieve a successful learning design. In particular, to develop innovative and engaging practices that are appropriate to the ways in which researchers (in particular new researchers) wish or need to develop their skills, knowledge and practice in diverse academic and professional settings.

We explore these questions by presenting a case study of the V-ResORT Project (Virtual Resources for Online Research Training see www.v-resort.ac.uk). V-ResORT has developed innovative flexible learning materials that provide video narratives of researchers exploring key questions connected with their work. These online resources employ cutting edge technologies to make the content accessible to both research students and their lecturers.

Our theoretical framework for the learning design of these online resources is based on 5 pedagogic concepts:

- A research framework using the process of developing research ideas through to publication – this is mirrored in the storyboard for the individual video narratives.
- Inquiry-based learning – how we can involve research students in rich interactions with peers and more experienced researchers and engagement with authentic examples and insights about practice. (e.g. Brew, 2006).

- Community of practice – learning as situated social practice (e.g. Wenger, 1998) - creating the conditions (i.e. information, resources, communication) for participation.
- Visual learning – the affordances of video to tell a 'story' and to convey 'real life' examples with which learners can identify (e.g. Shephard, 2003).
- eLearning – achieving higher order learning and knowledge construction through online collaboration (e.g. McConnell, 2006).

Session 19:

Engaging with mobile technologies for learning and assessment (workshop/demonstration)

Gareth Frith
ALPS CETL, University of Leeds

Theme: Technological Innovation for Learning and Teaching

This session will focus on:

- Discussion and demonstration of current technologies, for example smartphones, MP3 players and PDAs. Examine and demonstrate future technologies such as wearable computing.
- Encourage participant to use smartphones to take pictures, record audio and text and send these to a reflective learning media board.
- Participants will examine the various aspects of learning, assessment (formative and summative) and reflective learning using Blogs and mobile devices.
- Participants will be encouraged to play a mobile game and comment on how this form of rich human-computer interface could be applied in a learning application.

Participants will work in groups using smartphones, PDAs, a wearable headset, a game platform and other aspects of technology.

The outcomes of this demonstration will be to enable delegates to be familiar with using a mobile device to record text, audio and images (pictures and video) and to have experienced sending these media objects to a Blog or Media Board.

Session 20:

Learning objects: a mystery? (workshop/demonstration)

Beverly Leeds
University of Central Lancashire

Theme: Technological Innovation for Learning and Teaching

There is much debate surrounding the definition and granularity of learning objects which can be a mystery to academic staff. This demonstration will introduce the audience to the rich and re-usable materials that have been developed by the E-Evolve Project for use by students and their academic tutors. The E-Evolve materials have been designed in a format intended to be familiar to academics in order to facilitate the re-use and re-purposing of these objects. Based on a curriculum map informed by research into employability the E-Evolve project has developed materials that can be used and/or accessed on line by students to enhance their employability. These materials have been designed to fit into a modular template providing teaching staff with the flexibility to use materials within a module or programme of study. The materials have been developed at two levels; learning activity and re-usable materials. The

learning activities are packaged learning content as a series of tasks using resources and materials. Each activity follows a specific pedagogy and provides learning outcomes for the activity. The re-usable materials are unpackaged raw materials to be used in different combinations. There are three main categories: case stories, knowledge providing and assessment. The materials will all be available online for academics to review and download for use on their institution's network from the E-Evolve materials repository. Participants will be given a demonstration of the E-Evolve materials repository and showcase of the re-usable learning objects.

As a result of the workshop session participants will have:

- An awareness of the E-Evolve Project materials and the framework for these re-usable materials
- Knowledge of the online E-Evolve Materials Repository
- Designed learning activities relating to the development of key employability.
- Re-purposed learning activities for different activities or pedagogy
- Identified ways in which they could become involved with the project.

Session 21:

Summoning the power of the Course Genie

Sue Murrin-Bailey and John Mercer
Edge Hill University

Theme: Technological Innovation for Learning and Teaching

Developing learning materials for online courses using VLEs such as WebCT is a daunting task for many academic staff. What should a course look like? How do you put it online and link the pages in order to assist learners to engage with the learning experience are common questions raised by online developers.

The presentation will promote the use of Course Genie as a course authoring tool through a word processing environment. A short demonstration will show the ease of generating web pages for a VLE through adaptation of new or existing Word documents.

The session will highlight how academic staff and / or information technologists can develop, together or independently interactive content for VLEs utilising simple Microsoft Word documents with links, quizzes and multi-answer questions. Additionally the session will examine the development of high quality learning resources and materials with a minimal amount of knowledge or training.

There will be an analysis of the impact for both students and teachers of the flexibility Course Genie offers in providing traditional learning objects, such as handouts that can easily be introduced into a web based document for on-line delivery.

The session will be practical and demonstrate the flexibility and ease of use of Course Genie. Examples involving the development of different learning objects will be demonstrated from basic text to presentation within a VLE. The learning objects produced by Course Genie will be evaluated against current theoretical perspectives of learning and teaching good practice to underpin the benefits of using such authoring programmes. Finally the potential benefits of deployment of the software for anyone engaged in the production of online learning materials will be identified and reinforced.

Session 22:

SOLSTICE 2007 Abstracts

The development of a verbal and visual skills profile for use in the configuration of blended learning objects

Dr Trevor Barker & Asli Adisen
University of Hertfordshire

Theme: Technological Innovation for Learning and Teaching

A psychological student model is a model of the characteristics of a learner which may be used to configure and adapt interaction with computer-based learning objects.

The research we present in this paper relates to the development and testing of computer software to measure visual and verbal skills for use in such a psychological student model. The model we describe in this paper is based on mental models, used to assist navigation and task performance in adaptive systems designed to deliver individualized blended learning objects. We describe the development of two tests, of visual skills test and verbal skills, related closely to tasks commonly associated with using and learning with computers. These tests are based upon standard measures of verbal and visual skills which we obtained from a review of the literature and we describe the development of the tests and our initial pilot studies in this paper.

Should there exist a simple, valid and reliable measure of verbal and visual skills, this would be useful as a descriptor in a psychological student model. For this reason we tested the relationship between our common skills profile and Riding's Cognitive Skills Analysis, a well known measure of verbal and visual skills. Fifty undergraduate student volunteers whose first language was English took part in the study. They were also given Riding's CSA test at the same time in a controlled experiment. The results of this study are research has shown that there was little correlation between our verbal and visual skills profile and Ridings WAVI dimensions as measured by his Cognitive Skills Analysis (CSA) test ($p>0.05$). We present possible reasons for this finding and attempted to relate it to the validity of the CSA test. We also present our initial work on the development of a psychological student model, based on this research.

Session 23:

Future elearning prospects and challenges: higher education in Pakistan

Saud Altaf
University of Arid Agriculture

Theme: Impacting on Students' Learning through eApproaches

eLearning is becoming a leading delivery method in workplace-learning settings across organizations of various sectors and of varying sizes. Educational universities and collaborative institutes all over the world are improving their methods of education and in view of continuing education and ultimate learning as a necessary factor in teaching-learning environment and using Information and Communication Technology (ICT) as a medium of knowledge distribution. Usual learning has been restructuring in the form of virtual learning, elearning, or web-based learning. However in Pakistan, where education is the most neglected area, distance and technology-based education is the slightest priority of educational universities and strategy makers, and the enormous scope of this emerging educational domain is not much realized. Pakistan is facing significant challenges to meet new strains in education with its ever increasing population growth, remote and scattered populated areas, non-availability of resources (infrastructure, expert teachers etc.) and limited funding. Regardless of these difficulties, universities and institutions are not expanding sufficiently to accommodate the increasing number of students who will be looking for access to secondary and tertiary level

education. Introducing web-based learning can be one of the anticipated solutions, but, consecutively, it has its own inherited prospects and challenges that have already started surfacing in the few distance or elearning universities/institutions working in Pakistan.

The paper presents an advanced relative account of the current and future directions for elearning and possible insinuations for policy and practice by assimilate significant research findings. An effort is made to open out the motivations why online distance education universities/institutions have been unsuccessful especially in US, Europe etc, as well as the elevated rate of technology, deprived assessments, rivalry, and the lack of suitable commerce approaches. The discussion ends with the most crucial issue of suggest solutions and structure to implement step-by-step elearning in higher learning universities/institutions of Pakistan.

Session 24:

Engaging learners in academic discourse: the role of the VLE in helping students to find a 'voice'

Bettina Woodroffe and Fiona Hallett
Edge Hill University

Theme: eWork in Progress

This presentation/demonstration both seeks to share the experiences of a novice academic and her attempt to engage teacher-researchers in academic discourse, and invites critical interrogation of preliminary findings and insights!

In the context of widening participation, much research has been undertaken in the area of undergraduate experience, and the enhancement of that learning experience through innovative use of technologies.

Despite the growing graduate diversity, likewise recorded, there has been rather less investigation into postgraduates' experience, in the context of Lifelong Learning and Professional Development, of transition to study at masters level, and perceptions of their own confidence and competence to relate this meaningfully to their professional practice, and to 'write academically'.

This account shares the observations of a facilitator of such developments, herself aspiring to enhance her own practice in partnership with colleague(s), and discusses and raises questions around the use of a virtual learning environment as a platform for the collaborative creation of learning objects, which focuses on students' use of and response to writing support frameworks, designed to promote a willingness among participants - increasingly distance learners - to explore academic discourses and voices. Drawing on the experiences of colleagues in the field, this project seeks to move away from the use of electronic media to replicate the kind of discussion which might take place in face-to-face contexts, and towards an emphasis on writing as a form of individual but public enquiry, and in particular a formative process which mitigates the (perceived) outcome orientation of participants, whose tendency to approach writing as a single stage, 'end-loaded' operation restricts its purpose to that of a vehicle for summative assessment.